



Boundary Zone - The Geology of a New Zinc Discovery in the Macmillan Pass Zn-Pb-Ag district

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Land acknowledgement

I acknowledge that the Macmillan Pass project is located on the traditional territories of:

- The Ross River Dena Council
- The Liard First Nation
- The First Nation of Na-Cho Nyak Dun



Cautionary Statements

The following statements are required by Canadian securities legislation:

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 news release contains “forward-looking” statements and information relating to the Company and the Macmillan Pass Project that are based on the beliefs of Company management, as well as 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 www.sedar.com. 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.

NI43-101 Qualified Person:

Jack Milton, Ph.D., P.Geol., Chief Geologist of Fireweed Zinc, 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.Geol., Senior Resource Geologist for CSA Global Canada Geosciences Ltd. is independent of Fireweed Zinc Ltd. and a ‘Qualified Person’ as defined under Canadian National Instrument 43-101. Mr. McGarry is responsible for the Mineral Resource Estimate and directly related information in this presentation. Michael Makarenko, P.Eng., Project Manager for JDS Energy and Mining, Inc., is independent of Fireweed Zinc Ltd. and a ‘Qualified Person’ as defined under Canadian National Instrument 43-101. Mr. Makarenko is responsible for the PEA results and directly related information in this presentation.

Fireweed Zinc - Selwyn Basin



Selwyn Basin, Yukon

- One of the most prolific zinc basins on Earth, split in to three districts, each hosted by different age Palaeozoic rocks



Macmillan Pass District

- Zn-Pb-Ag-barite deposits mainly in mid to late Devonian host rocks
- Tom and Jason: one of the largest undeveloped zinc deposits worldwide
- Owned by Fireweed Zinc



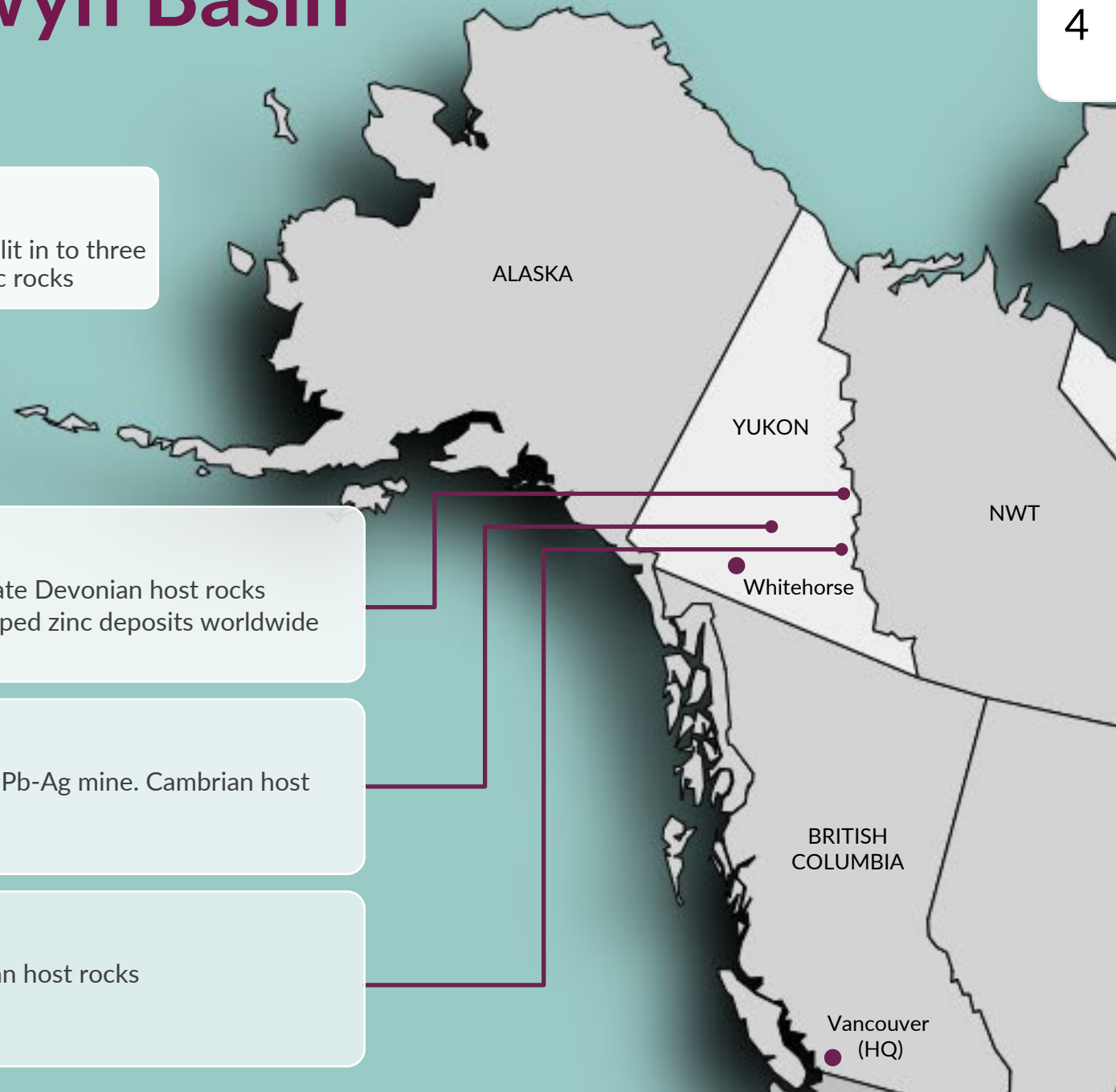
Faro Mining District

- Faro – once the world's largest open pit Zn-Pb-Ag mine. Cambrian host rocks.
- (not owned by FWZ)

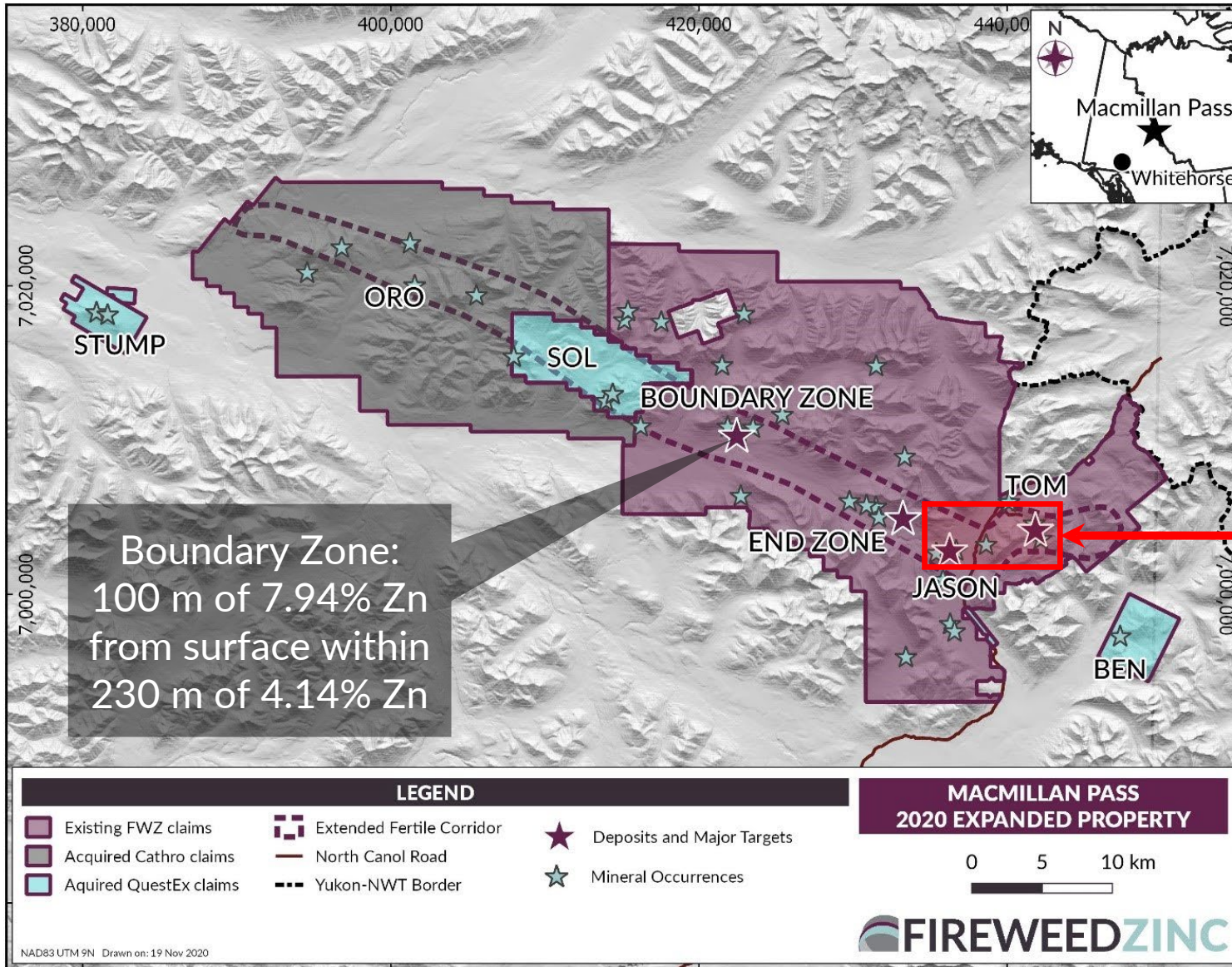


Howard's Pass District

- High tonnage Zn-Pb deposits in Early Silurian host rocks
- (not owned by FWZ)



Macmillan Pass district: 940 km² of potential



Area included in 2018 Resource Update & PEA

Tom and Jason only Resource Update

	Mt	Zn %	Pb %	Ag g/t	ZnEq %
Indicated Total	11.2	6.59	2.48	21.33	9.61
Inferred Total	39.5	5.84	3.14	38.15	10.00

