

# CAUTIONARY STATEMENTS

#### **PEA Cautionary Note**

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 do not have demonstrated economic viability. Additional work is needed to upgrade these mineral resources to mineral reserves.

#### **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 <a href="www.sedarplus.ca">www.sedarplus.ca</a>. 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.

#### NI 43-101 Qualified Person

Brandon Macdonald P.Geo., CEO and Director of Fireweed Metals and a Qualified Person under the meaning of Canadian National Instrument 43-101, is responsible for the technical information in this presentation. Leon McGarry, P.Geo., Senior Resource Geologist for CSA Global Canada Geosciences Ltd. is independent of Fireweed Metals. and a 'Qualified Person' as defined under Canadian NI 43-101. Mr. McGarry is responsible for the Mineral Resource Estimate for the Macpass Project and directly related information in this presentation. Michael Makarenko, P.Eng., Project Manager for JDS Energy and Mining, Inc., is independent of Fireweed Metals. and a 'Qualified Person' as defined under Canadian NI 43-101. Mr. Makarenko is responsible for the PEA results for the Macpass Project and directly related information in this presentation. Garth Kirkham, P.Geo., of Kirkham Geosystems Ltd. is independent of Fireweed Metals and a 'Qualified Person' as defined under Canadian NI 43-101. Mr. Kirkham is responsible for the Mineral Resource Estimate for the Mactung Project and directly related information in this presentation.

# Why Critical Metals? Why Fireweed?

We're leveraging our local and regional knowledge to create a new world-class critical metals district in Yukon, Canada

#### **Coming Bull Market**

Chronic underinvestment and protracted bear market has left cupboard bare

#### **Best-in-Class Projects**

Macpass and Mactung have the grade, scale, economics and upside potential

#### **Critical Metals Essential**

Geopolitical conflict and resource nationalism are fueling Western critical metals focus

#### **Massive Global Stimulus**

Fiscal stimulus will focus on infrastructure, bullish for zinc

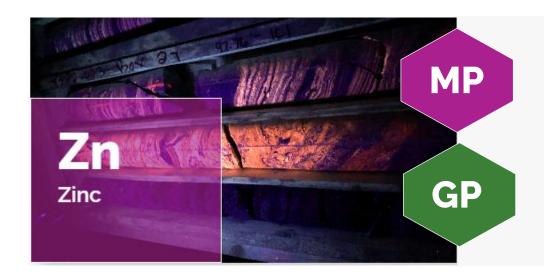
#### **Strong Backers, Cashed Up**

Teck, Lundins, others have invested, projects getting recognition they deserve

#### **Catalysts Coming**

2023 drill results, resource update, and economic studies, all due in next few months

# CRITICAL METALS FOR GENERATIONS



Zinc's unique properties make it an essential metal for everyday life. Zinc plays a crucial role in:

- Renewable Energy
- Transportation
- Food Security
- Energy Storage
- Healthcare
- Infrastructure
- Industrial Applications
- Electronics

Tungsten is an extremely versatile metal, essential for industrial applications in the following sectors :

- Automotive parts
- Aerospace & Defense
- Industrial machinery
- Drilling

- Boring and cutting equipment
- Logging and mining
- Electrical and electronics appliances



# **PROJECT HIGHLIGHTS**



#### **MACPASS PROJECT**

- One of the world's largest high-grade undeveloped zinc projects\*
- Newly discovered Boundary zone delivering best-in-class drill results
- Assays pending, resource update including Boundary inaugural resource due in Q2 2024



#### **MACTUNG PROJECT**

- World's largest high-grade tungsten deposit\*\*
- Environmental Assessment complete, clear path to production
- Ongoing project optimizations, explore government support for critical metals projects
- PEA due Q2 2024

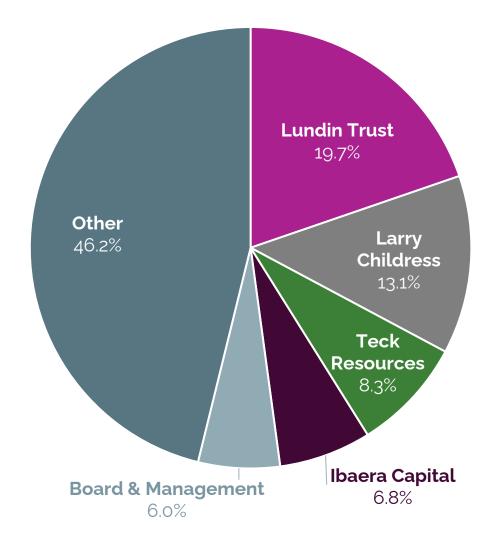


#### **GAYNA PROJECT**

- Exceptional exploration potential for zinc, germanium, gallium, lead, and silver
- Transformational new deposit model supported by geophysics ready for drill testing
- Acquired via low-cost staking, high potential for new discoveries

# CAPITAL STRUCTURE

As of January 17, 2024



<b>Shares Outstanding</b>	145,445,800
Shares Issuable Under Stock Option Plan	12,031,400
Performance Shares	3,700,000
Agents Warrants	61,941
Investor Warrants	2,887,669
Fully Diluted	164,126,810

