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### FIREWEED METALS

# MACPASS MINERAL RESOURCE ESTIMATE

5<sup>th</sup> September 2024

Proud member of the **LUNDINGROUP** 

# **CAUTIONARY STATEMENTS**

#### **Forward-Looking Statements**

This presentation contains "forward-looking" statements and information relating to the Company, Macpass and Mactung Projects that are based on the beliefs of Company management, as well assumptions made by and information currently available to Company management. Such statements reflect the current risks, uncertainties and assumptions related to certain factors, including but not limited to, without limitations, exploration and development risks, expenditure and financing requirements, general economic conditions, changes in financial markets, the ability to properly and efficiently staff the Company's operations, the sufficiency of working capital and funding for continued operations, title matters, First Nations relations, operating hazards, political and economic factors, competitive factors, metal prices, relationships with vendors and strategic partners, governmental regulations and oversight, permitting, seasonality and weather, technological change, industry practices, and one-time events. Additional risks are set out in the Company's prospectus dated May 9, 2017, and filed under the Company's profile on SEDAR+ at <u>www.sedarplus.ca</u>. Should any one or more risks or uncertainties materialize or change, or should any underlying assumptions prove incorrect, actual results and forward-looking statements may vary materially from those described herein. The Company does not undertake to update forward-looking statements or forward-looking information, except as required by law.

The estimation of mineral resources is inherently uncertain and involves subjective judgments about many relevant factors. Mineral resources that are not mineral reserves do not have demonstrated economic viability. The accuracy of any such estimates is a function of the quantity and quality of available data, and of the assumptions made and judgments used in engineering and geological interpretation, which may prove to be unreliable and depend, to a certain extent, upon the analysis of drilling results and statistical inferences that may ultimately prove to be inaccurate. Mineral resource estimates may require re-estimation based on, among other things: (i) fluctuations in the price of zinc and other metals; (ii) results of drilling; (iii) results of metallurgical testing, process and other studies; (iv) changes to proposed mine plans; (v) the evaluation of mine plans subsequent to the date of any estimates; and (vi) the possible failure to receive required permits, approvals and licenses.

#### NI 43-101 Qualified Persons

Pierre Landry, P.Geo., SLR Managing Principal Resource Geologist. is independent of Fireweed Metals. and a 'Qualified Person' as defined under Canadian NI 43-101. Mr. Landry is responsible for the Mineral Resource Estimate for the Macpass Project and directly related information in this presentation – a technical report will be filed within 45 days of the effective date of the MRE, September 4<sup>th</sup> 2024 at https://www.sedarplus.ca/. Dr. Jack Milton P.Geo., VP Geology, Fireweed Metals and a Qualified Person under the meaning of Canadian National Instrument 43-101, is responsible for all other technical information in this presentation.

#### Notes

\* References to relative size and grade of the Mactung resources and Macpass resources in comparison to other tungsten and zinc deposits elsewhere in the world, respectively, are based on review of the Standard & Poor's Global Market Intelligence Capital IQ database.