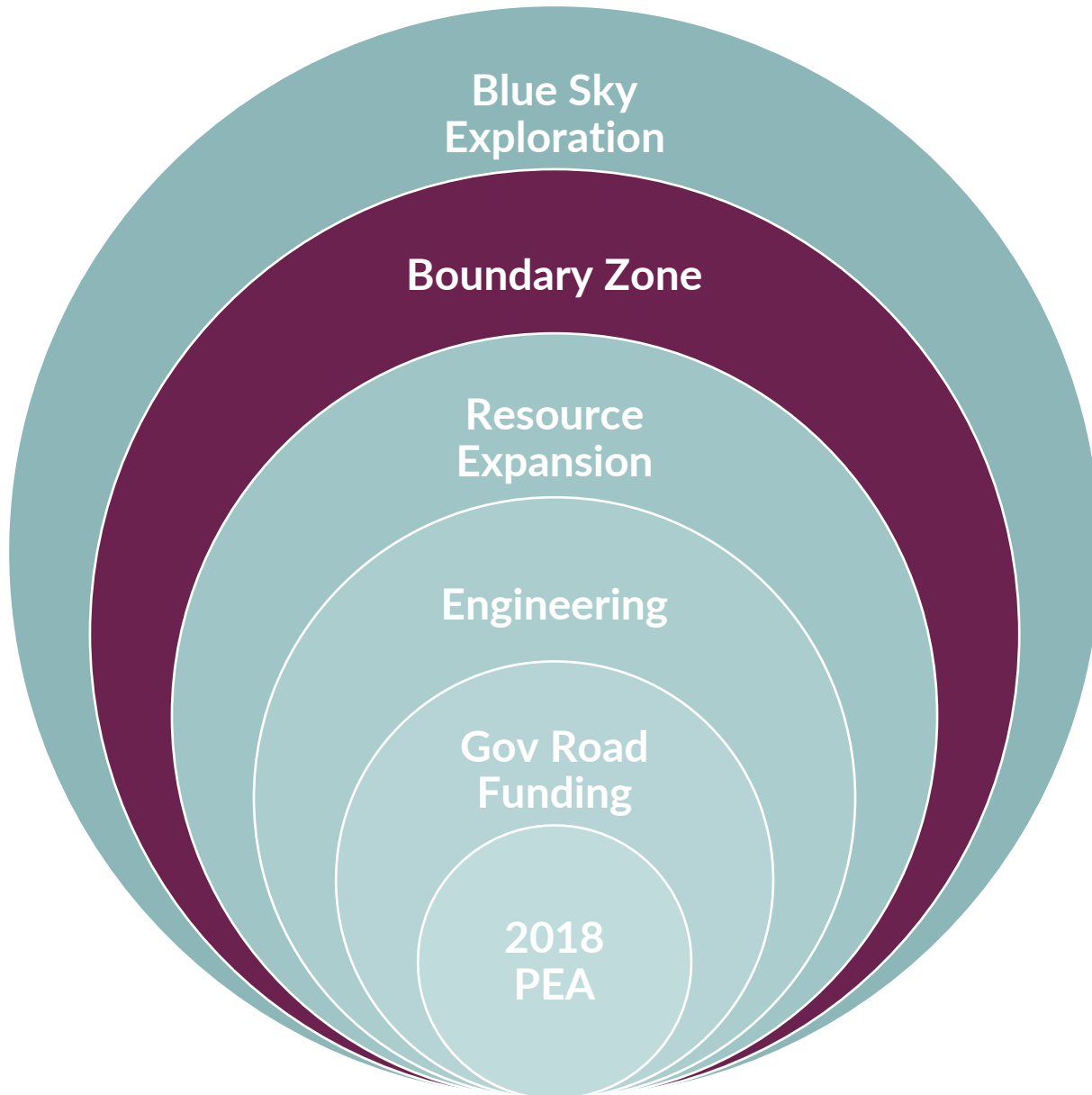
	Zinc	Lead	Silver
Ind.	0.74 Mt (1.63 Blbs)	0.28 Mt (0.61 Blbs)	7.7 MOz
Inf.	2.23 Mt (5.08 Blbs)	1.22 Mt (2.73 Blbs)	48.4 MOz

Tom and Jason only Preliminary Economic Assessment*

After-Tax IRR	24%
After-Tax NPV8	C\$448M
Initial CAPEX	C\$404M
Mine Life	18 years
Life-of-Mine Tonnage	32.7 Mt

* Using US\$1.21/lb Zn, \$0.98/lb Pb, \$16.80/oz Ag

Blueprint for Value Creation



2018 PEA Establishes **Base Case**, then add:

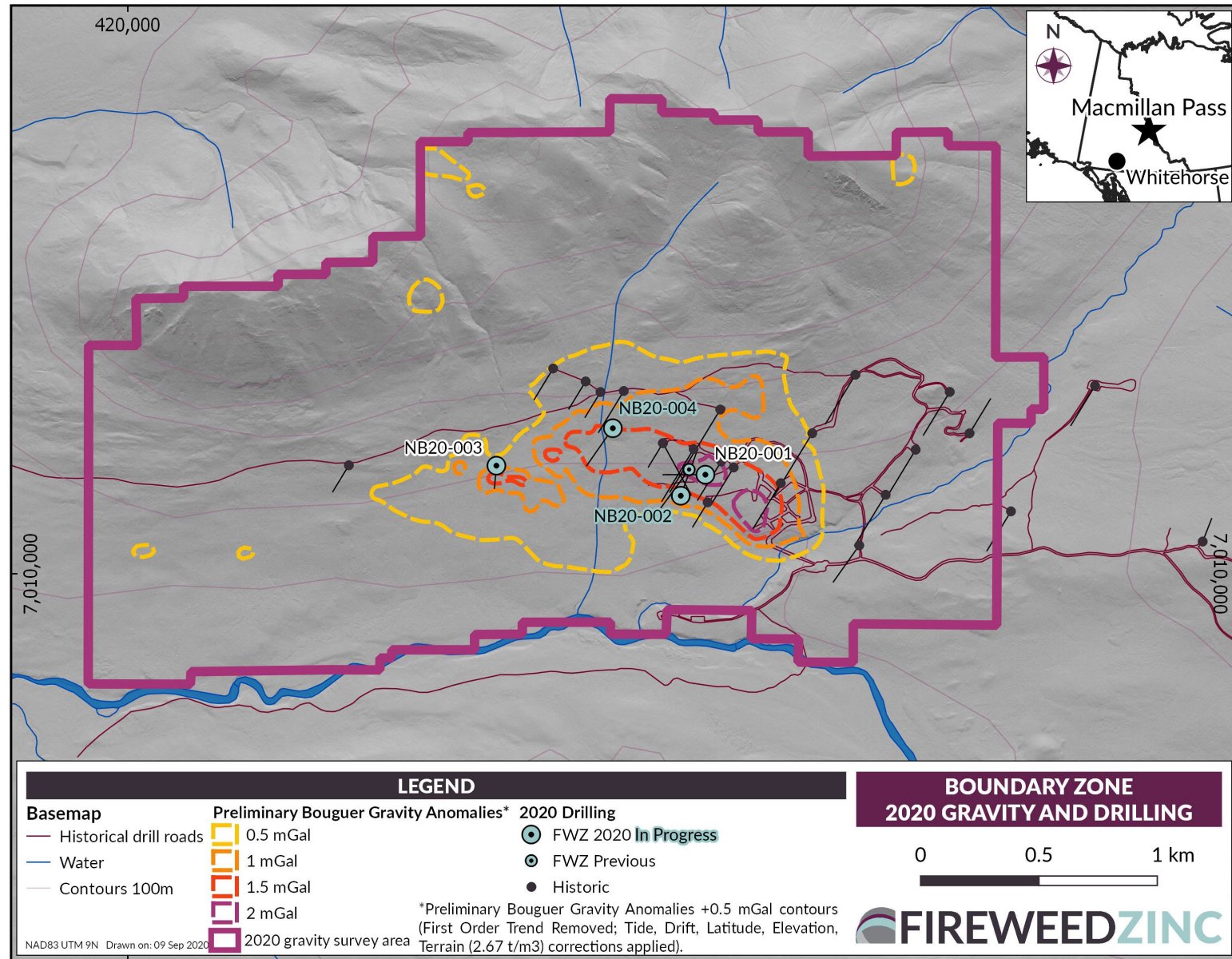
- **Government C\$71M funding** of road reduces up front **CAPEX**
- **Engineering Optimizations** increase pit size at **Tom** using new **Geotech/Geochem** data
- **Resource Expansion** at both **Tom & Jason** improve mine life & throughput
- **Boundary Zone** inaugural resource, and integration, creates larger mine plan
- **Exploration Potential** elsewhere blue sky, could lead to expanded mine life

= More NPV

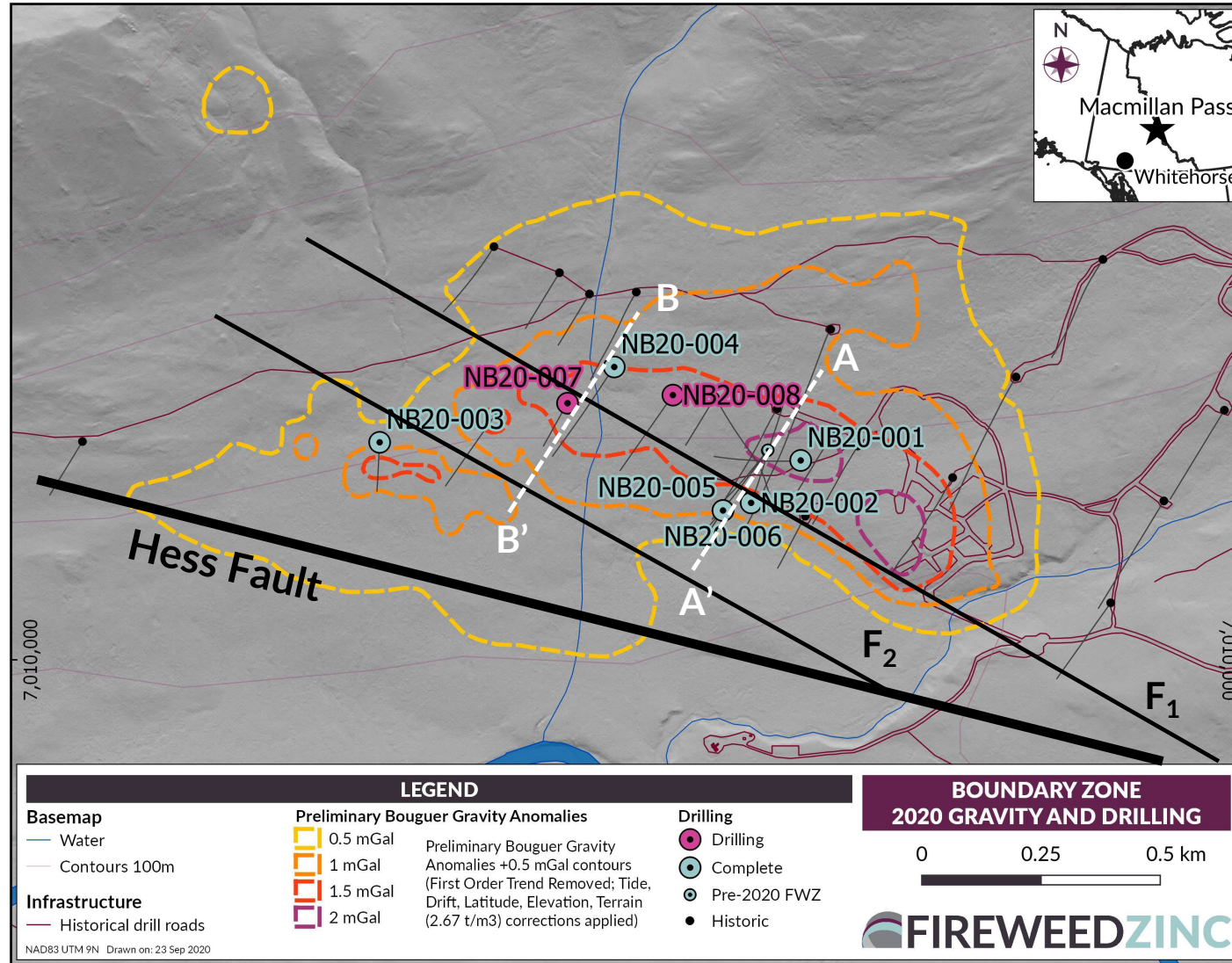
Huge Gravity Anomaly at Boundary

Ground gravity survey in August 2020 revealed a huge gravity anomaly:

