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NI43-101 Qualified Person:

Brandon Macdonald PGeo, CEO and Director 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, PGeo, 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, PEng, 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.
Why Zinc? Why Fireweed?

- Demand Growth & Supply Attrition, with Massive Stimulus Coming
- Projected Projects are not Enough, China Supply Risks
- Macmillan Pass has World-Class Zinc Resource
- Growth Potential: Significant Potential Remains Untapped
Zinc Primary Uses

- **Galvanizing**: 50%
- **Alloys**: 17%
- **Brass/Bronze**: e...
- **Semi**: 6%
- **Chemicals**: 6%
- **Misc**: 4%

---

**Zinc Market**
Major Demand Drivers in the Zinc Market
Massive Stimulus Incoming

- Stimulus response to COVID-19 economic damage coming
  - Following on the back of monetary responses many countries are announcing or projected to announce fiscal stimulus programs
  - USA has announced >$2.5 TRILLION in planned stimulus with much intended to refresh aging infrastructure
  - Similar is being seen around the world
- Infrastructure is key for zinc demand
  - Infrastructure means steel, which in turn means galvanization and zinc
  - Exact impact of this stimulus as of yet unclear, but there is a real possibility sentiment leads physical market impacts and base metal prices, including zinc, run early

Global Coronavirus Stimulus Packages Compared

- Financial response to the COVID-19 pandemic as a share of GDP (selected countries)*

<table>
<thead>
<tr>
<th>Country</th>
<th>Stimulus as % of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>21.1</td>
</tr>
<tr>
<td>United States</td>
<td>13.0</td>
</tr>
<tr>
<td>Sweden</td>
<td>12.0</td>
</tr>
<tr>
<td>Germany</td>
<td>10.7</td>
</tr>
<tr>
<td>France</td>
<td>9.3</td>
</tr>
<tr>
<td>Spain</td>
<td>7.3</td>
</tr>
<tr>
<td>Italy</td>
<td>5.7</td>
</tr>
<tr>
<td>UK</td>
<td>5.0</td>
</tr>
<tr>
<td>China</td>
<td>3.8</td>
</tr>
<tr>
<td>South Korea</td>
<td>2.2</td>
</tr>
</tbody>
</table>

* As of May 10, 2020
Source: Ceyhun Elgin
China: Can Mine Supply Keep Up?

China Lead and Zinc Mining and Milling Capacity

Mine Output in China

<table>
<thead>
<tr>
<th>Scale</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Scale</td>
<td>0</td>
</tr>
<tr>
<td>Medium Scale</td>
<td>20</td>
</tr>
<tr>
<td>Small Scale</td>
<td>350+</td>
</tr>
<tr>
<td>Private Small Mine</td>
<td>500+</td>
</tr>
<tr>
<td>Total Number of Mines</td>
<td>870+</td>
</tr>
</tbody>
</table>

Source: ILZSG

Source: CNIA, Antaike
Purpose-Built with Strong Backers

About Fireweed Zinc

Share Structure

- Issued and Outstanding: 41,604,799
- Agent’s Warrants: 137,779
- Investor Warrants: 3,807,670
- Options: 2,695,000
- Performance Shares: 4,000,000
- Fully-Diluted: 52,245,248

Close Associates: 24%
Management: 15%
Teck: 9%
Hudbay: 9%
Resource Capital Funds: 11.4%
Other Funds: 6%
Other: 18%

Purpose-Built with Strong Backers
**Located in Yukon with a Massive Resource**

<table>
<thead>
<tr>
<th>2018 Resource Update</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tonnes</strong></td>
<td><strong>Zn %</strong></td>
</tr>
<tr>
<td>Indicated Total</td>
<td>11,207,000</td>
</tr>
<tr>
<td>Inferred Total</td>
<td>39,465,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contained Metal</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Zn Mt</strong></td>
<td><strong>Pb Mt</strong></td>
</tr>
<tr>
<td>0.74</td>
<td>0.28</td>
</tr>
<tr>
<td>2.23</td>
<td>1.22</td>
</tr>
</tbody>
</table>
Among the Biggest with >4mt Metal
Over 540 sq km Open for Discovery

2018 Resource and PEA included only the Tom and Jason deposits, and naturally does not integrate the results from the 2018 and 2019 drilling there and at other zones.