# **RESOURCE FOOTNOTES**

- All mineral resources have been estimated in accordance with CIM definitions, as required under NI 43-101.
- Data for this mineral resource estimate has been independently reviewed and validated by a third-party consultancy, SLR Consulting (Canada) Ltd.
- Pierre Landry P.Geo. of SLR Consulting (Canada) Ltd. ("SLR") is independent of Fireweed Metals Corp., and a 'Qualified Person' as defined under NI 43-101. Pierre Landry is responsible for the Macpass Mineral Resource Estimate. g/t: grams per tonne; Mlbs: million pounds; Moz: millions of troy ounces; Mt: million metric tonnes.
- Mineral resources are reported within conceptual open pit ("OP") shells and underground ("UG") mining volumes to demonstrate Reasonable Prospects for Eventual Economic Extraction ("RPEEE"), as required under NI 43-101; mineralization lying outside of the OP shell or UG volumes is not reported as a mineral resource. Note the conceptual OP shell and UG volumes are used for mineral resource reporting purposes only and are not indicative of the proposed mining method; future mining studies may consider UG mining, OP mining or a combination of both. Mineral resources are not mineral reserves and do not have demonstrated economic viability.
- All quantities are rounded to the appropriate number of significant figures; consequently, sums may not add up due to rounding.
- All prices in Canadian dollars unless otherwise stated.
- Open Pit mineral resources are reported at a pit wall angle of 45°, Revenue Factors of 0.8 (Tom, End Zone), 0.6 (Jason), 1.0 (Boundary Zone), and Net Smelter Return ("NSR") cut-off of \$30/tonne ("t").
- Underground mineral resources are constrained within reporting panels with heights (H) of 20 m, lengths (L) of 10 m, with 10 m H and 5 m L sub-shapes and minimum widths of 2 m at Tom, Jason, and End Zone; and 20 m H by 20 m L with 10 m sub-shapes and a minimum width of 5 m at Boundary Zone, using an average panel NSR cut-off of \$112/t.
- NSR block values and zinc equivalency are based on a price of US\$1.40/lb Zn, US\$1.10/lb Pb, and US\$25/oz Ag, CAD:USD exchange rate of 1.32, and a number of operating cost and recovery assumptions specific to each deposit or mineralization domain (see Tables 2 and 3 from Fireweed's News Release September 4, 2024).
- ZnEq has been calculated on a block-by-block basis using the NSR calculation and input parameters related to each deposit or mineralization domain (see Tables 2 and 3 from Fireweed's News Release September 4, 2024). For reporting subtotals and totals, ZnEq values have been calculated using the mass weighted average of the ZnEq block values of each respective domain for its respective classification category within OP and UG reporting volumes.
- The effective date of the MRE is September 4, 2024 and the MRE is based on all drilling data up to and including holes drilled in 2023 with a final database cut-off date of June 23, 2024. The MRE does not include any data from holes drilled in 2024.
- Inferred mineral resources are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. There is also no certainty that these inferred mineral resources will be converted to the measured and indicated categories through further drilling, or into mineral reserves, once economic considerations are applied. The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.



# **EXECUTIVE SUMMARY**

### 2024 Mineral Resource Estimate

- First constrained Mineral Resource Estimate (MRE)
- Updated Tom-Jason MRE
- Inaugural resource for Boundary Zone and End Zone

2024 SLR Class	Tonnes (Mt)	ZnEq (%)	Zn Grade (%)	Pb Grade (%)	Ag Grade (g/t)	Zn Contained Metal (MIbs)	Pb Contained Metal (MIbs)	Ag Contained Metal (Moz)
Total Indicated	56.00	7.27	5.49	1.58	24.2	6,784	1,952	43.54
Total Inferred	48.49	7.48	5.15	2.08	25.3	5,500	2,227	39.42



### Highlights

- Large resource of 56.0 Mt Ind. + 48.5 Mt Inf.
- High-quality, best-practice, defendable MRE
- Doubled the tonnage (+106%) over the unconstrained 2018 resource.
- Almost doubled the contained zinc (+83%)
- Large amount of Indicated (56.0 Mt) vs Inferred (48.5 Mt)
- ✓ Two-thirds of tonnage is OP
- Significant potential for Ga-Ge byproducts

# **Macpass Project**

### Overview

We respectfully acknowledge that the Macpass Project is located on the Traditional Territories of the Kaska Dena Nation and the First Nation of Na-Cho Nyäk Dun.

### PROJECT LOCATIONS & EXISTING INFRASTRUCTURE

### Macpass District Macpass (Zn-Pb-Ag) & Mactung (W) Projects

#### (~977 km² land package)

Macpass: multiple large-scale sediment hosted zinc-primary deposits with mineralization hosted along splays of the Hess-Macmillan structural trend

Mactung: high-grade tungsten skarn deposit hosted within intrusives of the Tombstone Tungsten Belt

### Projects Are Accessible Via Road and Existing Airstrip at Site

0 km 250 km 500 km access to Asia



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### MACPASS: ONE OF THE WORLD'S LARGEST UNDEVELOPED ZINC DISTRICTS

#### **Macpass Zinc District**

- Macpass is one of the world's largest undeveloped primary zinc districts<sup>1</sup>
- Located at the heart of the Selwyn Basin one of Earth's most prolific zinc basins.
- ✓ 940 km<sup>2</sup> land package that hosts multiple zinc-leadsilver deposits
- ✓ Four known deposits:
  - Tom
  - Jason
  - End Zone
  - Boundary Zone
- Prospective corridor for exploration down the trend.