- Gravity high over Boundary extends 200 m east and 800 m west from areas of drilling
- Boundary West discovered in 2020
- This suggests a massive system, which has barely been drilled
- Even at low grades, metal endowment could be staggering



Boundary Zone – drilling and cross section



Boundary Zone

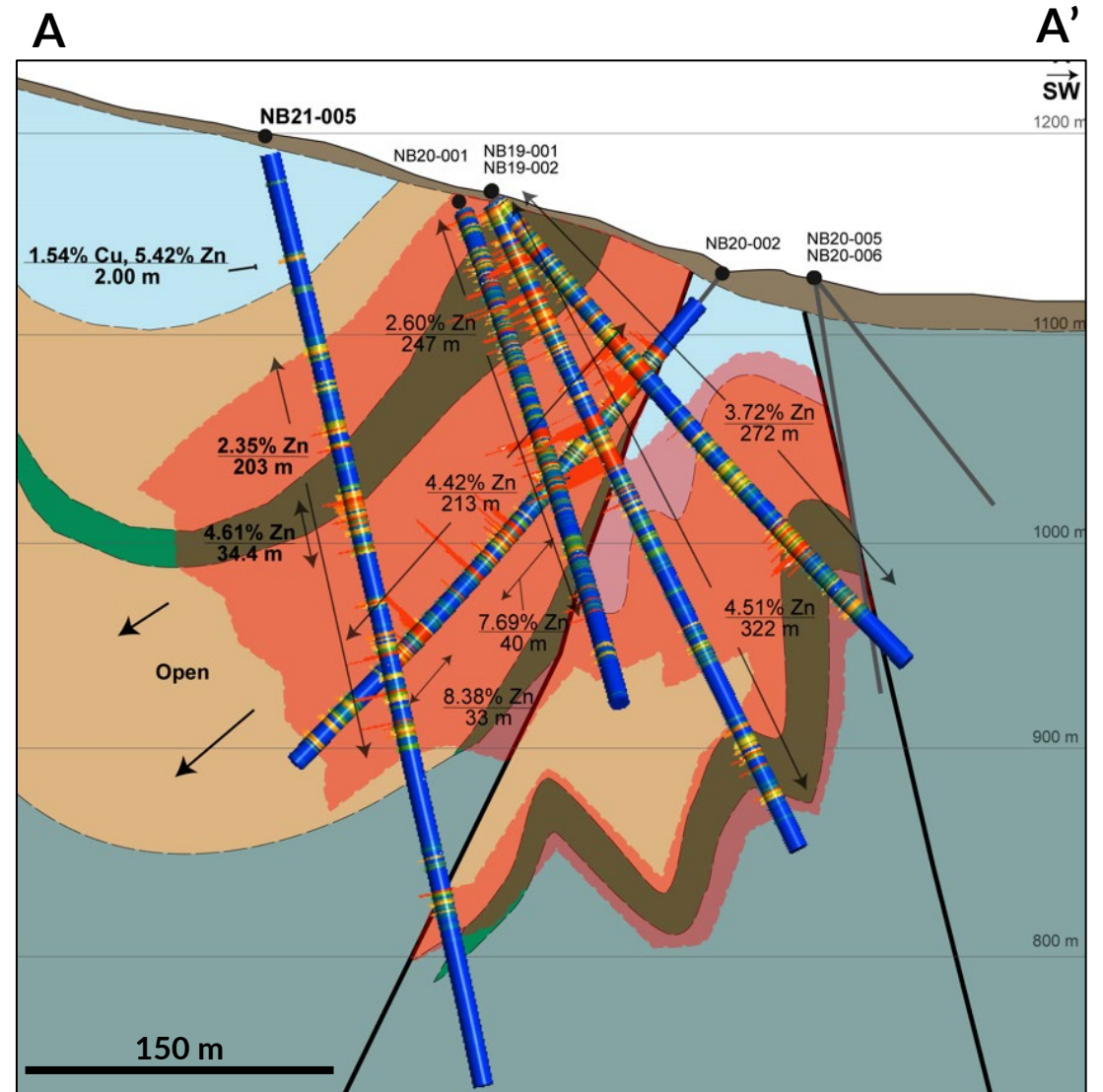
Extensive zinc system

Drilling highlights:

- NB19-002:
 - 230 m of 4.1% Zn from surface
 - Including 100 m of 7.95% Zn
 - With 6.4 m of 42.5% Zn
- NB19-001:
 - 230 m of 3.4% Zn from surface
 - Including 97 m of 5.6% Zn
- NB20-002:
 - 213 m of 4.4% Zn
 - Confirmed a vein stockwork
- NB21-005:
 - 1.54% Cu, 5.42% Zn over 2 m
 - First discovery of copper mineralization at Boundary
 - Significantly extended zinc zone down-dip

Large size potential

- True thickness 200 to 250 m
- At least 250 m down-dip and open
- Higher grades concentrated near surface

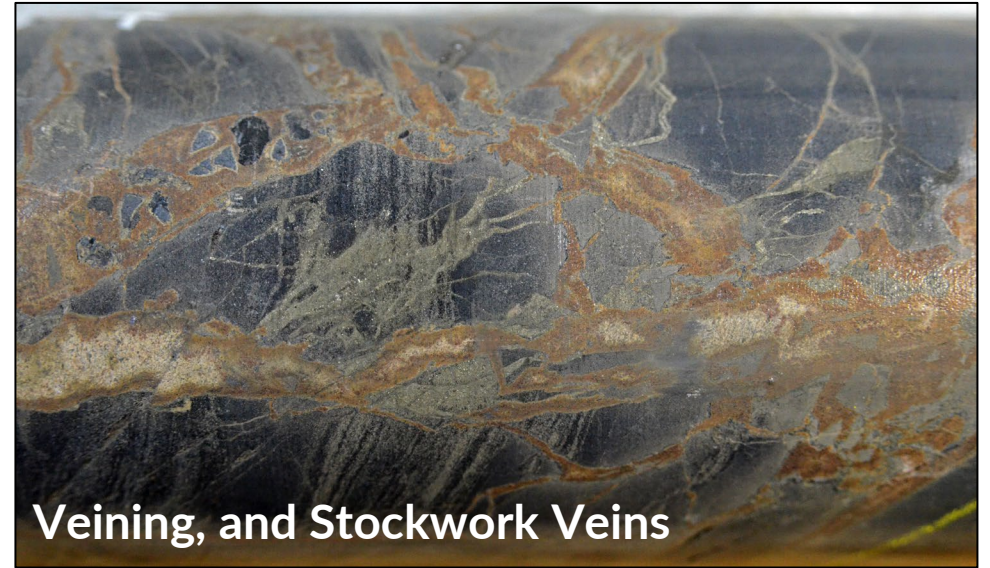


Boundary Zone – Mineralization Styles

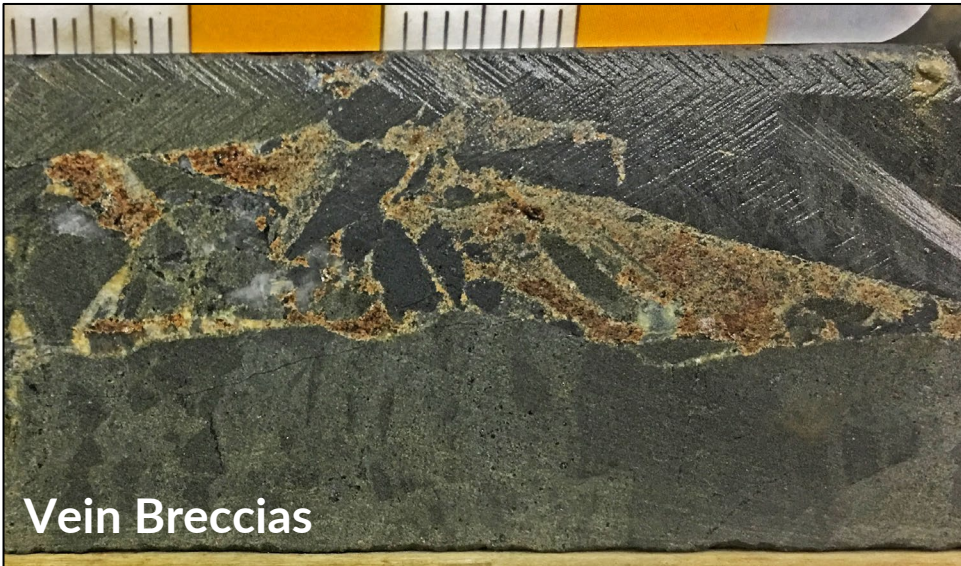
Mineralization is very different in character to Tom & Jason



