



# **PRAIRIE CREEK**

Canada's Next High-Grade Silver-Zinc-Lead Mine, Path to Production

TSX - NZC OTCQB - NORZF

**NorZinc Corporate Presentation November 2021** 

## **Forward Looking Statements**



#### Cautionary Statement

For the full details of the 2021 Preliminary Economic Assessment and further information with respect to the key assumptions, parameters, and risks associated with the results of the feasibility study, the mineral reserve and resource estimates included therein, and other technical information, please refer to the complete Technical Report filed on SEDAR on November 10, 2021. The EBITDA projections summarized in this presentation are not measures recognized under Canadian generally accepted accounting principles ("GAAP") and do not have any standardized meanings prescribed by GAAP.

#### Forward Looking Statements

This presentation contains forward-looking statements that are made under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and under Canadian securities laws that involve a number of risks and uncertainties. Such statements are based on the NorZinc Ltd's (the "Company", the "Registrant", "NorZinc" or "NZC") current expectations, estimates and projections about the industry, management's beliefs and certain assumptions made by it. We use words such as "expect," "anticipate," "project," "believe," "plan," "intend," "seek," should," "estimate," "future" and other similar expressions to identify forward-looking statements. The Company's actual results could differ materially and adversely from those expressed in any forward-looking statements as a result of various factors.

Statements about the Company's planned/proposed Prairie Creek Mine operations, which includes future mine grades and recoveries; the Company's plans for further exploration at the Prairie Creek Mine and other exploration properties; future cost estimates pertaining to further development of the Prairie Creek Mine and items such as long-term environmental reclamation obligations; financings and the expected use of proceeds thereof; the completion of financings and other transactions; the outlook for future prices of zinc, lead and silver; the impact to the Company of future accounting standards and discussion of risks and uncertainties around the Company's business are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict. Therefore, the Company's actual results could differ materially and adversely from those expressed in any forward-looking statements as a result of various factors. You should not place undue reliance on these forward-looking statements.

Information relating to the magnitude or quality of mineral deposits is deemed to be forward-looking information. The reliability of such information is affected by, among other things, uncertainty involving geology of mineral deposits; uncertainty of estimates of their size or composition; uncertainty of projections relating to costs of production or estimates of market prices for the mineral; the possibility of delays in mining activities; changes in plans with respect to exploration, development projects or capital expenditures; and various other risks including those relating to health, safety and environmental matters.

The Company cautions that the list of factors set forth above is not exhaustive. Some of the risks, uncertainties and other factors which negatively affect the reliability of forward-looking information are discussed in the Company's public filings with the Canadian securities regulatory authorities, including its most recent Annual Report, quarterly reports, material change reports and press releases, and with the United States Securities and Exchange Commission (the "SEC"). In particular, your attention is directed to the risks detailed herein concerning some of the important risk factors that may affect its business, results of operations and financial conditions. You should carefully consider those risks, in addition to the other information in this Presentation and in the Company's other filings and the various public disclosures before making any business or investment decisions involving the Company and its securities.

The Company undertakes no obligation to revise or update any forward-looking statement, or any other information contained or referenced in this Presentation to reflect future events and circumstances for any reason, except as required by law. In addition, any forecasts or guidance provided by the Company are based on the beliefs, estimates and opinions of the Company's management as at the date of this Presentation and, accordingly, they involve a number of risks and uncertainties. Consequently, there can be no assurances that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. Except as required by law, the Company undertakes no obligation to update such projections if management's beliefs, estimates or opinions, or other factors should change.

## Why NorZinc



### **Exceptional High Grade**

- Large and high-grade deposit, with massive potential for expansion
- 9.8 Mt of Measured & Indicated Resources at 22.7% ZnEq + 6.4 Mt of Inferred Resources at 24.1% ZnEq

### **Low-Risk Jurisdiction**

Located in Northwest Territories Canada

### **Compelling Economics**

- US\$299M NPV and avg EBITDA US\$123M over 20-year mine life
- Strong free cashflow.