Satellite zones represent immediate exploration upside:
- 2018 drilling at **End Zone** intersected high grade zones including 4.78% Zinc, 10.17% Lead, 87g/t Silver over 11.08 m

The Nidd Property (acquired 2018) hosts established zinc mineralization in the **Boundary Zone** where recent drilling included intersections of 100 m of 7.94% Zn from surface within 230 m of 4.14% Zn
Project Overview

Vancouver, BC vs
Macmillan Pass Project

10km
Maiden PEA Shows Attractive Economics

Key Inputs

<table>
<thead>
<tr>
<th>Input</th>
<th>Unit</th>
<th>Base Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Price</td>
<td>US$/lb</td>
<td>$1.21</td>
</tr>
<tr>
<td>Lead Price</td>
<td>US$/lb</td>
<td>$0.98</td>
</tr>
<tr>
<td>Silver Price</td>
<td>US$/oz</td>
<td>$16.80</td>
</tr>
<tr>
<td>Exchange Rate</td>
<td>CAD/USD</td>
<td>0.77</td>
</tr>
</tbody>
</table>

Key Outputs

<table>
<thead>
<tr>
<th>Output</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial CAPEX</td>
<td>C$404M</td>
</tr>
<tr>
<td>Mine Life</td>
<td>18 years</td>
</tr>
<tr>
<td>Life-of-Mine Tonnage</td>
<td>32.7 Mt</td>
</tr>
</tbody>
</table>

Project Cash Flows

- **Pre-Tax**: C$1,735 M, NPV at 8%: C$779 M, IRR: 32%, Payback Period: 3.2 years
- **Post-Tax**: C$1,119 M, NPV at 8%: C$448 M, IRR: 24%, Payback Period: 4.0 years

APPENDIX: May 2018 PEA
Starter Pits Reduce CAPEX, Frontloaded CFs

- With more appropriate engineering assumptions pit life could be extended to 5+ years pushing underground development to after payback
- Potential to mine other zones, such as Boundary Zone, in parallel could significantly increase production profile

### Open Pit
- Mineralized Tonnes: 4,229kt
- Waste Tonnes: 20,934kt
- Strip Ratio: 5.0
- Production Life: 3 years

### Underground
- Mineralized Tonnes: 28,427kt
- Lateral Development: 100km
- Vertical Development: 5.8km
- Production Life: 16 years

### Production Profile

<table>
<thead>
<tr>
<th>Year</th>
<th>Zn (k tonnes)</th>
<th>Pb (k tonnes)</th>
<th>Ag (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y1</td>
<td>100</td>
<td>50</td>
<td>300</td>
</tr>
<tr>
<td>Y2</td>
<td>80</td>
<td>40</td>
<td>200</td>
</tr>
<tr>
<td>Y3</td>
<td>60</td>
<td>30</td>
<td>150</td>
</tr>
<tr>
<td>Y4</td>
<td>40</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>Y5</td>
<td>20</td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td>Y6</td>
<td>10</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Y7</td>
<td>5</td>
<td>2.5</td>
<td>12.5</td>
</tr>
<tr>
<td>Y8</td>
<td>2.5</td>
<td>1.25</td>
<td>6.25</td>
</tr>
<tr>
<td>Y9</td>
<td>1.25</td>
<td>0.625</td>
<td>3.125</td>
</tr>
<tr>
<td>Y10</td>
<td>0.625</td>
<td>0.3125</td>
<td>1.5625</td>
</tr>
<tr>
<td>Y11</td>
<td>0.3125</td>
<td>0.15625</td>
<td>0.78125</td>
</tr>
<tr>
<td>Y12</td>
<td>0.15625</td>
<td>0.078125</td>
<td>0.390625</td>
</tr>
<tr>
<td>Y13</td>
<td>0.078125</td>
<td>0.0390625</td>
<td>0.1953125</td>
</tr>
<tr>
<td>Y14</td>
<td>0.0390625</td>
<td>0.01953125</td>
<td>0.09765625</td>
</tr>
<tr>
<td>Y15</td>
<td>0.01953125</td>
<td>0.009765625</td>
<td>0.048828125</td>
</tr>
<tr>
<td>Y16</td>
<td>0.009765625</td>
<td>0.0048828125</td>
<td>0.0244140625</td>
</tr>
<tr>
<td>Y17</td>
<td>0.0048828125</td>
<td>0.00244140625</td>
<td>0.01220703125</td>
</tr>
<tr>
<td>Y18</td>
<td>0.00244140625</td>
<td>0.001220703125</td>
<td>0.006103515625</td>
</tr>
<tr>
<td>Y19</td>
<td>0.001220703125</td>
<td>0.0006103515625</td>
<td>0.0030517578125</td>
</tr>
<tr>
<td>Y20</td>
<td>0.0006103515625</td>
<td>0.00030517578125</td>
<td>0.00152587890625</td>
</tr>
</tbody>
</table>
Capital Achievable for an Independent Junior