Matrix Infill & Clast Replacement



Veining, and Stockwork Veins

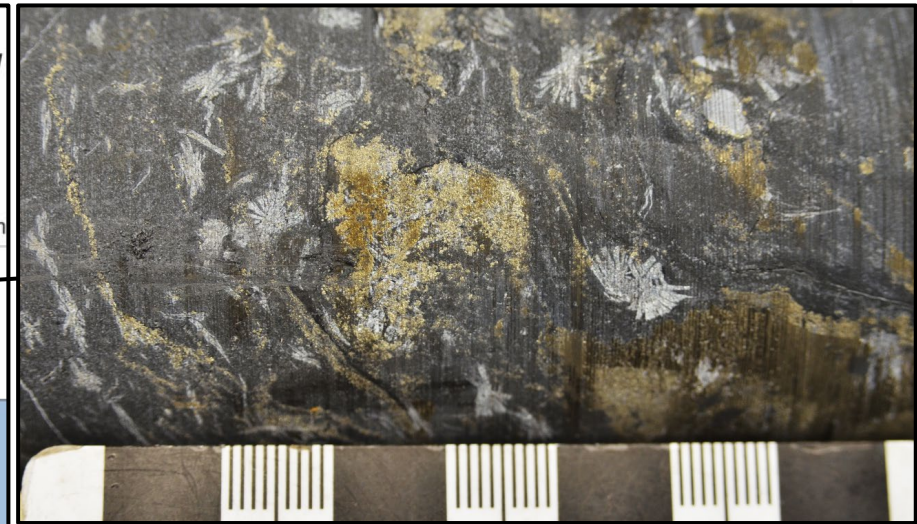
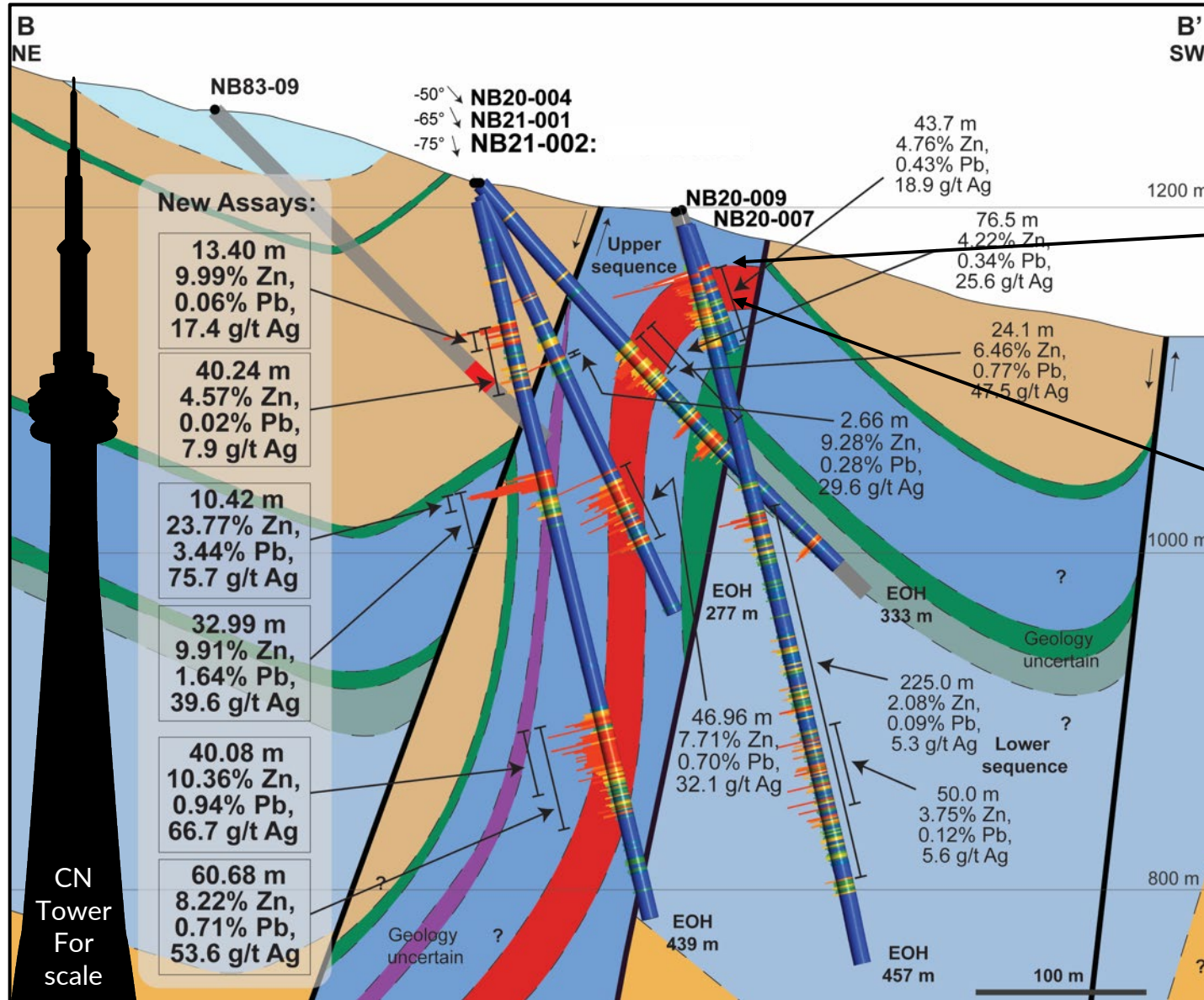


Vein Breccias



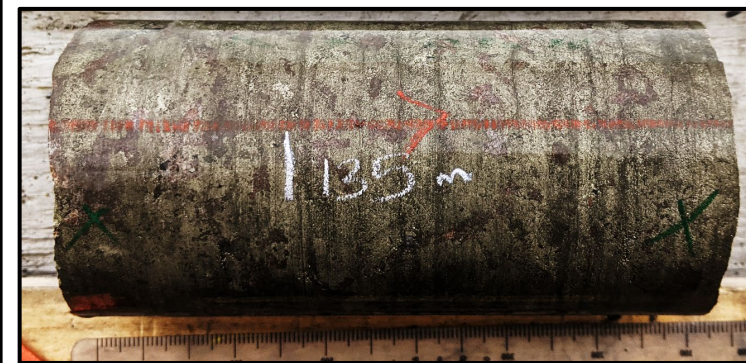
Thick Banded Veins

Boundary West Massive sulfide and barite

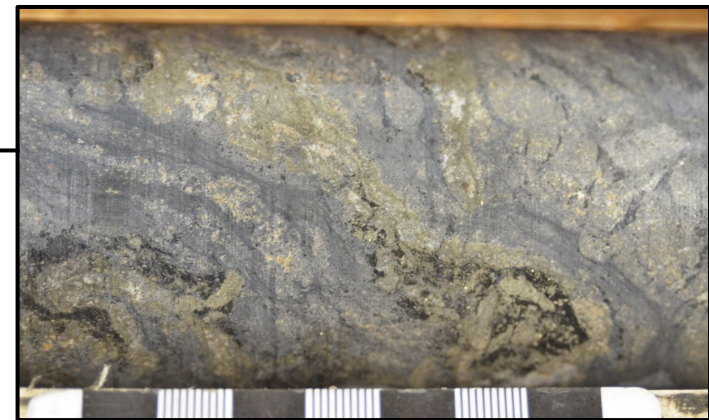
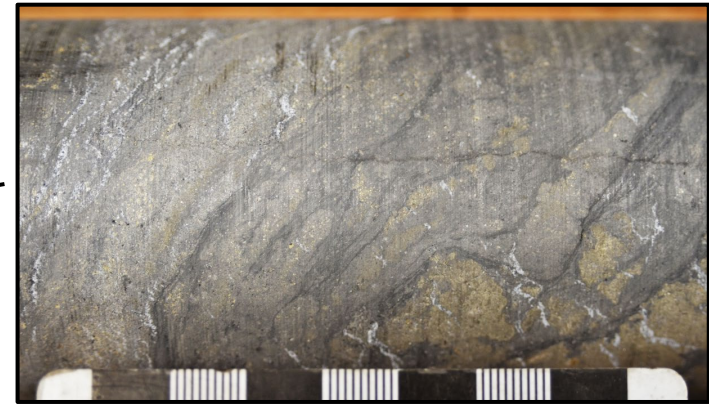
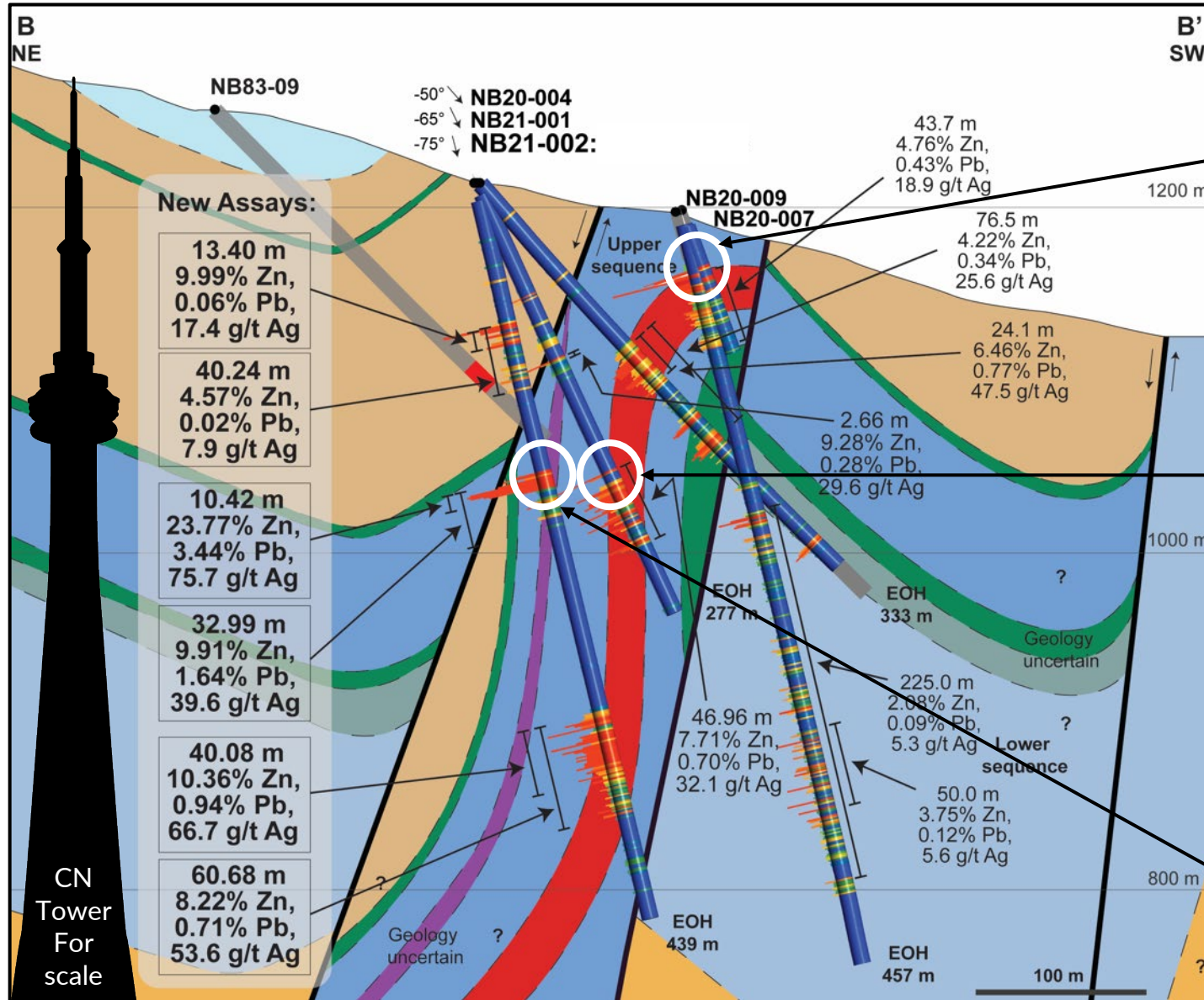