### **Experienced Leadership in Key Areas**

- Management experienced in financing and developing projects
- Supportive major shareholder with additional technical experience

### **Strong & Comprehensive CSR Approach**

- Established relationships with key permitting governing bodies
- Project's longevity and relevance within the community mitigates uncertainties

### **Real Near-Term Potential**

- Shovel ready and awaiting updated permits for recently expanded 2,400 tpd mine design
- Updated Feasibility Study underway and near completion



## Why NorZinc Now

### A Fresh Approach to a Longstanding Project



### **Notable De-risking**

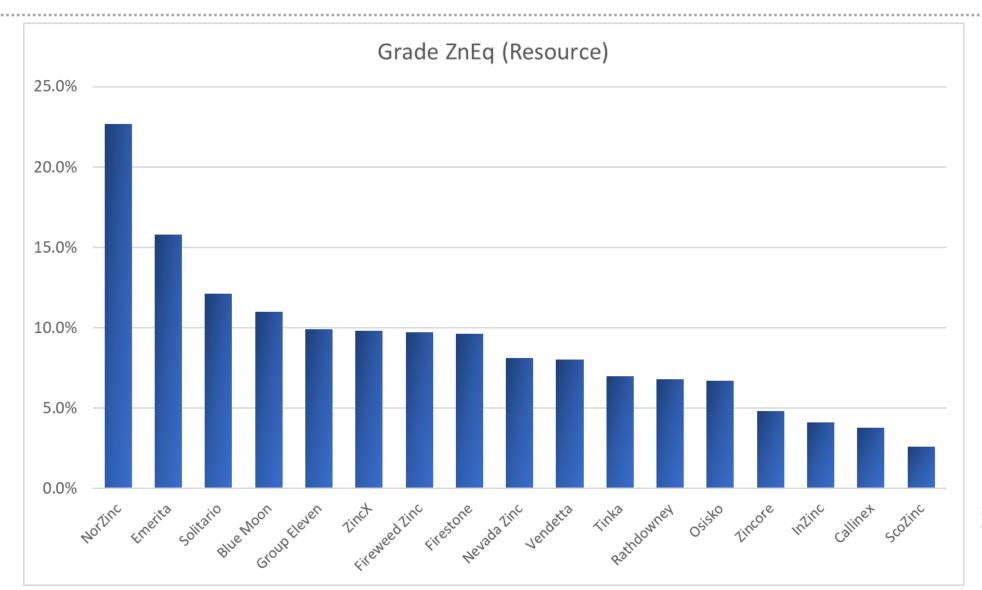
- ✓ Major permitting approval— 2,400 tpd expansion to proceed without an Environmental Assessment required
- ✓ Final IBA signed with Lidlii Kue First Nation (Road Benefit Agreement)
- ✓ MOU signed with Parks Canada (valid for 5 years)
- ✓ MOU signed with Boliden to significantly increase zinc concentrate offtake
- ✓ Base metal markets showing exceptional strength in short term with positive long-term fundamentals
- ✓ Management team focus finance/build/operate
- ✓ Feasibility Study Phase 1 initiated
- ✓ Critical metals for Canada and USA zinc added to Canada's critical mineral list (Mar 2021) and USA (Nov 2021)
  - "The 31 critical minerals on Canada's list are used to develop clean technologies, from solar panels to EV batteries. They're all essential to lowering emissions, increasing our competitiveness, and strengthening our energy security. Canada's list signals to investors where Canada will focus and where Canada will lead. Critical minerals will get us to net-zero."