#### TSX-V: FWZ | FireweedMetals.com

References to relative size, grade, and metal content of the Mactung resources and Macpass resources in comparison to other tungsten, zinc, gallium, and germanium deposits elsewhere in the world, respectively, are based on review of the Standard & Poor's Global Market Intelligence Capital IQ database.

# **ROBUST TECHNICAL PROCESS**

Fireweed's 2024 Mineral Resource Estimate represents the culmination of a rigorous technical process, delivering a robust and defensible estimate

- Comprehensive Drilling Data: Derived from 124,632 m of drilling (including 82,321 meters pre-2018 and 42,311 m from recent campaigns) across 544 drill holes<sup>1</sup>
- Enhanced Geological Understanding: Redefined stratigraphy and lithological units through core relogging, scanning, surface mapping, and density measurements.
- Rigorous Data Quality Assurance: Intensive QA/QC of the database, including digitization and reinterpretation of all historical data
- Advanced Modeling Techniques: Comprehensive modeling incorporating structural, lithological, stratigraphic, and mineralization aspects, supported by AI to refine geological domain interpretations.
- Refined Estimation Methods: Utilized density-weighted composites, grade capping, and dynamic anisotropy to enhance estimation accuracy, with over 50% of the global resource tonnage classified as Indicated
- Conservative Resource Classification: Applied a conservative Reasonable Prospects for Eventual Economic Extraction (RPEEE) approach, with the updated resource constrained by realistic mining volumes



\* Does not include 2024 drilling.

### **DRILLING AND MAPPING**

- There has been 44,000 m of drilling since the 2018 Mineral Resource Estimate.
- Extensive regional geological mapping has been done to provide a robust framework for the geological models.
- Lithological and stratigraphic units have been redefined.
- Much of the historical core has been relogged and reinterpreted.
- High-resolution surface mapping has improved the near-surface models.
- Drillholes have been resurveyed with differential GPS.
- Data is captured digitally in a secure database.
- Core is routinely scanned with very high-resolution photos, XRF data and hyperspectral data.
- Density measurements are taken routinely on the whole sample interval, and many historical sample intervals have been measured.
- All drilling data for this resource are on our website, free to access.



# **DRILLING & DATABASE VALIDATION**

• Total of 124,632 m of drilling between 544 holes in 2024 resource

Deposit	Drilling pre-2018	Holes pre-2018	Drilling since 2018	Holes since 2018	Total Drilling	Total Holes
Tom	34,267 m	218	11,624 m	59	45,909 m	277
Jason	36,853 m	126	2,097 m	11	38,950 m	136
End Zone	3,415 m	14	743 m	5	4,158 m	19
Boundary Zone	7,786 m	26	27,830 m	86	35,615 m	112

- Significant re-logging campaigns, redefinition of lithological and stratigraphic units, and re-interpretation of geology.
- Database improved vastly by digitization of records, and comprehensive data validation exercise.
- Many silver values were corrected from null to half-detection limit where "Tr." (trace) was noted in assay certificates.
- Logging code system revised and historical codes translated.
- Historic check assays and thorough assay QAQC processes.
- Resulted in a very clean, highly organized database to support the Mineral Resource Estimate.

# 2024 MACPASS DEPOSIT GEOLOGY

- Stratiform, Sediment-Hosted Zn-Pb-Ag Deposits: The Tom, Jason, End Zone, and Boundary Zone deposits are examples of clastic-dominated (CD) sediment-hosted massive sulphide deposits
- Mineralization Model Reinterpreted from Classic SEDEX
  Models: involves replacement of porous, barite-rich sediments in a sub-seafloor environment rather than strict seafloor exhalation
- Distinct Mineralization Styles:
  - **Early Stage:** Finely laminated pyrite, sphalerite, and galena, grading to semi-massive and massive sulphides near feeder structures. Generally associated with barite-rich layers at various stratigraphic levels
  - **Boundary Zone:** Features a later, cross-cutting style with breccia, veins, and siderite-rich replacement textures within conglomerates and volcaniclastics
- Geological Domains:
  - Tom: Sub-domained into distinct facies (black, grey, pink, massive sulphide)
  - **Boundary Zone**: Divided into Massive Sulphide, Boundary Vein, and lower-grade Boundary Halo domains