Cash Position as of January 17, 2024: C\$16.9M

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# **LEADERSHIP**



## John Robins Chairman

- Great Bear Royalties Founder & Chairman, \$200M exit
- Great Bear Resources \$1.8B exit
- Kaminak Gold Founder & Executive Chairman, \$520M exit
- Discovery Group Principal, Winner of AMEBC's Murray Pezim Award in 2018 and 2022, and H.H. "Spud" Huestis Award in 2008



#### Brandon Macdonald CEO & Director

- Commander Resources Ltd. Chairman
  - Macquarie Bank Alumni
- **UBC** BSc. Geology
- Oxford University MBA
- 2023 H.H. "Spud" Huestis Award for Fireweed team
- Grew up in Ross River, long history of work in Yukon





James Scott Senior VP Projects



Pamela O'Hara VP Sustainability



Cindy Chiang CFO



Jack Milton VP Geology



Moira Cruickshanks
VP Technical Services



**Kelly Bateman** VP Studies



Andrew Crook
VP Operations



Alex Campbell VP Corp. Development



**Penny Johnson**Corporate Secretary

BOARD OF DIRECTORS



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**Peter Hemstead**Bluestone Resources CEO



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Patrick Downey
Orezone Gold - CEO

**PROJECT LOCATIONS & EXISTING INFRASTRUCTURE** 

> Macpass (Zn-Pb-Ag) & Mactung (W) Projects

#### >950 km² land package

Projects are accessible via road and existing airstrip at site

> Deep-sea port with access to Asia



#### Gayna (Zn-Pb-Ag) **Project**

New zinc exploration project with intriguing potential and significant mineralization



Northwest **Territories** 



Dawson Creek

# **PROGRESS & CATALYSTS**

#### COMPLETED 2023

- +\$50M raised
- Acquisition of Mactung finalized
- Updated resource for Mactung
- Largest drill campaign at Macpass with >22,500 m
- Expanded Boundary Zone
- Expanded camp and facilities, increasing operational capacity and operating window
- Gayna ground and geophysical validation and drill target generation

#### **UPCOMING 2024**

- Macpass assays pending
- Update Macpass Mineral Resource Estimate
- Mactung PEA
- 2024 program in the planning stage for Macpass, Mactung and Gayna, which may include:
  - Step-outs at Tom, Jason and Boundary Zone
  - Generative work across the Macpass property
  - Potential drill program at Gayna

# 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.

# ONE OF THE WORLD'S LARGEST UNDEVELOPED ZINC PROJECTS

- Host to multiple zinc-lead-silver deposits within a 940 km² land package
- Accessible via the North Canol Road and the Macmillan Pass aerodrome, ~250 km from Ross River

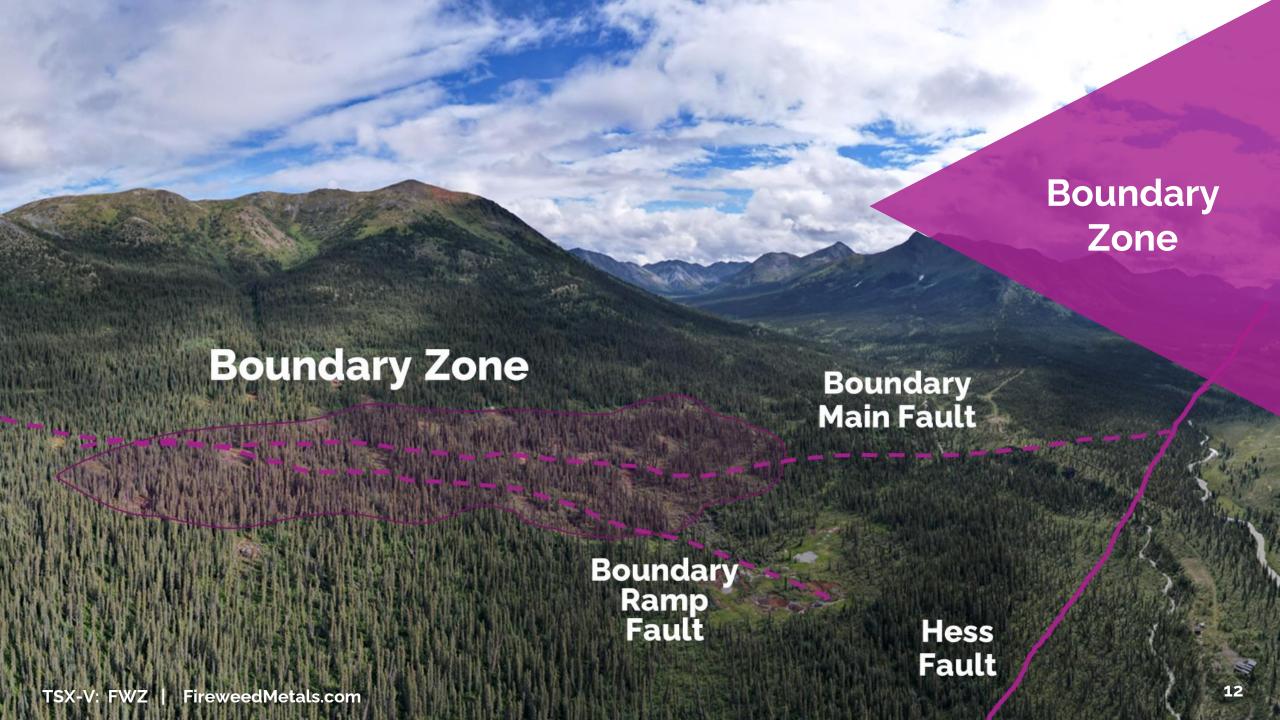
Macpass 2018 Resource Estimate						
	Tonnage (Mt)	Zn	Pb	Ag (g/t)	ZnEq¹	
Indicated	11.2	6.59%	2.48%	21.33	9.61%	
Inferred	39.5	5.84%	3.14%	38.15	10%	
2018 Preliminary Economic Assessment*						
Life of Mine (Lo	OM)				18 years	
<b>LOM Tonnage</b>					32.7 Mt	
LOM Production	on (Zn/ZnEq)¹			2.887 /	4.729 Mlb	
Initial CAPEX					C\$404M	
After-Tax NPV	8% <sup>1</sup>				C\$448M	
After-Tax IRR <sup>1</sup>					24%	