Seamus O'Regan Jr., Canada's Minister of Natural Resources, March 2021

## **Resource Grade Zinc Equivalent (%)**





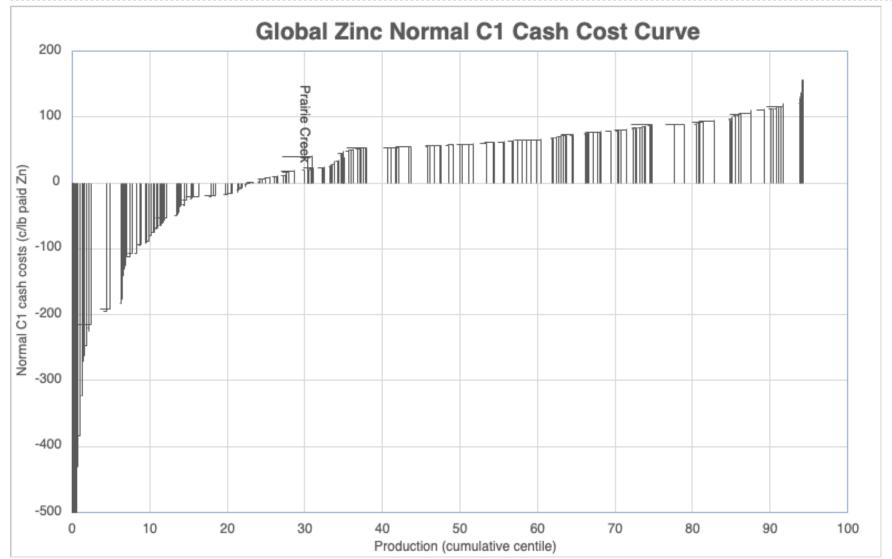


Source: Cormark (June 2021); Company reports

## **Low Cost Producer**

Normal C1 Cash Cost Curve Projected Year 2027





- Of 230 projects,
   Prairie Creek falls
   within lowest third
   of cash costs using
   Normal (Byproduct)
   C1 Cash Cost of
   \$0.19/lb Zn and C3
   Cost of \$0.60/lb Zn
- Projects projected to be in production in the year 2027 according to Wood Mackenzie

## Preliminary Economic Assessment for Prairie Creek



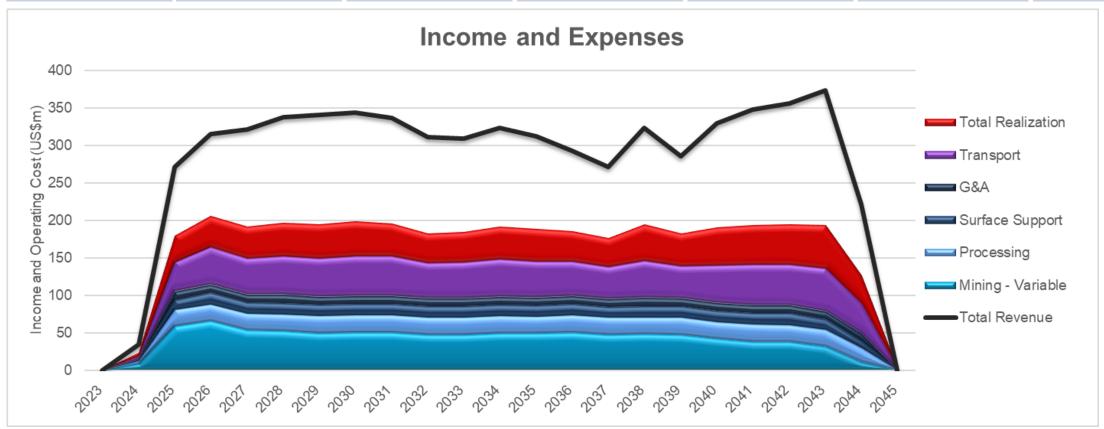
Robust Results Based on Updated Mineral Resource Estimate and 2,400 TPD

NPV8% \$299M IRR 17.7% At \$1.20/lb zinc NPV<sub>8%</sub> \$479M IRR 22.8% At approx. spot \$1.50/lb zinc

20.3 Yr Mine Life \$123M Avg EBITDA Low Cost LOM C1 \$0.19

(by-product costs)