#### Early-stage Mineralization - Two Step Genetic Model



# GEOLOGY

- Robust geological interpretation has been critical in resource estimation.
- A detailed geological model was built out for each deposit, based on revised stratigraphic and structural interpretations of the geology.
- Geological domains were defined within each deposit that were integrated into estimation domains.
- Extensive cross-checking of geological domain interpretations through core-photos and very highresolution core-scans, supported by AI.
- This improved geological framework has supported the conversion of inferred to indicated resource, and the definition of new indicated resources at Boundary Zone.









### **GEOLOGY – TOM** Black facies Split into several zones Zones divided into geological domains Grey facies Tom East zz\_ignor 004250 N Pink facies Tom West 003500 N Tom Southeast Massive sulphide Map view Looking north facies

### **GEOLOGY – JASON**



Jason South – high grade domains

#### Map of geological domains Jason Main and South



### **BOUNDARY GEOLOGY**

- Faulted, lithological model built upon a sequencestratigraphic interpretation of the geology
- Estimation domains follow lithology and link areas of zinc mineralization that follow the lithological trends
- BZPZ (Prime Zone), BZUZ (Upper Zone), and BZFL (Fuller Lake) are sequences of stratiform, laminated, and massive Zn-Pb-Ag rich sulphide mineralization, with BZFL occurring in a similar stratigraphic position to Tom and Jason
- Min01 to Min13 are defined zones of Boundary Zone vein dominant mineralization
- The Halo domain captures lower grade mineralization bleeding-off the main mineralized domains
- An "Other" catch-all buffer surrounds this but is not classified as mineral resource



#### Boundary mineralization domains - Section view looking West-northwest

### **ESTIMATION**

- Density weighted composites (1.53 m Tom; 2 m Jason; 1.5 m BZ) were created from the assay data using domain boundaries.
- Estimation domains were built from combining geological domains and validated through contact-plots.
- A data-driven approach was taken to capping high assay values on a domain-by-domain basis.
- Density regressions were developed for each domain, for the few samples that do not have measured bulk density values.
- Sub-blocked models were created using 5x5x5 m parent blocks with 8 sub blocks (0.625 m smallest block).
- Dynamic anisotropy was used, guided by the HW and FW contacts of the mineralization wireframes (bedding parallel).
- A high-grade search restrictions were implemented to cap grades within Pass 1 distance within certain domains.
- Inverse distance weighted estimation has been used for Zn, Pb, Ag, Ba, and density.





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### **CLASSIFICATION – TOM, JASON & EZ**



# **CLASSIFICATION – BOUNDARY ZONE**

 Boundary Zone Indicated (green) and Inferred resources (blue) within open pit (\$30/t NSR cut-off) and underground panels (\$112/t cut-off)





Boundary- Section view looking West-northwest

Boundary- Isometric view looking North

# **METALLURGY OVERVIEW**

Category	Unit	Tom, Jason & End Zone	Boundary Zone Massive Sulphide	Boundar y Zone Vein	Boundary Zone Halo
Recovery Zn, Zn Conc	%	89%	85%	88%	80%
Recovery Ag, Zn Conc	%	22%	30%	22%	22%
Recovery Pb, Pb Conc	%	75%	55%	55%	38%
Recovery Ag, Pb Conc	%	59%	40%	30%	20%
Zn Concentrate Grade Zn	%	58%	49%	56%	58%
Zn Concentrate Grade Hg	g/t	155	777	693	922
Hg Penalty	USD\$/dmt	\$0.00	\$14.11	\$11.63	\$21.63
Pb Concentrate Grade Pb	%	62%	45%	46%	44%
Zn Conc Payable Zn	%	85%	84%	85%	85%
Pb Conc Payable Pb	%	95%	93%	93%	93%

- The Tom, Jason, and Boundary Zone deposits have good metallurgical performance, producing high grade concentrates with high recoveries, consistent across all deposits.
- Recent metallurgical programs include:
  - o 2018 Focused on Tom and Jason
  - o 2020 Preliminary Investigation into Boundary Zone
  - 2023 Investigation of Boundary Zone Massive Sulphide Performance
- This testwork has guided the recovery and concentrate assumptions utilized in the NSR and ZnEq calculations for the updated Macpass MRE, on a deposit-bydeposit basis.
- A comprehensive geometallurgical review is underway to identify areas of sampling that will bolster our understanding of the variability not just between the deposits but within the deposits as well. A robust variability test program is planned for Q4 2024/Q1 2025.