<sup>&</sup>lt;sup>1</sup> Based on 2018 PEA commodity price assumptions (base case): US\$1.21/lb, Zn, US\$0.98/lb Pb, US\$16.80/oz Ag. \*Based on review of undeveloped zinc projects in the Standard & Poor's Global Market Intelligence Capital IQ database. Technical information in this disclosure has been approved by Fireweed Metals' VP Geology, Jack Milton, Ph.D., P.Geo. (BC), a 'Qualified Person' as defined under Canadian National Instrument 43-101.

#### + 6 Years Drilling

- Additional drilling at Tom & Jason will both expand resource and improve grades in some zones
- Boundary Zone inaugural resource expected in spring 2024
- Additional engineering to improve pits, metallurgy and optimize mine plan
- Government \$71M funding commitment to access roads, included as project CAPEX in 2018 PEA, now offset

Updated **Resource Statement** and new **Economic Studies** will reflect these improvements, and add to an already **World-Class Resource** and **Robust Mine Plan** 



## WHY IS BOUNDARY ZONE SIGNIFICANT?

Robust potential for both scale and grade derived from stockwork/brecciated mineralization + high-grade massive sulphide stratiform layers

#### Scale

**NB19-002**: 230 m of 4.51% Zn from surface, including 100 m of 8.73% Zn,

with 6.4m of 43.5% Zn

**NB20-002**: 213 m of 4.42% Zn, including 25.58% Zn over 5.81 m

**NB21-002**: 32.99 m of 9.91% Zn and 10,42 m of 23.77% Zn

#### **High Grade**

**NB22-002**: 124.5 m of 12.3% Zn, 1.3% Pb, 45.9 g/t Ag, including 60 m of 19% Zn, 1.6% Pb, 64.7 g/t Ag

**NB23-007**: **Upper zone** of 82.5 m grading 11.9% Zn, 2.2% Pb and 81.2 g/t Ag

+ **Lower zone** of 118 m grading 15.1% Zn, 2.8% Pb, and 85.8 g/t Ag

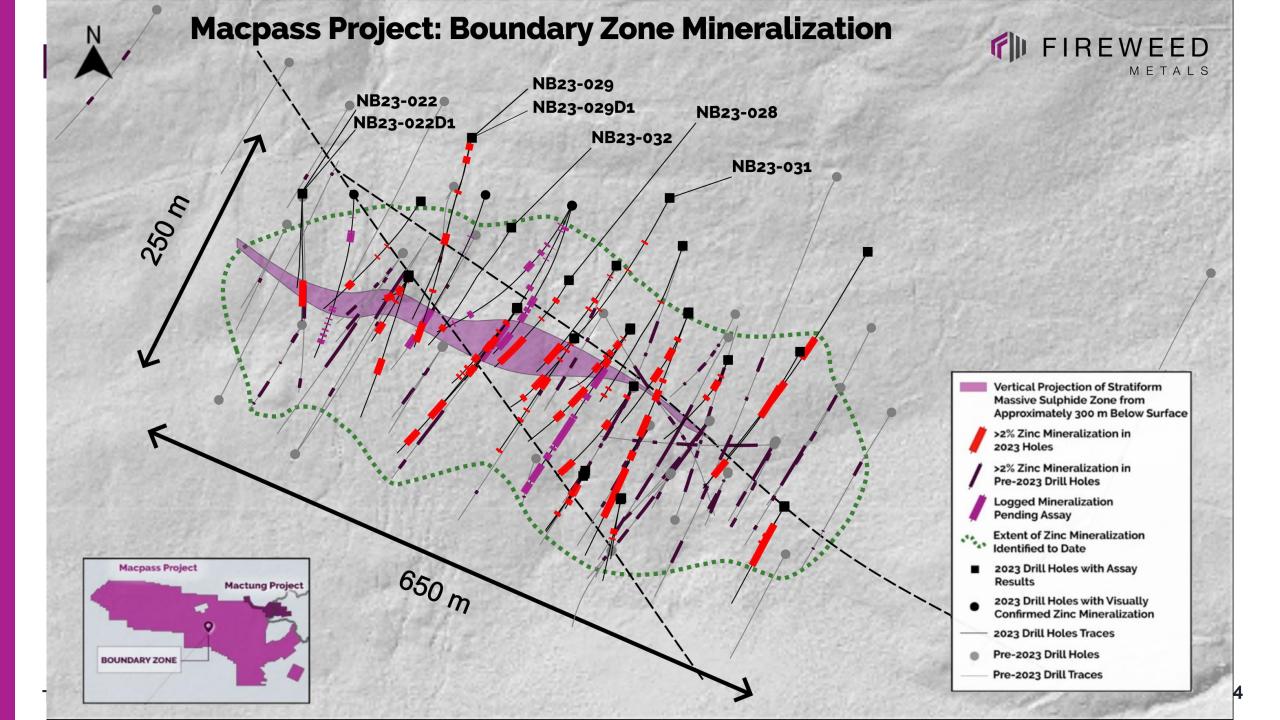
**NB23-028**: Upper zone of 66.11 m grading 7.13% Zn, 0.97% Pb, and 54.8 g/t Ag + Lower zone of 143.95 m grading 14.45% Zn, 1.15% Pb, and 60.0 g/t Ag