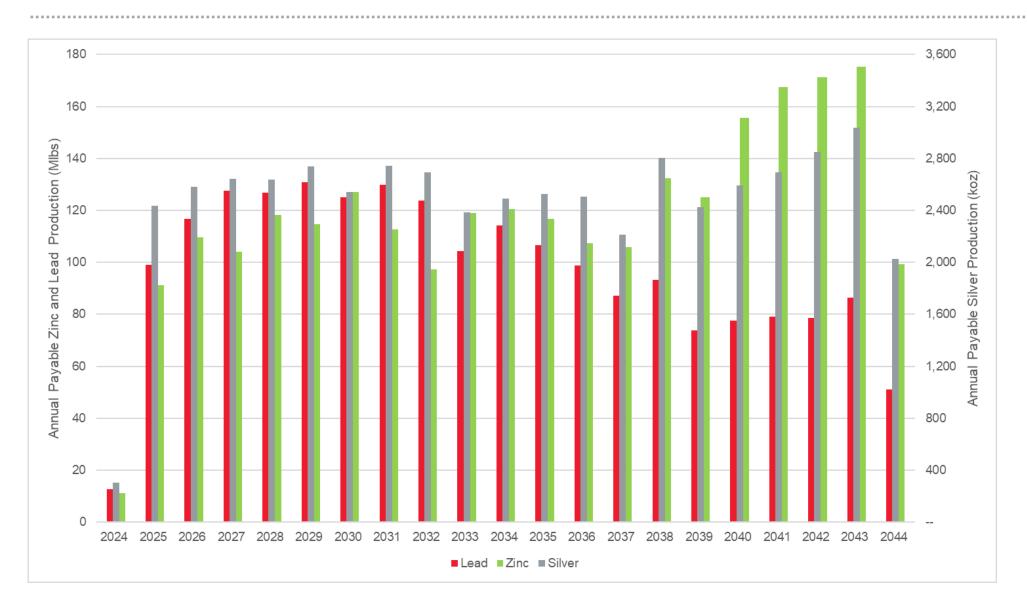
4.8 Yr Payback Period \$368M Initial Capex



## **PEA 2,400 TPD**

## Annual Payable Zinc, Lead and Silver Production





## **ESG**

### Committed to Responsible and Sustainable Development



NorZinc is committed to building strong relationships and respect with the Indigenous Peoples whose land we work on by ensuring benefits to Northern residents and local businesses through our sustainable development.

#### **Environment**

- Minimal footprint
   – no tailings, 100% paste and backfill
- Permits issued for mine and road
  - Currently amending permits for increased production
- 100% water recycling in plant design
- Use of alternative energy

### **Social Responsibility and Social License**

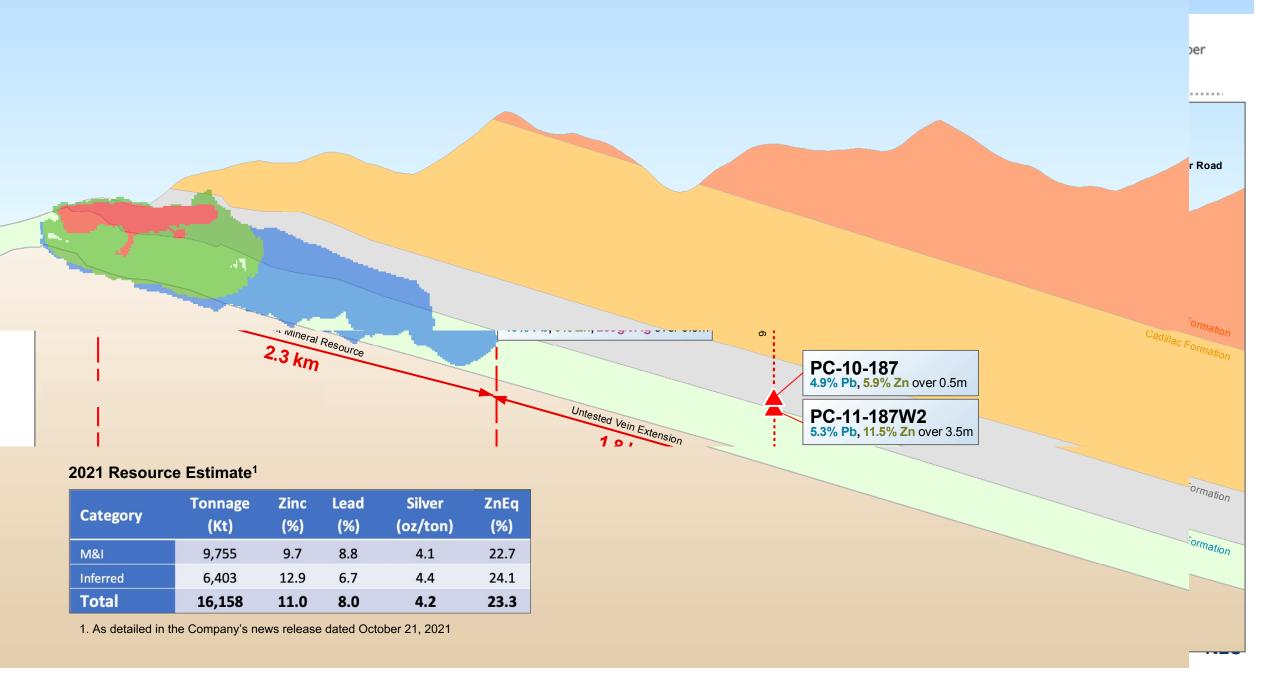
- Strong local Indigenous Support
  - Naha Dehé (Nahanni Butte) Dene Band (NDDB/NBDB) IBA signed
  - Liidlii Kue First Nation (LKFN) IBA signed
  - Acho Dene Koe First Nation (ADK) Benefit agreements in negotiation
- Long mine life providing long-term economic benefits