### MINING CONSTRAINTS – TOM & JASON

Tom OP RF 0.8 & UG

#### Tom

0.8 RF Pit Selected

 ✓ Minimizes Footprint whilst keeping strip <10</li>
 ✓ Remaining Underground has vast majority of panels >10 m width (yellow) with 57% of UG tonnage from >20 m width panels (orange to red).



Jason Main OP RF 0.6 & UG



82% of tonnes in panels 10 m+ width

#### Jason

0.6 RF Pit selected

✓ Minimizes Footprint whilst maximizing resource scale

Pit volume could accommodate some UG mine waste associated with Jason/End
 Remaining Underground has vast majority of panels ~10 m width (yellow)





### MINING CONSTRAINTS – BOUNDARY ZONE

Base case RF 1.0 OP with 112/t NSR stope shape UG, looking towards 030, north-northwest.



#### **Boundary**

1.0 RF Pit selected (4.9 Strip)

- ✓ Maximizes economic inventory via Open Pit
- ✓ Geometry and grade distribution is OP amenable
- ✓ Boundary is lower grade than Jason/Tom Margins favor OP

### MACPASS 2024 GLOBAL MRE

<b>Category</b>	Deposit	Tonnage		Gra	ade	Contained Metal			
			ZnEq	Zn	Pb	Ag	Zn	Pb	Ag
		(Mt)	(%)	(%)	(%)	(g/t)	(M lbs)	(M lbs)	(M oz)
	Tom	17.52	9.90%	6.30%	3.34%	33.0	2,435	1,291	18.56
Indicated	Jason	3.80	9.09%	7.62%	1.86%	1.7	638	156	nn
muicateu	End Zone	0.34	16.15%	3.81%	12.32%	86.2	29	93	0.95
	Boundary	34.34	5.63%	4.86%	0.55%	21.6	3,682	412	23.83
	Total	56.00	7.27%	5.49%	1.58%	24.2	6,784	1,952	43.54
	Tom	18.94	9.10%	6.56%	2.30%	25.2	2,738	960	15.37
Inforrod	Jason	11.65	10.40%	5.48%	4.33%	48.2	1,407	1,112	18.05
meneu	End Zone	0.44	8.76%	1.86%	6.88%	48.1	18	67	0.68
	Boundary	17.46	3.75%	3.48%	0.23%	9.5	1,337	87	5.32
	Total	48.49	7.48%	5.15%	2.08%	25.3	5,500	2,227	39.42

Note: MRE effective date: September 4, 2024. For complete MRE-related notes refer to the relevant slides at the end of this presentation.

1 Zinc equivalency is based on a price of US\$1.40/lb Zn, US\$1.10/lb Pb, and US\$25/oz Ag, CAD:USD exchange rate of 1.32, and a number of operating cost and recovery assumptions specific to each deposit or domain.

# MACPASS 2024 MRE OP/UG

 Open-pit constrained Mineral Resources

2024 SLR Class	Deposit	Tonnes (Mt)	ZnEq (%)	Zn Grade (%)	Pb Grade (%)	Ag Grade (g/t)	Zn Contained Metal (M Ibs)	Pb Contained Metal (M Ibs)	Ag Contained Metal (Moz)
	Tom	13.63	8.60	5.84	2.63	24.1	1,754	789	10.56
	Jason	1.63	8.63	6.96	2.12	2.1	251	76	0.11
Indicated	End Zone	0.32	16.43	3.91	12.51	87.3	28	89	0.90
	Boundary Zone	33.50	5.46	4.72	0.53	20.9	3,486	388	22.45
Total Ir	ndicated	49.08	6.51	5.10	1.24	21.6	5,518	1,342	34.02
	Tom	4.20	10.16	6.37	3.24	39.7	591	300	5.37
	Jason	1.06	6.59	5.68	1.16	0.9	132	27	0.03
Inferred	End Zone	0.24	9.57	2.27	7.32	50.1	12	38	0.38
	Boundary Zone	16.90	3.63	3.39	0.21	8.9	1,260	77	4.85
Total I	nferred	22.40	5.06	4.05	0.90	14.8	1,995	442	10.63