Discovery hole massive sulphides

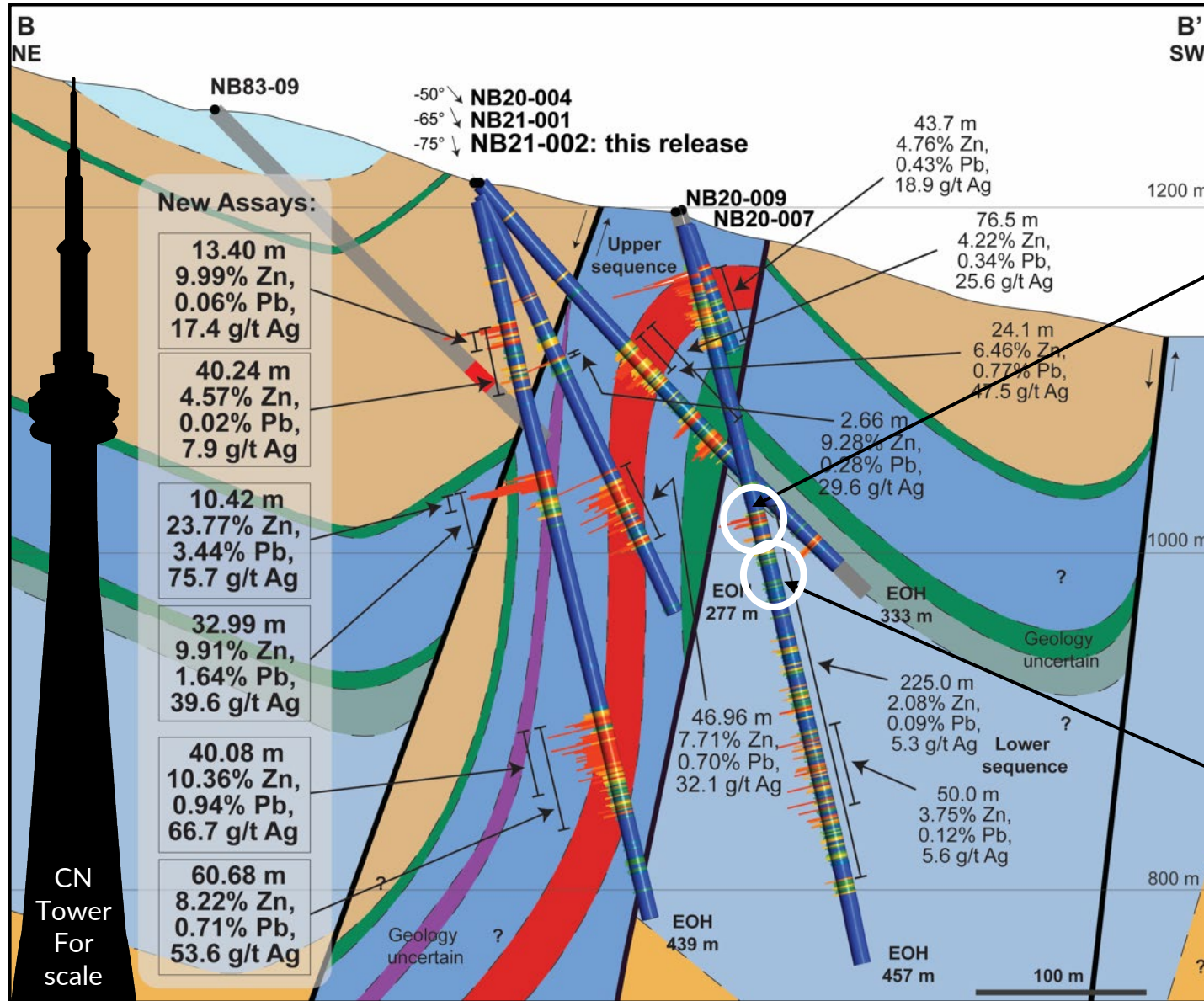
NB20-004: 26 m of massive sulfides (pyrite-sphalerite-[galena]) – Red Dog style?



High grade Tom-style stratiform mineralization

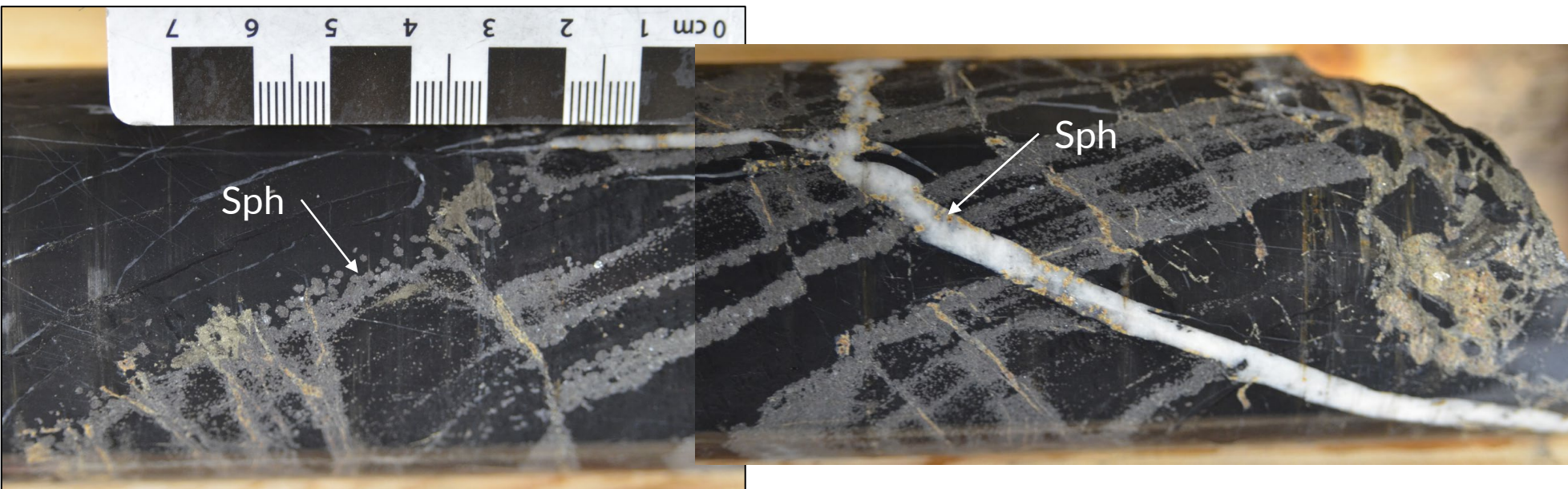
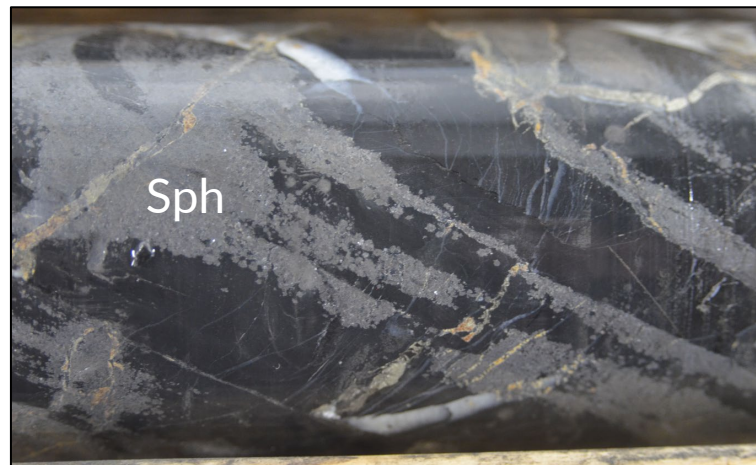
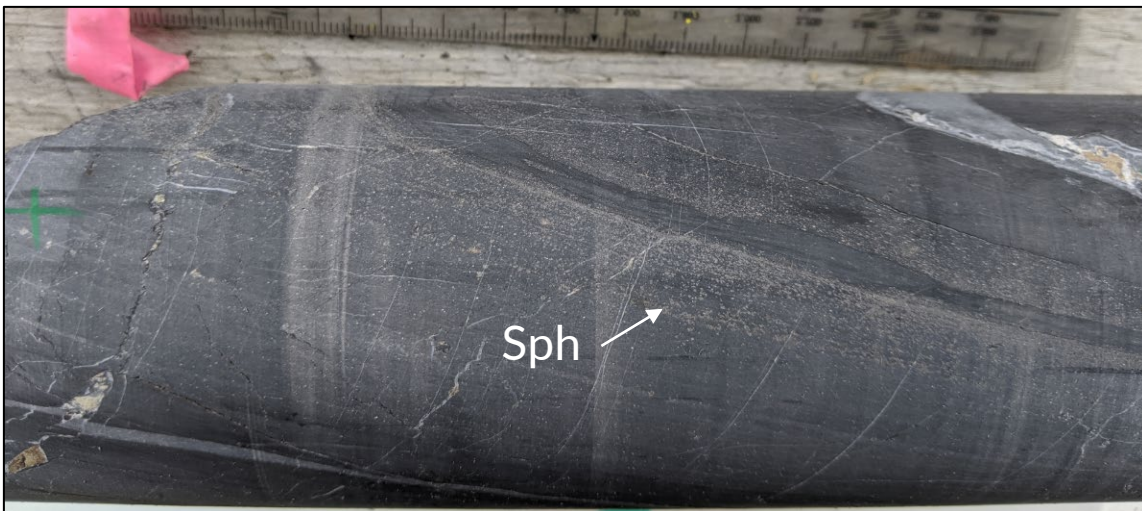