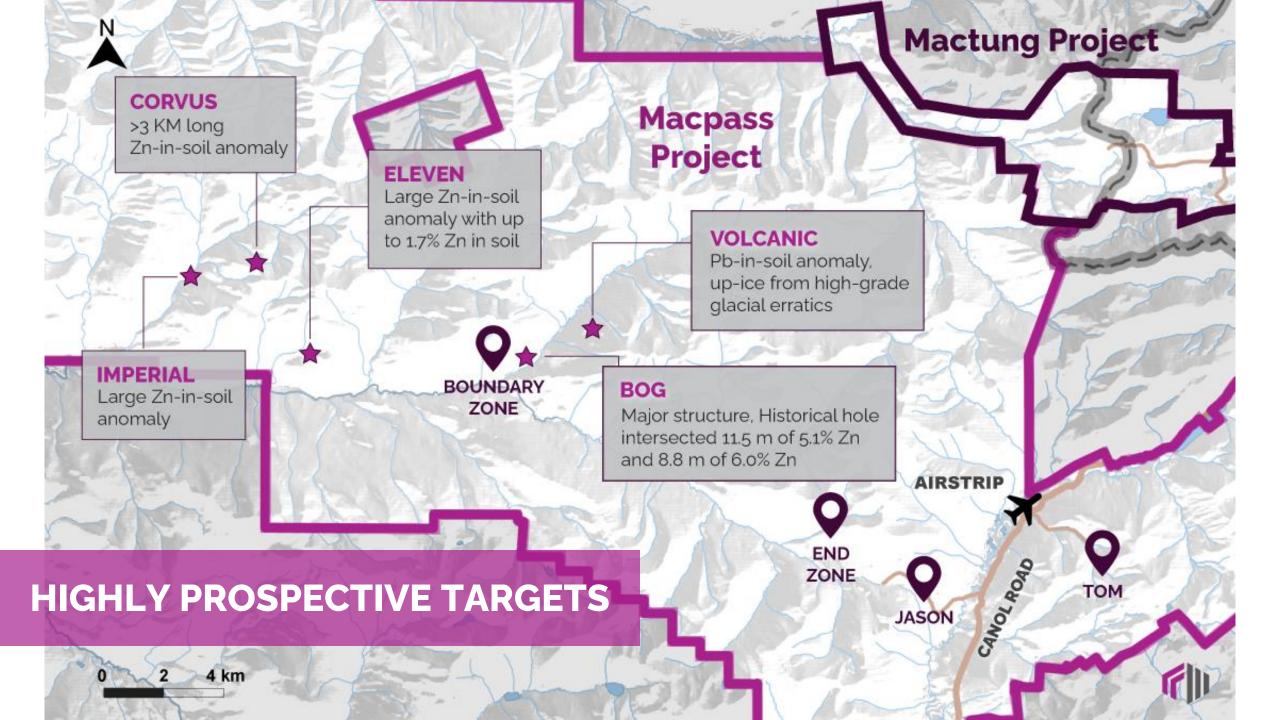
Pending assay for an additional wide Zn-Pb massive-stratiform intersection:

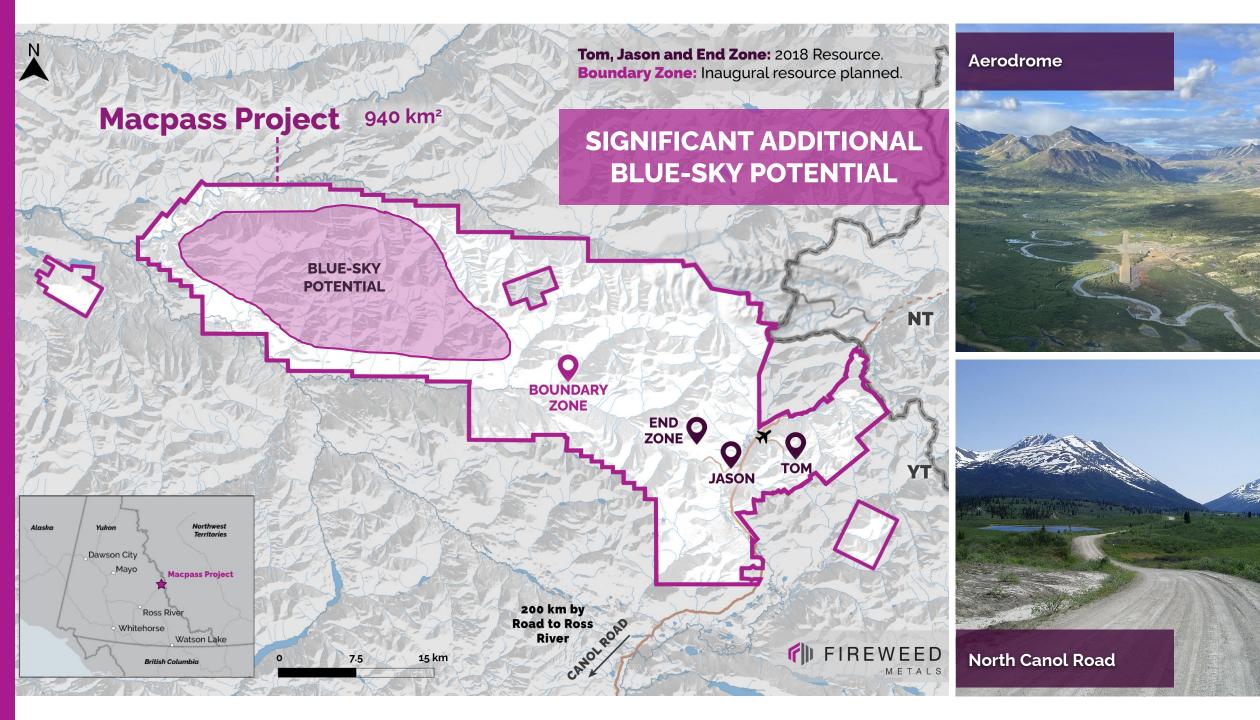
**NB23-037** intersected 110 m of feeder-proximal laminated to massive sulphides