 Underground constrained Mineral Resources

2024 SLR Class	Deposit	Tonnes (Mt)	ZnEq (%)	Zn Grade (%)	Pb Grade (%)	Ag Grade (g/t)	Zn Contained Metal (M Ibs)	Pb Contained Metal (M Ibs)	Ag Contained Metal (Moz)
	Tom	3.90	14.46	7.93	5.85	63.9	681	502	8.00
	Jason	2.17	9.43	8.12	1.67	1.5	388	80	0.10
Indicated	End Zone	0.02	11.43	2.16	9.07	68.0	1	4	0.04
	Boundary Zone	0.84	12.46	10.55	1.31	51.0	196	24	1.38
Total In	dicated	6.92	12.64	8.29	4.00	42.8	1,266	610	9.52
	Tom	14.74	8.80	6.61	2.03	21.1	2,148	660	10.00
	Jason	10.59	10.78	5.46	4.65	52.9	1,274	1,085	18.01
Inferred	End Zone	0.20	7.83	1.40	6.38	45.9	6	29	0.30
	Boundary Zone	0.56	7.35	6.29	0.84	26.6	77	10	0.47
Total I	nferred	26.09	9.56	6.09	3.10	34.3	3,505	1,784	28.79

Note: MRE effective date: September 4, 2024. For complete MRE-related notes refer to the relevant slides at the end of this presentation.

1 Zinc equivalency is based on a price of US\$1.40/lb Zn, US\$1.10/lb Pb, and US\$25/oz Ag, CAD:USD exchange rate of 1.32, and a number of operating cost and recovery assumptions specific to each deposit or domain.

### **TOM AND JASON**





### **BOUNDARY ZONE**





### **2024 MACPASS RESOURCE SENSITIVITY**

 $\checkmark$ 

#### <u>Global MRE Sensitivity – Key Takeaways</u>

- All deposits exhibit very similar sensitivities on a global basis
- All deposits <u>demonstrate resilience</u> to elevated cut-off and/or reduced commodity price environment

#### <u>Global MRE Sensitivity to NSR Cut-off (Mt; % ZnEq)</u>

- Cut-off grade ("COG") sensitivity analyses were run on each deposit at increments of 20% NSR cut-off to determine continuity of mineralization
- NSR and ZnEq values presented below reflect the combination of global open pit and underground resources



tested' at +80% cut-off

elevated cut-offs

Resource maintains economic scale even when 'pressure

Potentially mineable inventory remains continuous at

### **NSR COG SENSITIVITY VISUALIZATIONS**

Tom - Sensitivity Jason - Sensitivity Boundary - Sensitivity Looking North-West Looking South-East Looking North-East -20% Base Case -20% Base Case -20% Base Case pen Pit Open Pit +20% +20% +40% +40% +40% +20% +80% +60% +80% +60% +80% +60%

0m 20pm 40pm 60pm 80pm 1 : 20,000



m 200m 400m 600 1 : 15,000

### **PARAMETERS 2018 VS. 2024**

Item	2018 MRE	2024 MRE
Mining Shape Constraints	none	OP and UG
Zinc Price USD\$/t	1.17	1.40
Lead Price USD\$/t	0.99	1.10
Silver Price USD\$/oz	16.95	25
FX rate	1.24	1.32
Cut-off grade CAD\$/t	65	30 OP 112 UG
Processing cost CAD\$/t milled	n/a	22.00
G&A cost CAD\$/t milled	n/a	8.00
OP Mining cost CAD\$/t moved	n/a	4.67
UG Mining cost CAD\$/t milled	n/a	61.00
UG Sustaining capex CAD\$/t milled	n/a	21.00
Hg Penalty	Less	More
Transport costs CAD\$/wmt conc	211.85	293.55
Treatment charges Zn/Pb USD\$/dmt conc	190/170	225/150
Refining costs Ag USD\$/oz	1.50	1.25

2018 MRE vs 2024 MRE Key Changes:

- Mining Constraints for Reporting
- Zn Price ↑
- Cut-off↑
- Mercury Penalty ↑
- TCRC ↑

Notes: 2024 MRE OPs applied 45 degree pit slope angle (OSA).