Howard's Pass style zinc mineralization

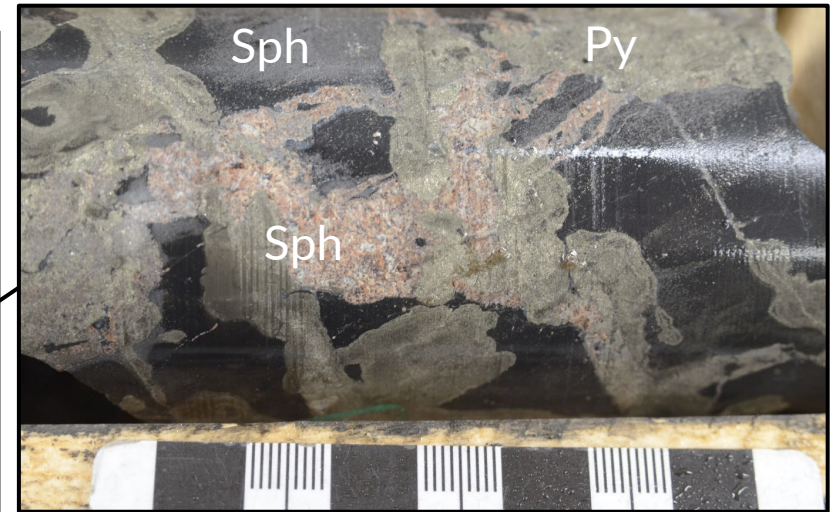
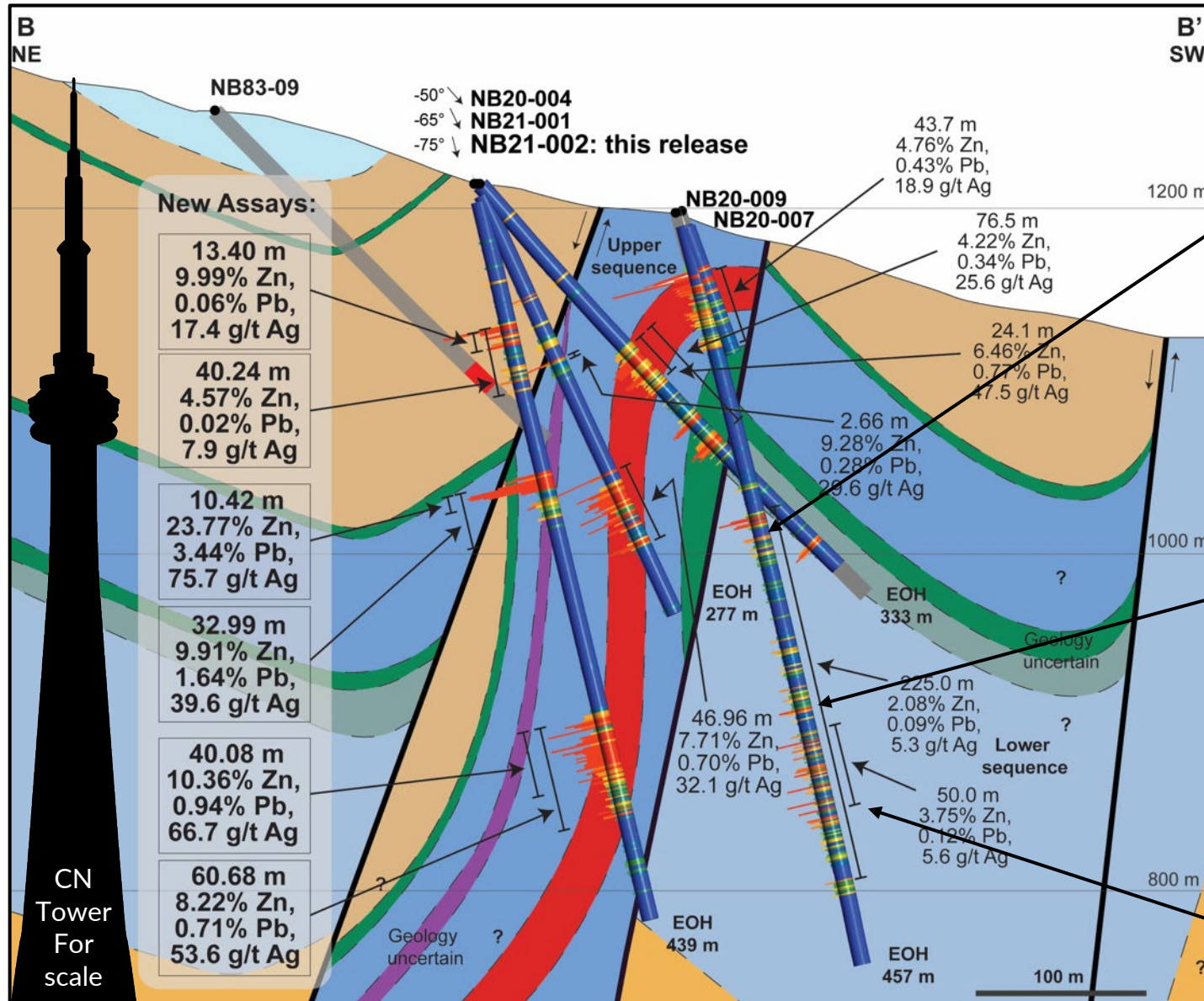


Howard's Pass style zinc mineralization

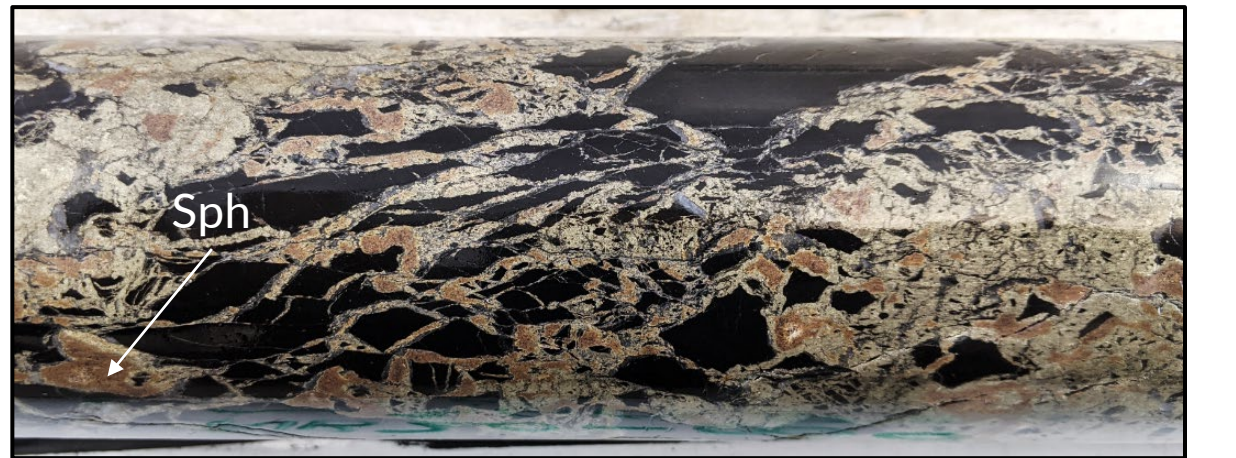
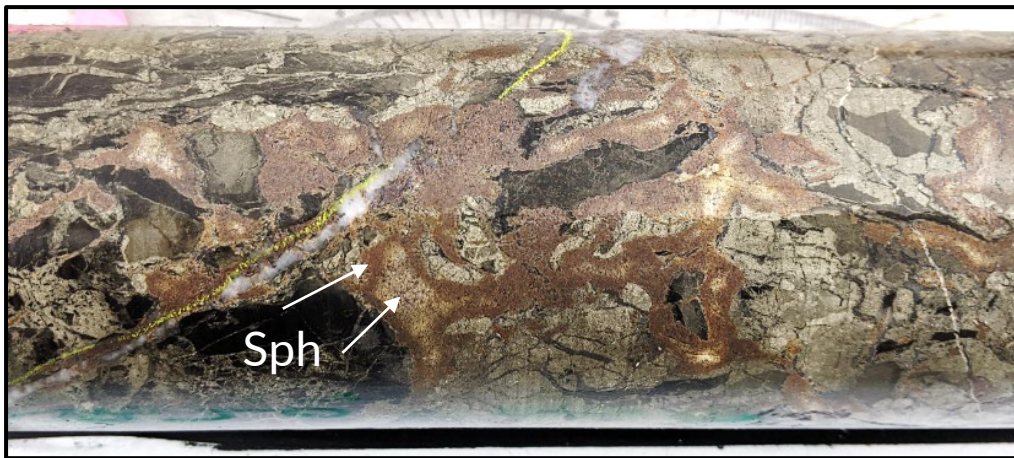
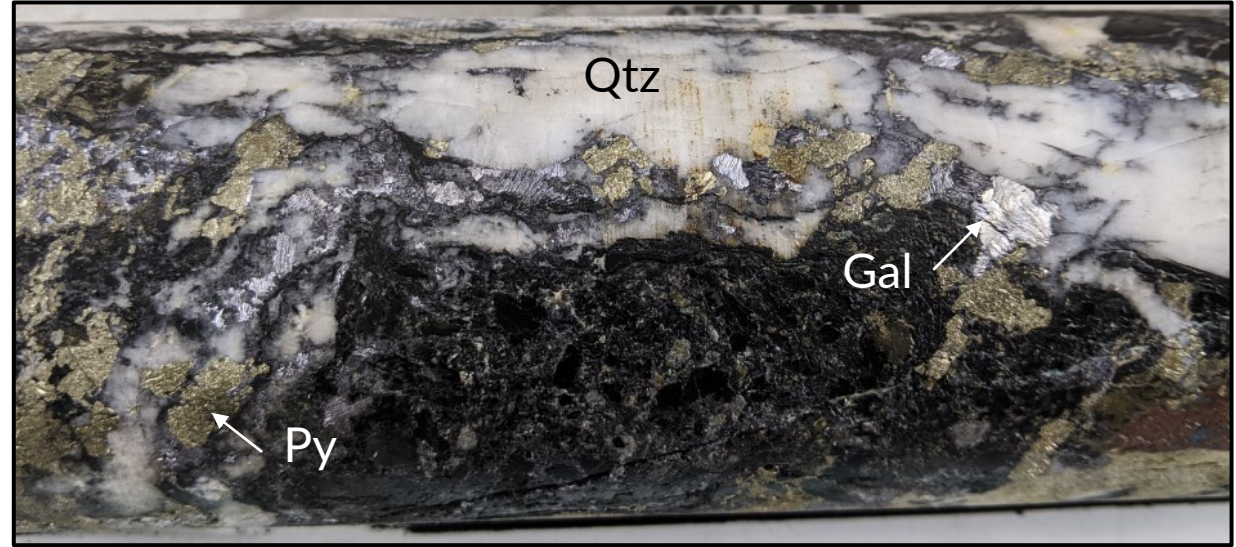
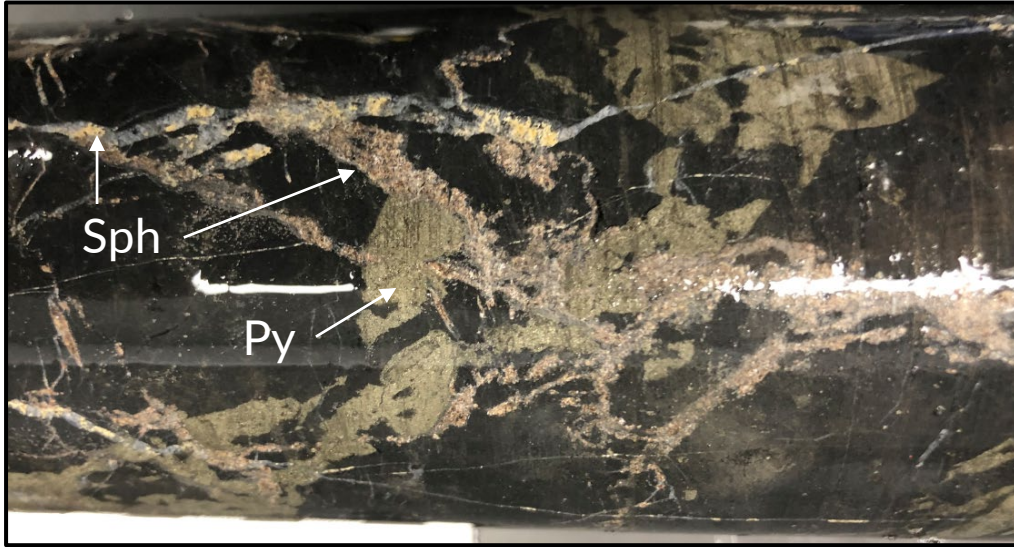
NB20-009: Late Ordovician – Early Silurian hosted stratiform mineralization – Howard's Pass style