- Initial Capex can easily be financed, particularly given likely price of a silver stream if that route is chosen
- Elimination of “off site infrastructure” cost is possible

<table>
<thead>
<tr>
<th></th>
<th>Initial (C$000)</th>
<th>Sustaining (C$000)</th>
<th>Total (C$000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>30,300</td>
<td>378,400</td>
<td>408,700</td>
</tr>
<tr>
<td>Site Development</td>
<td>12,000</td>
<td>1,100</td>
<td>13,100</td>
</tr>
<tr>
<td>Mineral Processing</td>
<td>70,600</td>
<td>5,500</td>
<td>76,100</td>
</tr>
<tr>
<td>Tailings Management</td>
<td>32,700</td>
<td>113,900</td>
<td>146,600</td>
</tr>
<tr>
<td>On-Site Infrastructure</td>
<td>51,400</td>
<td>14,800</td>
<td>66,200</td>
</tr>
<tr>
<td>Off-Site Infrastructure</td>
<td>78,300</td>
<td>6,700</td>
<td>85,000</td>
</tr>
<tr>
<td>Closure</td>
<td>-</td>
<td>56,700</td>
<td>56,700</td>
</tr>
<tr>
<td><strong>Direct Costs</strong></td>
<td><strong>275,300</strong></td>
<td><strong>571,500</strong></td>
<td><strong>846,800</strong></td>
</tr>
<tr>
<td>Project Indirects</td>
<td>43,000</td>
<td>-</td>
<td>43,000</td>
</tr>
<tr>
<td>EPCM</td>
<td>20,500</td>
<td>-</td>
<td>20,500</td>
</tr>
<tr>
<td><strong>Indirect Costs</strong></td>
<td><strong>63,500</strong></td>
<td>-</td>
<td><strong>63,500</strong></td>
</tr>
<tr>
<td>Owner’s Costs</td>
<td><strong>7,000</strong></td>
<td>-</td>
<td><strong>7,000</strong></td>
</tr>
<tr>
<td>Contingency</td>
<td>58,600</td>
<td>72,300</td>
<td><strong>130,900</strong></td>
</tr>
<tr>
<td><strong>Total Project</strong></td>
<td><strong>404,400</strong></td>
<td><strong>649,400</strong></td>
<td><strong>1,053,800</strong></td>
</tr>
</tbody>
</table>
## Competitive with Easy Access to Asia

- On-site and Off-site costs combine for a competitive all-in cost structure on production
- Despite remote location access to Asian Smelters and Teck’s smelter in British Columbia is available year-round without being cost prohibitive

### Operating Costs

<table>
<thead>
<tr>
<th></th>
<th>C$/t mined</th>
<th>C$/t</th>
</tr>
</thead>
<tbody>
<tr>
<td>OP Mining</td>
<td>$4.45</td>
<td></td>
</tr>
<tr>
<td>UG Mining</td>
<td>$52.02</td>
<td></td>
</tr>
<tr>
<td>Processing</td>
<td>$22.92</td>
<td></td>
</tr>
<tr>
<td>G&amp;A</td>
<td>$10.37</td>
<td></td>
</tr>
<tr>
<td>All-In OPEX</td>
<td>$82.00</td>
<td></td>
</tr>
</tbody>
</table>

### Costs per Payable lb Zn

<table>
<thead>
<tr>
<th></th>
<th>Net of By-Product</th>
<th>Net of Co-Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Cost (inc Offsite Costs)</td>
<td>US$0.47</td>
<td>US$0.76</td>
</tr>
<tr>
<td>Adjusted Cash (w Sustaining Capex)</td>
<td>US$0.64</td>
<td>US$0.86</td>
</tr>
</tbody>
</table>

### Offsite Charges

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
<th>Zinc Con</th>
<th>Lead Con</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport to Smelter</td>
<td>C$/wmt conc.</td>
<td>$211.85</td>
<td>$211.85</td>
</tr>
<tr>
<td>Smelter Treatment Charge</td>
<td>US$/dmt conc.</td>
<td>$190.00</td>
<td>$170.00</td>
</tr>
<tr>
<td>Silver Refining</td>
<td>US$/oz</td>
<td>$1.50</td>
<td>$1.50</td>
</tr>
<tr>
<td>Mercury (Hg) Penalty</td>
<td>US$/dmt conc.</td>
<td>$0.96</td>
<td>NA</td>
</tr>
<tr>
<td>Silica (SiO₂) Penalty</td>
<td>US$/dmt conc.</td>
<td>$2.00</td>
<td>NA</td>
</tr>
</tbody>
</table>
Standard Processing and Attractive Con.