# Mactung Project

# Overview

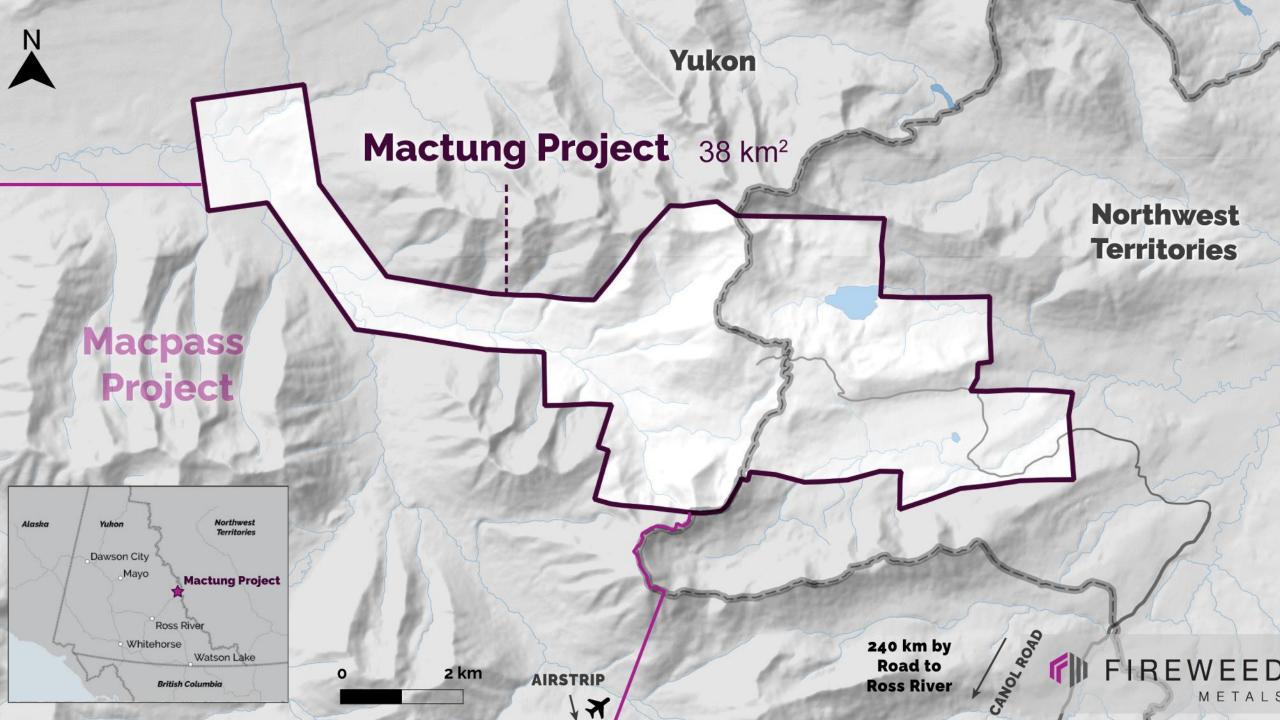
We respectfully acknowledge that the Mactung Project is located on the Traditional Territories of the Kaska Dena Nation and the First Nation of Na-Cho Nyäk Dun, and the Sahtu Settlement Area.

# THE WORLD'S LARGEST HIGH-GRADE TUNGSTEN DEPOSIT

- Host to a large **tungsten** deposit within a 38 km² area, 100% owned by Fireweed
- Adjacent to Macpass, and access via the North Canol Road and the Macmillan Pass aerodrome
- Extensive drilling, engineering, metallurgy, geotechnical, and environmental studies were undertaken in support of a Feasibility Study (2009)
- Environmental Assessment completed, predictable licensing and pathway to construction

#### **Mactung 2023 Resource Estimate**

	Tonnage (Mt)	WO <sub>3</sub> Grade (%)	Contained WO <sub>3</sub> (mtu <sup>5</sup> )
Indicated (underground)	12.17	1.05%	12,789,000
Indicated (open pit)	29.32	0.59%	17,367,000
Total Indicated (UG+OP)	41.49	0.73%	30,156,000
Inferred (underground)	2.82	0.73%	2,066,000
Inferred (open pit)	9.43	0.55%	5,139,000
Total Inferred (UG+OP)	12.25	0.59%	7,205,000



## WHY MACTUNG?

#### **CRITICAL METAL**

The U.S., Canada and the EU have designated tungsten a critical metal. It has extreme physical characteristics necessary for many industries.