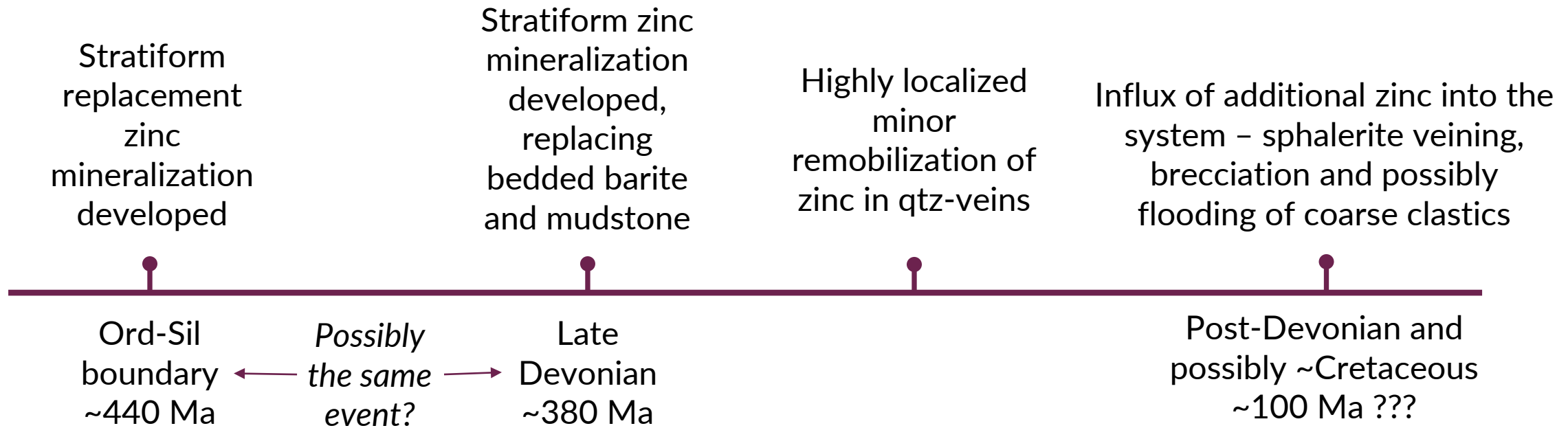
Boundary West – vein mineralization



Boundary West – Vein mineralization



Geological evolution and genesis



- Early-formed structures influence mineralization
- Reactive host rocks favoured – barite and volcanoclastics
- Multiple pulses of mineralization at Boundary Zone
- Long-lived hydrothermal system
- Overprinting episodes of mineralization
- Large time integrated fluid flux
- Fault system points to deep architecture and crustal scale plumbing system
- High potential for forming a very large deposit

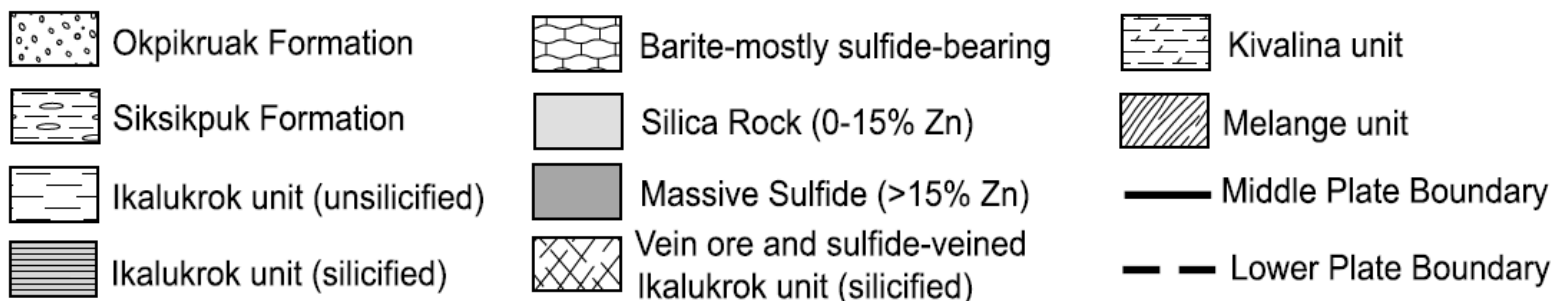
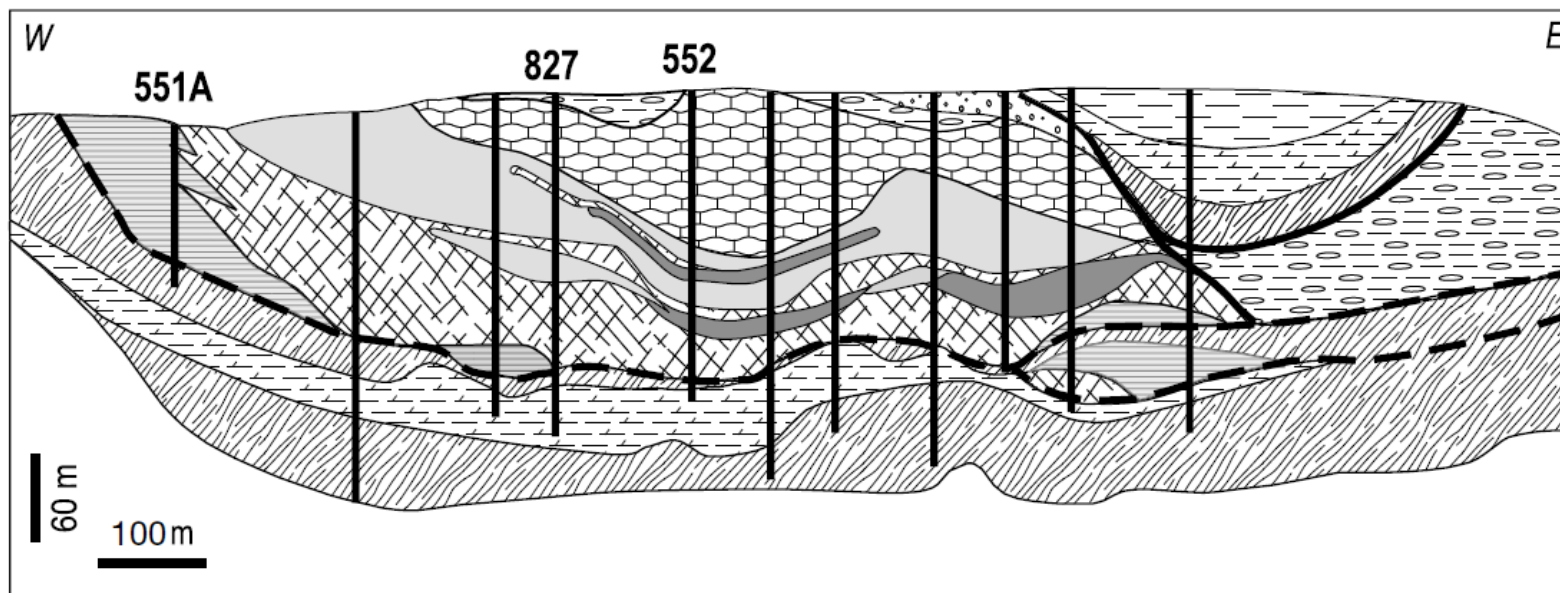
Geological Analogue for Boundary – Red Dog

- Red Dog is an analogue and a model for exploration going forward
- Boundary has been targeted for the potential for barite hosted massive sulphides

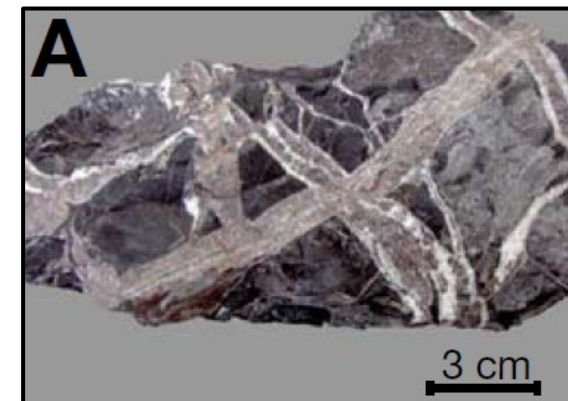
Red Dog vein ore



(From Kelley et al, 2004)