- Feed is very amenable to standard processing methods consistent with other SEDEX mines
- Resulting Con should be attractive because of grades and minimal problematic elements

- Standard comminution and flotation flow sheet including:
  - 2 crusher, 1 SAG mill, 1 ball mill
  - Stirred mills for regrind
  - Selective two and three-stage flotation to produce Zn and Pb concentrates

- Primary Grind to 50um, Secondary to:
  - 15um for Pb
  - 25um for Zn

- Low Energy Consumption for Grinding
  - SCSE of 7.82 and 9.2 kWh/t
  - BWi from 8.8 to 14.0 kWh/t

- Attractive Concentrate
  - High Grade
  - Low iron in concentrates: 1.5% Fe in zinc concentrate
  - Potential modest penalties on Hg (155pm) and SiO2 (4%) in Zn Con

<table>
<thead>
<tr>
<th>Product</th>
<th>Assay Grade</th>
<th>Recovery %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Zn %</td>
<td>Pb %</td>
</tr>
<tr>
<td>Flotation Feed</td>
<td>7.29</td>
<td>3.22</td>
</tr>
<tr>
<td>Zinc Concentrate</td>
<td>58.4</td>
<td>2.2</td>
</tr>
<tr>
<td>Lead Concentrate</td>
<td>8.9</td>
<td>61.5</td>
</tr>
</tbody>
</table>
Opportunities for Economic Improvement

- We feel engineering assumptions for PEA reflect “worst case scenario” and additional data will allow for more aggressive design
- **Detailed optimization** beyond scope of a PEA
  - Future work can further optimize mine schedule and plan
  - Opportunity to explore codisposal of tailings and waste rock for efficiencies
- Opportunity to increase **pit size**
  - Optimal pit size driven by mining costs and waste rock management
  - Increase in pit-wall slope could have significant impact on strip ratio and, as a result, waste rock management costs
  - Exploration success at Tom North can significantly expand open pit
- Economics heavily influenced by **metallurgy**
  - High Lead & Silver zones show higher recoveries, but this was not reflected in PEA
  - Geometallurgical domaining needed
  - PEA metallurgy can be expanded to improve recoveries and metal partitioning

**Canol Road Funding**

- Total CAPEX of Canol Road upgrade including direct, EPCM, Indirect, Owner’s Costs and Contingency is $105M
- This cost was wholly born by Fireweed in the PEA
- In March 2020 the Yukon Government announced $71M for improvements to the Robert Campbell Highway and Canol Road
- This represents a significant reduction in up front capital required for the improvement of the Canol Road
- Yukon Government has indicated a willingness to finance more of the road as the project advances
Tom North Step-Out Target

- No drilling since 1978 (one hole); most holes in 1951 and 1952
  - Tom North was not included in 2018 resource update
- Intersections of up to 22.5 m at 6.1% Zn, 1.0% Pb in short holes
  - Shallow intersections suggest potential amenability to open-pit
- 2019 Drilling successfully hit on 7 holes
  - Inferred resource now possible
  - May add >1 year to open pit mine life
Tom East Surprises with More High-Grade

2018 TOM EAST ZONE DRILL RESULTS

<table>
<thead>
<tr>
<th>Hole No.</th>
<th>Interval (m)</th>
<th>Zinc (%)</th>
<th>Lead (%)</th>
<th>Silver (g/t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS18-004</td>
<td>16.41</td>
<td>21.14</td>
<td>13.55</td>
<td>242.8</td>
</tr>
<tr>
<td>Including</td>
<td>8.70</td>
<td>23.88</td>
<td>19.42</td>
<td>332.9</td>
</tr>
<tr>
<td>Including</td>
<td>3.00</td>
<td>35.66</td>
<td>18.49</td>
<td>312.7</td>
</tr>
<tr>
<td>Including</td>
<td>1.55</td>
<td>15.57</td>
<td>35.65</td>
<td>542.1</td>
</tr>
</tbody>
</table>