### 2018 MRE VS. 2024 MRE

Comparing unconstrained 2018 MRE with the constrained 2024 MRE:

- 106% increase in global tonnage (+400% Indicated, +23% Inferred)
- 65% increase in contained zinc equivalent metal
- 83% increase in contained zinc metal
- 35% increase in contained lead metal
- 48% increase in contained silver metal

Changes are primarily driven by:

- Discovery of Boundary Zone.
- Discovery of Tom North.
- Discovery of Tom South.
- Changes in costing/pricing (NSR calc), cutoff grade, and addition of mining constraints.
- Correcting a subset of historic silver values from nulls to zeros (half detection limit values).





#### Contained zinc metal (Mlbs)



#### Contained lead metal (Mlbs)



#### Contained silver metal (koz)



# **MACPASS RELATIVE POSITIONING**

Select Zinc-primary Development Assets - Ranked by Contained Metal (Mt ZnEq ; % ZnEq)



Note: Assets located in China, Russia, Iran, and Myanmar were excluded from this ranking

\* ZnEq quantities calculated based on the content of the following metals: Zn, Pb, Cu, Ag, Au. ZnEq pricing based on Macpass 2024 MRE assumptions (US\$1.40/lb Zn, US\$1.10/lb Pb, US\$25.0/oz Ag) and LT analyst consensus estimates (US\$4.08/lb Cu and US\$1.915/oz Au. Source SNL Cap IQ and company public disclosure.

### **DISTRICT POTENTIAL**

#### Genetic Model and Geophysical Anomalies in the Macpass District Suggest the Potential for New Discoveries

- Structural and Stratigraphic Control: The Tom, Jason, End Zone, and Boundary Zone deposits are located along structurally and stratigraphically controlled feeder-fault systems, which are splays of the MacMillan-Hess fault
  - Feeder-faults are spaced approximately 5–10 km apart
- These same fault systems and prospective geology occur throughout the length of the Macpass project tenure area, along a pathway referred to as the "Prospective Corridor"
- Exploration Potential: The corridor features geophysical anomalies, coincident soil and rock geochemical anomalies, and a history of systematic under-exploration for base metals, making it an exceptionally attractive target
- Regional Exploration Focus: Fireweed's 2024 exploration program will concentrate significantly on this Prospective Corridor



*Note:* The simplified genetic model shows a proposed sub-surface depositional environment, with the curved pink lines representing the "stepping" faults controlling the distribution of the deposits. The pink plumes in the schematic cross section represent the theoretical environment where deposits at Tom, Jason, and Boundary formed within the sediment column, and are displayed prior to any deformation.

### **2024 EXPLORATION PROGRAM**

#### 14,000 m drilling

- 8,000 m step outs at Boundary, Tom, and Jason not included in 2024 MRE
- 6,000 m at new greenfield targets
- First assays expected in Q3 2024



- **District-wide greenfield exploration** to generate new targets (Zn-Pb-Ag-Au)
  - Gravity surveying
  - Soil sampling
  - Prospecting

- Areal surveys for LiDAR and VTEM
- Downhole Muon Survey at Boundary



With 36 Priority Targets, Our Enhanced 2024 Regional Exploration Efforts Present a Strong Opportunity for Advancing Prospects

### **NEXT STEPS**

- Assess the potential for Gallium and Germanium by-products
  to the MRE that could further enhance Fireweed's critical minerals exposure.
- Drill results: The 2024 drill results are anticipated to be released throughout Q3 and Q4 2024
- Geometallurgical test Program: sampling underway for additional metallurgical testwork at Tom, Jason, End Zone, and Boundary Zone to maximize value from each domain.

- Mine to Mill assessment: a value-driven internal targeting exercise used to help prioritize exploration efforts in the highest potential value areas.
- Geological analysis of huge 2024 regional program: data from gravity, VTEM-magnetics, LiDAR, prospecting, soil sampling will be used to generate 2025 exploration targets.
- Optimized 2025 exploration program to test the Macpass Zinc District.



# Thank you for listening.