#### **CHINA MARKET DOMINATION**

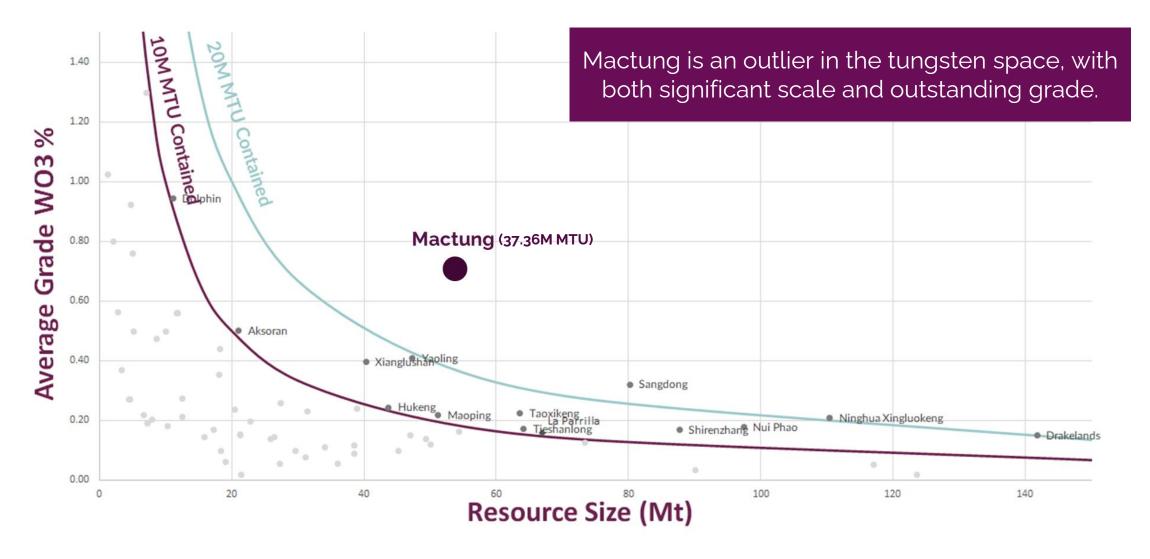
China controls most of the world's tungsten deposits and production, creating risks to the west in a changing world.

#### **CHANGING WORLD**

Recent world events have sharpened the focus of western governments on critical metals, creating an opportunity to create a reliable western source of tungsten.

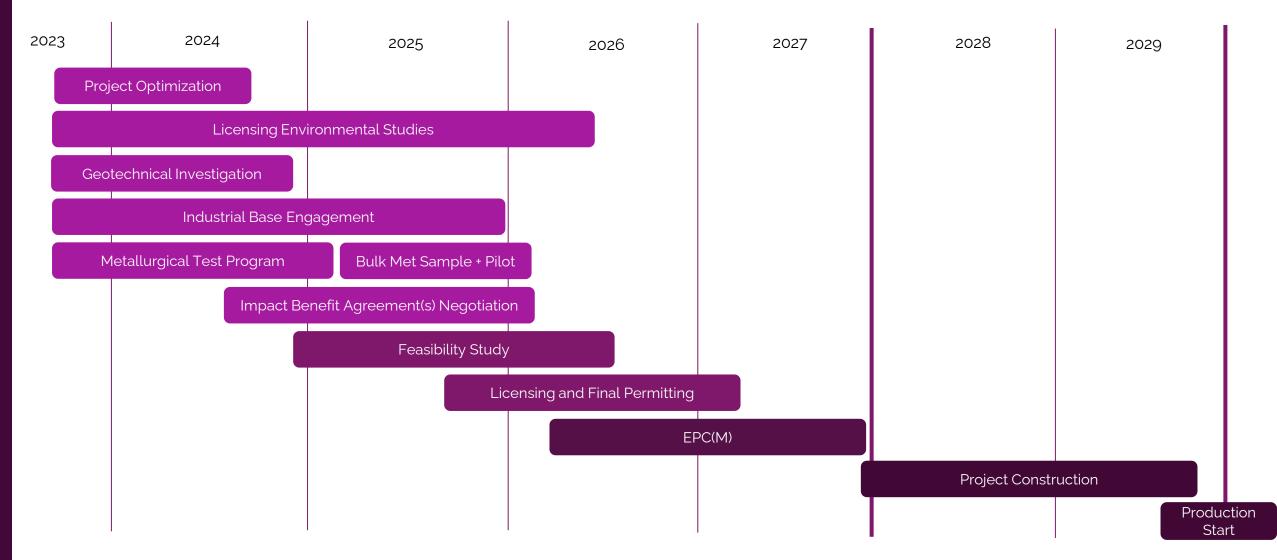


## **MACTUNG STANDS OUT**



Qualified Person Statement Technical information in this document has been approved by Fireweed's VP Geology, Dr. Jack Milton, P.Geo. (BC), a 'Qualified Person' as defined under Canadian National Instrument 43-101 Footnotes and References': References to relative size and grade of the Mactung resource in comparison to other tungsten deposits in the world are based on review of the Standard & Poor's Global Market Intelligence Capital IQ database 1: For details, see https://www.sedarplus.ca/Fireweed Technical Report titled "NI 43-101 Technical Report, Mactung Project, Yukon Territory, Canada" filed July 28, 2023, and Fireweed News Release dated June 13, 2023.