- Tom East Zone may be folded
  - Structural thickening or higher grades in hinge-zones of folds?
- Tom East remains open at depth
  - Previously was thought to terminate at depth
  - Is there further upside potential in this high-grade zone?
Low Hanging Fruit for Expanding Jason

- Syncline remains untested at depth
  - Connecting two sides of Jason may yield a significant amount of additional resource tonnage
  - Possible structural thickening at hinge and enrichment
- Lower Jason South Zone is now understood to be a fault offset of Jason South
  - No follow-up on high-grade intersections in offset zone, eg:
    - 13.8 m of 7.2% Zn, 5.3% Pb, 118 g/t Ag
    - 9.2 m of 1.6% Zn, 16.5% Pb, 92 g/t Ag
  - These intersections sit outside the 2018 Resource Statement
  - Additional drilling here should add high-grade tonnes
Boundary Zone – Grade Potential

- 2019 Drilling
  - NB19-002:
    - 230 m of 4.14% Zn from surface
    - Including 100 m of 7.95% Zn
    - With 6.4 m of 42.5% Zn
  - NB19-001:
    - 230 m of 3.44% Zn from surface
    - Including 97 m of 5.63% Zn
Brandon Macdonald
CEO & Director

Email: brandon@fireweedzinc.com
Phone: +1 (604) 646 8360
Address: Suite 1020 – 800 West Pender Street
Vancouver, British Columbia,
V6C 2V6
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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:

Brandon Macdonald PGeo, CEO and Director 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, PGeo., 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, PEng., 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.
The deposit-type formerly known as SEDEX

Typically large, continuous, high-grade systems – good targets.

Classic Selwyn Basin SEDEX model
• Hydrothermal fluids carry Zn, Pb, Ba
• Exhale on seafloor and precipitate sulphides and sulphates
• Narrow search space

Replacement model (Magnall, Gleeson, et al.)
• Ba enrichment is diagenetic
• Hydrothermal fluids with Zn and Pb replace barite in near subsurface
• Wider search space for Zn

(from Wilkinson, 2014)
What makes a good target? (from Hayward et al., 2018)
2020 Exploration Targets

- 240 Mile
- Round Mountain
- End Zone
- Volcanic target
- Bog zone
- Zinc moss target
- Eleven target
240 Mile Target

Canol Highway

240 Mile Target

Tom

Jason

1 km
50 m depth slice through conductivity model derived from 2017 VTEM data
Faults inferred from conductivity model
240 Mile Target - Geology

- Itsi Fm.
- Upper Fuller Lk mbr.
- Lower Fuller Lk mbr.
- Macmillan Pass mbr.
- Road River Gp.

Simplified geological map
Ground gravity, regional trend removed, with high pass filter upward continued to 1000 m
Simplified geological map

- Itsi Fm.
- Upper Fuller Lk mbr.
- Lower Fuller Lk mbr.
- Macmillan Pass mbr.
- Road River Gp.

240 Mile Target

Jason

Tom

1 km

N
Schematic cross section and conceptual representation of the 240 Mile exploration target.
Round Mountain

- Located 900 m west of Jason
Soil samples up to 941 ppm Pb, 3,400 ppm Zn
Ground gravity, regional trend removed, with high pass filter upward continued to 1000 m.
Round Mountain - geology

- Macmillan Pass mbr.
- Niddery Lake Fm.
- Round Mtn.
- Pb-in-soil anomaly and gravity-high
- Jason Main
- Road River Gp.
- Macmillan Pass mbr.
- Road River Gp.
- Fuller Lake mbr.

Scale: 500 m
Target advancement

Initial target refining
• Detailed mapping of the hangingwall stratigraphy
• Lithogeochemical pXRF mapping

Next steps
• Refined gravity terrain correction
• Gravity inversion for subsurface density model
• Drilling

Truck abandoned in the 1940s along the Canol Highway
End Zone

- Located 4 km NW of Jason along the Hess Fault
- Drilled in 2018 outlining a 400 m long zone of high-grade Pb-rich mineralization not included in the current Mineral Resource
- Geochemistry suggests other zones may be present at surface
Up to 550 ppm Pb and 9850 ppm Zn in soils uphill and up-ice of known mineralization.
Pb-in-soil anomaly located uphill (and up-ice) of known mineralization at End Zone
Boundary Zone – Grade Potential