#### Governance

- Socio-Economic Agreement signed with the GNWT to provide benefits to the Dehcho Region
- Indigenous decision makers alongside governments (co-management)



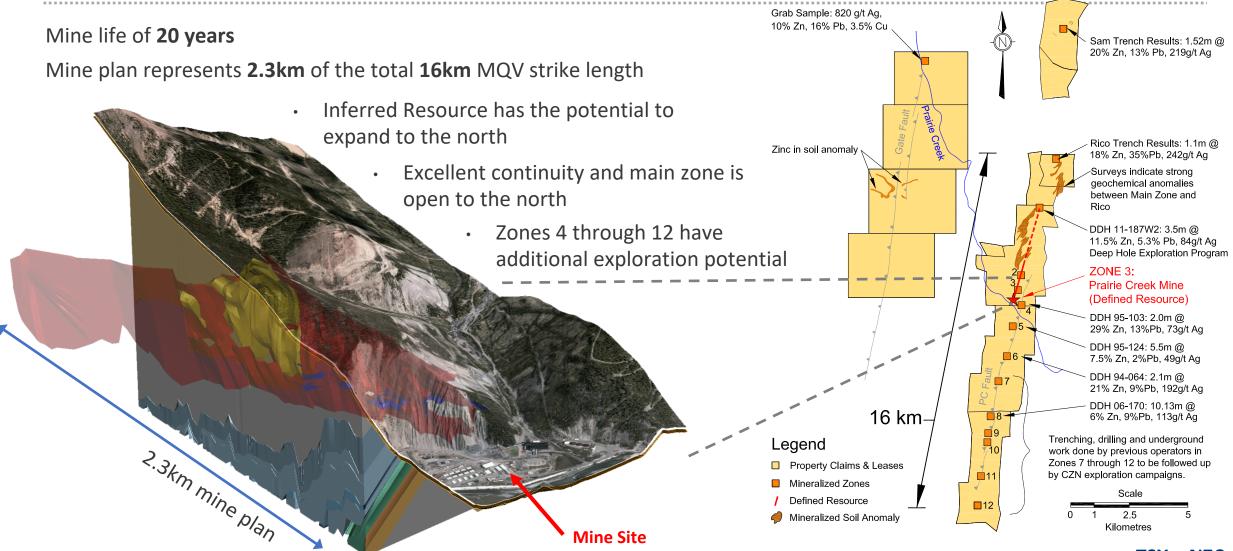




## **District Geology**

World-Class Geology

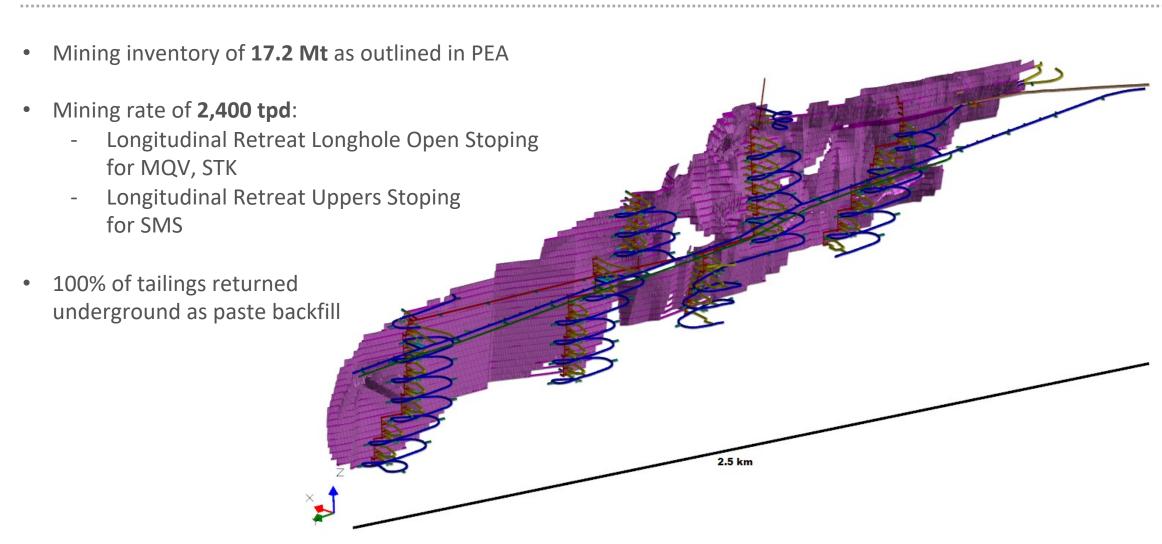




## **Conceptualized Mine Design**

Based on increased throughput of 2,400tpd





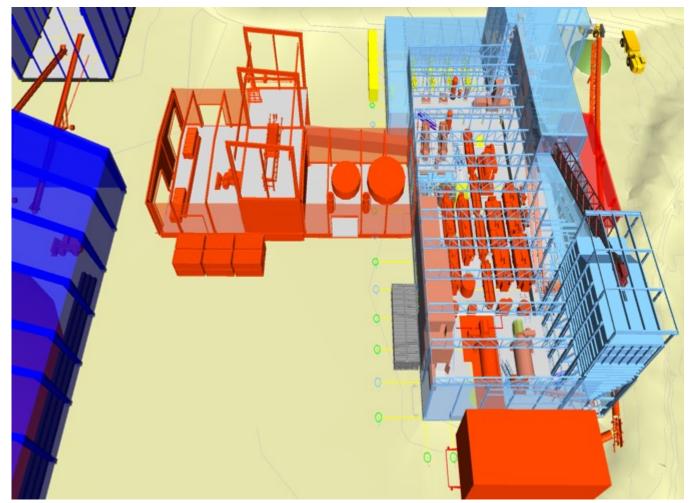
## Mill Expansion to 2,400 TPD

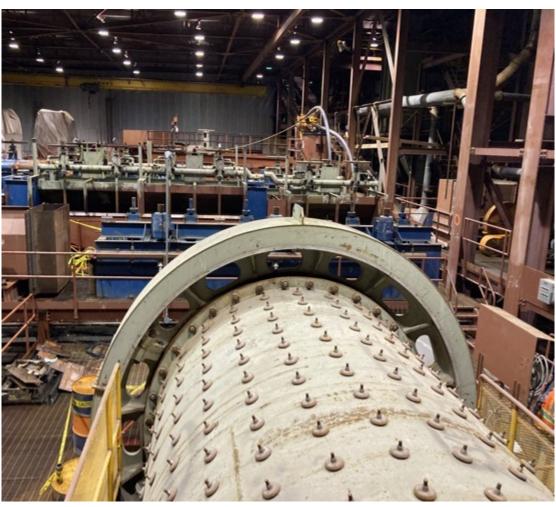
Existing Plant Capacity of 1,000 tpd



Conceptual Drawings of Plant Expansion Plans





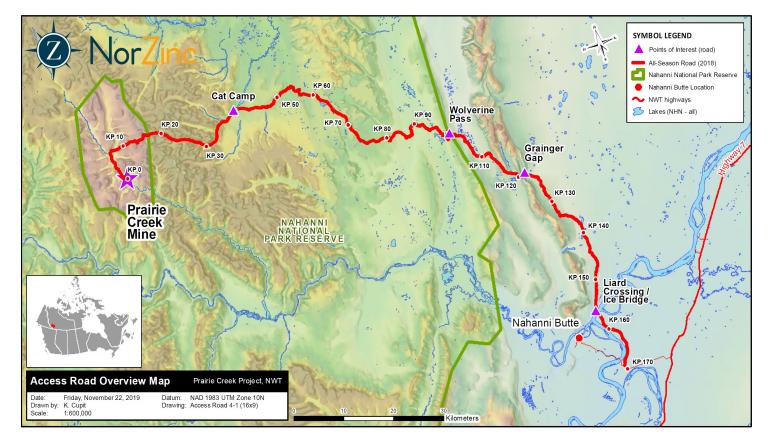


## All Season Road - 170 km

Access Road Key Milestone for Mine Construction Timeline



|             | 2021 | 2022                      |            | 2023 |                    | 2024                            |  |  |  |
|-------------|------|---------------------------|------------|------|--------------------|---------------------------------|--|--|--|
| Access Road |      | PWR Construction  Geotech | ruction Co |      | WR<br>Construction | All Season Road<br>Construction |  |  |  |
|             |      |                           | * 700 Load | S    | •                  | * 700 Loads                     |  |  |  |





## **Definitive Path to Financing & Production**



Comprehensive Pathway to Bring Prairie Creek to Production

| Path to           | 2021 2022 |                     |        |   |                        |     | 2023               |      |              |      |         |                 |                                       | 2024 |   |     |    |     |      |        |       |              |     |               |              |     |