## MACTUNG HAS A CLEAR PATHWAY TO PRODUCTION





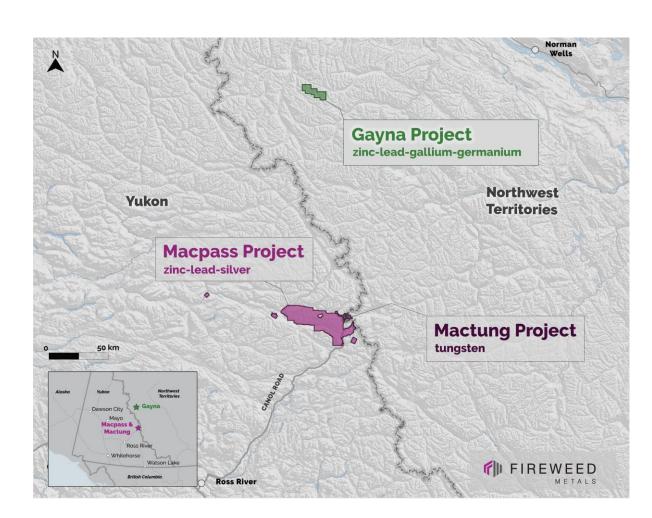
# Overview

We respectfully acknowledge that the Gayna Project is located within Settlement Areas of Sahtu and Gwich'in, and the Traditional Territory of First Nation of Na-Cho Nyäk Dun.

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# GREAT EXPLORATION POTENTIAL FOR ZINC, GERMANIUM, GALLIUM, LEAD, AND SILVER

- Located 180 km north of Macpass, in the Mackenzie Mountains, NWT
- Rio Tinto drilled 28,000 m in the 1970s. Claims ultimately lapsed
- New interpretation establishes Gayna's geological setting and mineralization as similar to that of a reefstyle deposit, like Ivanhoe's high-grade Kipushi mine in DRC
- Fireweed acquired Gayna through staking a 128-sqkm area encompassing all historical showings and anomalies
- 2023 geophysical program identified two broad areas with gravity anomalies, while ground gravity survey highlighted multiple potential drill targets.

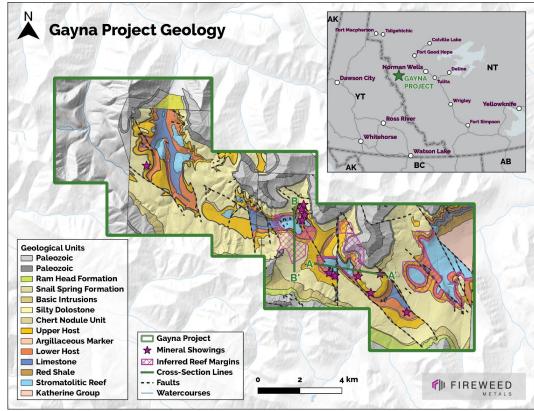


## **EXPLORATION UPDATE**

- High-grade rock samples confirmed the presence of massive sulphide mineralization that also contains elevated gallium and germanium.
- Soil samples confirmed the presence of a strong, 4 km x 1 km, historical zinc and lead soil anomaly
- Results from two ground gravity surveys totaling ~100 line-km have highlighted multiple potential drill targets.
- Completion of a LiDAR topographic survey over the entire 128.75 km<sup>2</sup> property has generated accurate location data for future drilling and other exploration work.
- The 2022 geophysical program identified two broad areas with gravity anomalies consistent with Kipushi-style targets.
- The 2023 gravity survey expanded the gravity coverage to identify new anomalies, and to refine existing anomalies for future drill-testing.







# **BLUEPRINT FOR VALUE CREATION**









#### FIREWEED METALS

With best-in-class team and strong backers, Fireweed is poised to deliver shareholder value as we drive our critical metals projects forward during a catalyst-rich 2024.

#### **MACPASS PROJECT**

 Resource expansion, inaugural Boundary resource and governmentfunded road upgrades position Macpass in a class of its own among undeveloped zinc-leadsilver projects globally, with blue-sky potential including germanium / gallium.

#### **MACTUNG PROJECT**

 Updated environmental and economic studies, including PEA, and government backing for critical metals will drive value at Mactung.

#### **GAYNA PROJECT**

 Exciting discovery upside and further drill targeting at Gayna, a target-rich project that hosts Kipushi-style geology.

# Thank you!

Please visit us online at **fireweedmetals.com** and follow for updates.





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FSE: MoG

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# **ABOUT FIREWEED METALS**

Fireweed is a Canadian company with the mission to explore and develop critical mineral assets through progressive leadership, high standards, innovation, and collaborative partnerships for the benefit of present and future generations.