- 2019 Drilling
  - NB19-002:
    - 230 m of 4.14% Zn from surface
    - Including 100 m of 7.95% Zn
    - With 6.4 m of 42.5% Zn
  - NB19-001:
    - 230 m of 3.44% Zn from surface
    - Including 97 m of 5.63% Zn
Boundary Zone – Mineralization styles

Matrix Infill & Clast Replacement

Veining, and Stockwork Veins

Vein Breccias

Thick Banded Veins
Boundary Zone – Geological Analogues

- **Red Dog** is an analogue and a model for exploration going forward

![Red Dog vein ore](image1)

(From Kelley et al, 2004)

![Red Dog vein ore](image2)

(From Leach et al, 2004)
Boundary Zone – Conceptual Geology

Conceptual Target

Massive Zn-Pb sulphide:
Massive sphalerite-galena replacing barite layers.

Geology drilled and exposed at Boundary Zone

Feeder-type mineralization:
Sphalerite and galena in massive veins, stockworks and replacing coarse clastic rocks or volcaniclastic rocks.

Stratabound replacement of matrix and clasts in coarse clastic rocks
High-grade sphalerite veins and vein-breccias

<table>
<thead>
<tr>
<th>Layer Description</th>
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<tbody>
<tr>
<td>Black mudstone</td>
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<tr>
<td>Barite</td>
</tr>
<tr>
<td>Black mudstone</td>
</tr>
<tr>
<td>Interbedded sandstone and siltstone</td>
</tr>
<tr>
<td>Diamictite</td>
</tr>
<tr>
<td>Chert pebble conglomerate</td>
</tr>
<tr>
<td>Interbedded sandstone and siltstone</td>
</tr>
<tr>
<td>Mafic to intermediate volcaniclastic rocks</td>
</tr>
<tr>
<td>Calcareous mudstone</td>
</tr>
</tbody>
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Broader Nidd Area – Ba Anomalies

- Bog Zone and Eleven Creek show anomalous Ba, potential for stratiform Zn-Pb-Ag-Ba deposits?
- Area to west of Boundary Zone is both geologically appropriate, and shows Ba anomalies
  - Could this be the Barite cap to the vein system?
- Ground gravity survey will easily identify thick barite down to 200 m deep.
Volcanic Target

- Located next to major NE-SW structure
- 3 km NE of Boundary Zone
- Potential source of Pb-rich Zn mineralization found in boulders to the SW, e.g. Munro Boulder
Volcanic target

Looking south along the till-covered Boundary Creek (see previous slide for field of view)

Munro Boulder
19% Zn, 4% Pb

Boundary Zone
(no Pb at surface)

Volcanic target

Pb anomaly

Ice Flow to SW
Soil geochemistry shows down-ice dispersion of anomaly originating from altered favourable host rocks.
Anomaly only present where colluvial and till cover is absent, in areas of near-surface bedrock. Colluvial cone cuts off anomaly down-ice.
Bog zone

• Located along major NE-SW structure

• Similar mineralization to Boundary Zone

• Historic hole NB82-01 intersected 11.5 m of 5.1% Zn and 8.8 m of 6.0% Zn at depths of 120-170 m.

• Zn mineralization at surface in trenches

• Open to the west and at depth
Bog zone – map

- **Munro Boulder**: 18% Zn, 4% Pb
- **Zinc Mineralization**: Thin till, thick till, very thick colluvium, thin colluvium, thin soil
- **Bedrock**
- **Surface thickness of 4.14% Zn from NB19-002: 230 m true thickness**
Zinc moss

- Distinctive bright green moss that grows on zinc rich soils or rocks
- Used for prospecting across Selwyn Basin
Zinc moss target

• No exploration done in this area
• Is located along NE-SW trending structure
• Zinc moss spotted on high resolution colour aerial photographs acquired during the 2019 LiDAR survey
Zinc moss target

Zinc moss (green) and gossanous soils (rusty colour)
Eleven target

- Located along splay of the Hess Fault
- Significant Zn soil anomaly
- Previously drilled by Cominco... uphill from anomaly
Zn-in-soil anomaly up to 1.8% Zn. Historic drilling uphill from anomaly.
Target advancement – Boundary area

Initial exploration
• Ground truthing
• Mapping
• Soil sampling
• Prospecting
• Rock sampling

Followed by
• Fly VTEM-mag survey
• Ground Gravity survey
• Drilling
Greenfields exploration for new potential
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Email: jack@fireweedzinc.com