|-------------------|-----------|---------------------|--------|---|------------------------|-----|--------------------|------|--------------|------|---------|-----------------|---------------------------------------|------|---|-----|----|-----|------|--------|-------|--------------|-----|---------------|--------------|-----|
| Production        | O N D     | J F                 | MA     | M | J J A                  | A S | 0 1                | N D  | J            | F M  | A N     | 1 J             | J A                                   | A S  | 0 | N D | J  | F   | М    | A I    | M J   | J            | Α   | S             | O N          | D   |
| Engineering       | Jpdate    | · Feasibilit        | y Stud | Y |                        | D   | etail E            | ngin | eerin        | 3    |         |                 |                                       |      |   |     |    |     |      |        |       |              |     |               |              |     |
| Procurement       |           |                     |        |   |                        |     | t for W<br>VR) 202 |      |              |      |         | Equipn<br>or WR |                                       |      |   |     |    |     |      |        |       |              |     |               |              |     |
| Access Road       | PW        | /R Constr<br>Geotec |        | _ | eason Roa<br>R) Design |     | SR<br>nstr.        | Con  | WR<br>struct | tion | *700 Lo | Const           | SR<br>ructi                           | ion  |   | Cor | WR |     |      | 700 Lo | Const | ASR<br>truct | ion |               |              |     |
| Construction      |           |                     |        |   | Early<br>Works         |     |                    |      |              |      |         |                 | Process Plant and Site Infrastructure |      |   |     |    |     |      |        |       |              |     |               |              |     |