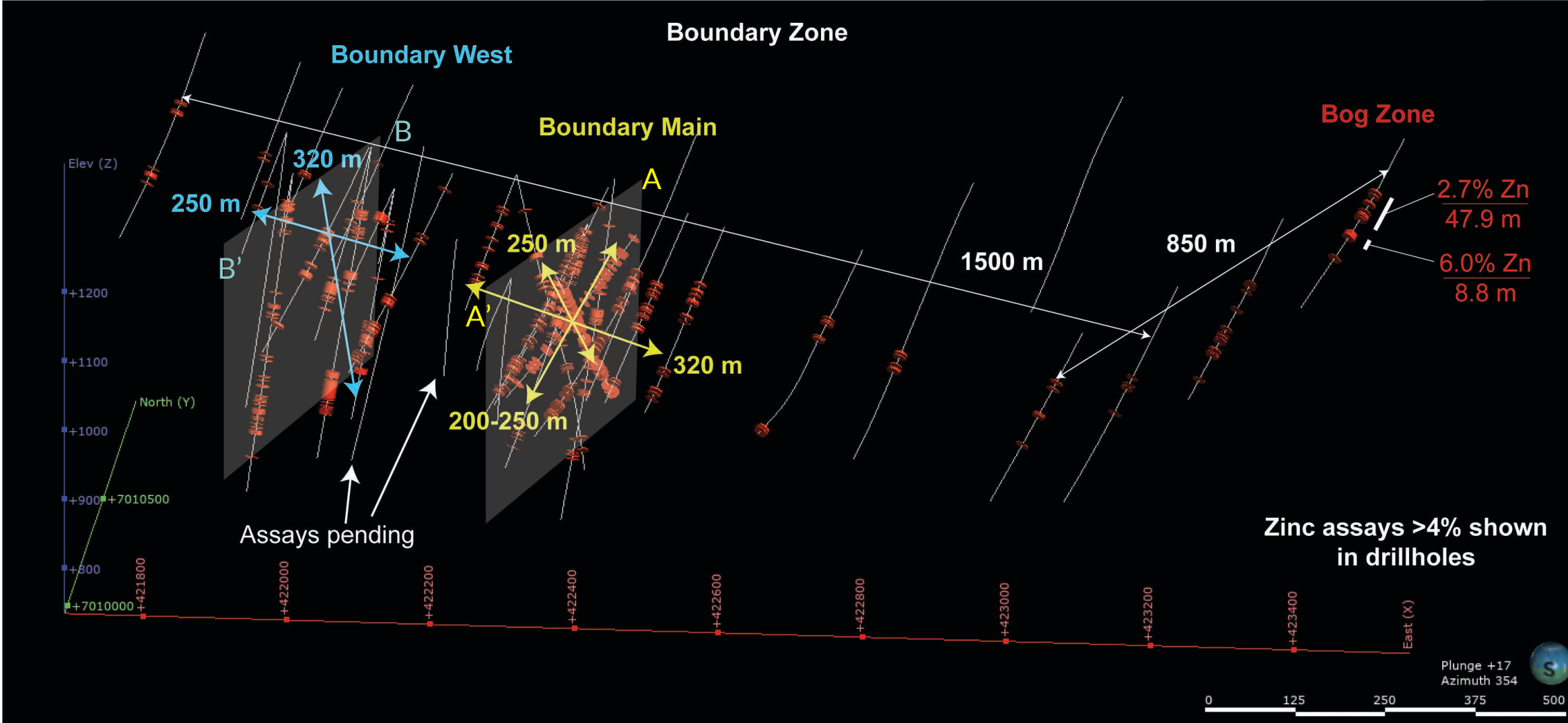


(From Slack et al, 2004)



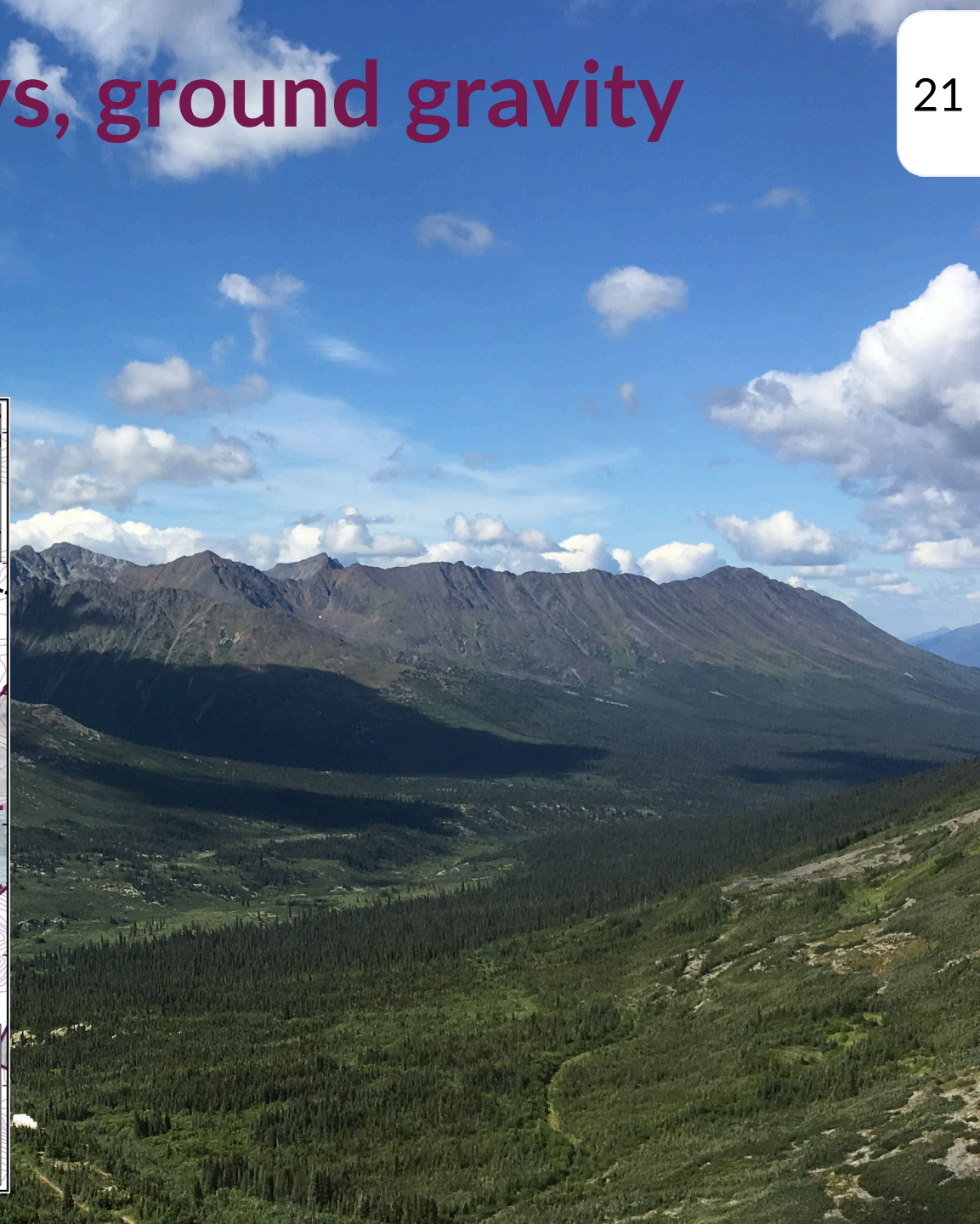
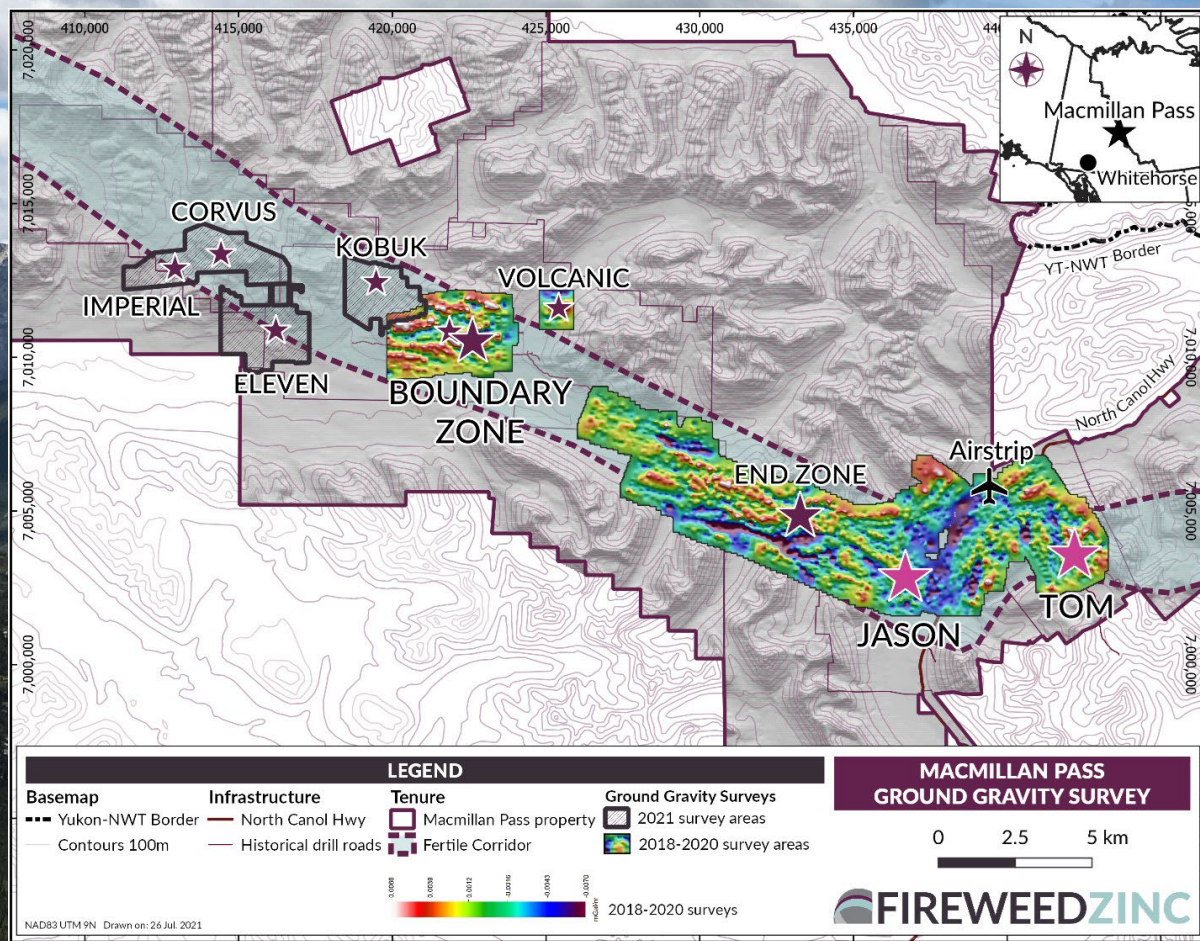
(From Leach et al, 2004)

Boundary Zone - huge size potential



Investors are cautioned that Boundary Zone is an exploration target with no Mineral Resources. Fireweed has done insufficient exploration to define a mineral resource and it is uncertain if further exploration will result in the target being delineated as a mineral resource. The dimensions of the targets stated here are estimates and should be regarded as ranges with a ±25% relative uncertainty. Target dimensions have been estimated using interpretation of the geology in 3D using logging and assay constraints available from drilling. Potential ranges of zinc grades have not been estimated.

Two 2021 drill hole assays, ground gravity and soils pending



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