#### **OUR VISION**

Fireweed Metals will sustainably explore and develop critical minerals assets to support the transition to a low-carbon economy. We will focus on leading with integrity, striving for consistency in words and actions, being honest, transparent, and accountable, mitigating health and safety risks, and being progressive and innovative while promoting environmental and social stewardship.

We will act in a way that reflects our core value of respect, for both the environment in which we work and the people we work with. Our approach will foster meaningful relationships with employees and local communities, and will build trusted partnerships benefiting Indigenous peoples and shareholders.

# **OUR VALUES**









## **SUSTAINABILITY APPROACH**

#### What does it mean to Fireweed?

Undertaking exploration and mine development activities that respect the environment, benefit local communities, and enhance project and investment certainty.

**Environmental Stewardship** 



Climate Action

Monitoring in 2023



Enhance understanding

through field studies

Net Zero

Offset

emissions for 2021 and 2022. equivalent to

Gillip Gillip Gillip cars tilly tilly tilly annual emissions for a passenger vehicle)

Alternative Energy



Solar and battery power system installation

• male

Strong compliance performance

water samples collected

Full-time onsite

environmental monitors

Indigenous

environmental professionals involved

cumulative in-field study hours

ongoing wildlife and aquatic studies 2023 Workplace Performance

Five Drill Program and Field Studies:

Number of All-personnel "Safety Sunday" Meetings





880

Field-level Risk Assessments

Lost Time Injuries

127,000

people hours on site, >50% with Yukoners



delivering goods primarily from Yukon suppliers

of field program expenditures with Indigenous-affiliated businesses

Workplace **Diversity** 





Number of Kaska Nation employees in 2023



Workplace personnel age range

# Why Zinc?

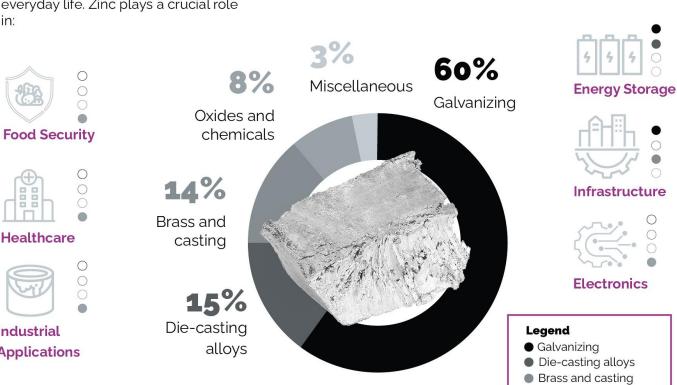
## **Uses & Applications\***

Healthcare

Industrial

**Applications** 

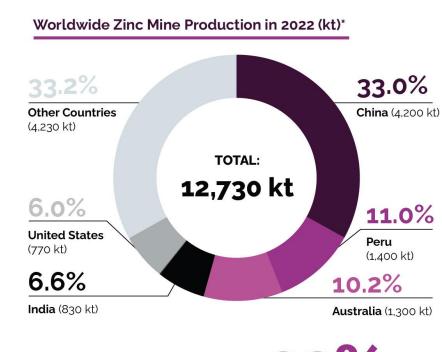
Zinc's unique properties make it an extremely versatile metal, essential for everyday life. Zinc plays a crucial role



Renewable Energy

\*Source: Government of Canada, "Zinc facts", 2021

#### **Zinc Supply**



China is the largest zinc producer, with

of the world's zinc

production in 2022.

\*Source: U.S. Geological Survey, "Mineral Commodity Summaries", 2023

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Oxides and chemicals

**Transportation** 

# Why Tungsten?







#### **Uses & Applications**

Tungsten's unique properties make it excellent for industrial applications in the following sectors:

#### By application:

- Tungsten carbide
- Tungsten alloys& mill products
- Automotive parts
- Aerospace & Defense
- Industrial machinery
- Drilling
- Boring and cutting equipment
  - Logging & Mining
  - Electrical & electronics appliances

Scheelite (CaWO4) mineral ore is the preferred source of tungsten

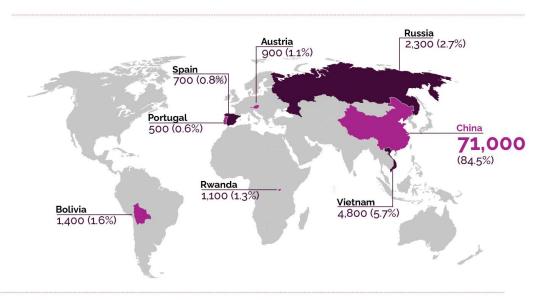
#### **Tungsten Supply**

Global production of tungsten in 2022, by country (tonnes)\*

China is the world's largest tungsten producer and exporter, with

84.5%

of the world's tungsten in 2022.



#### **Critical Metal**

Tungsten is a critical metal as now listed by Canada, the USA, and the EU, with extreme physical characteristics necessary for many industries.

#### **China Market Domination**

China controls both the resource and production side of the Tungsten market, creating risks to the west in an uncertain future.

#### **Changing World**

Recent world events have changed western government views on critical metals, creating an opportunity to create a reliable western source of tungsten.

# Leveraging Emerging Technologies

- Automated core cutting to improve speed, efficiency, and reduce job hazard and fatigue
- Automated core scanning to improve data capture for future interpretation and validation
- Directional drilling techniques to improve drilling efficiency and accuracy