| Mining            |           |                     |        |   |                        |     |                    |      |              |      |         |                 | Slasł                                 | hing |   |     |    | Dev | wate | ering  | and   | Stop         | ing |               |              |     |
| Commissioning     |           |                     |        |   |                        |     |                    |      |              |      |         |                 |                                       |      |   |     |    |     |      |        |       |              |     | Plar<br>imiss | it<br>Sionin |     |
| <b>Operations</b> |           |                     |        |   |                        |     |                    |      |              |      |         |                 |                                       |      |   |     |    |     |      |        |       |              |     | [             | Operati      | ons |

## Wrap-Up

### Prairie Creek – A High Grade Mine



- World Class Asset One of the Highest-Grade Deposits in the World, Leverage to Silver
- Highly Experienced New Leadership Delivering on Key Priorities:
   Project Optimization & Readiness
   Concentrate Offtake and Metallurgical Testing
   Comprehensive Project Financing
- Fully Permitted to 1,600 tpd Design; Upgrading to 2,400 tpd
- Robust Plan-to-Production, Existing Infrastructure
- ESG Vision and Strategy, Strong Community and Government Support
- Well-Capitalized and Supportive Shareholder: Resource Capital Funds (44%)
- Royalty Holders in Place: RCF 1%, Sandstorm 1.2%



| TSX:NZC                   | OTCQB - NORZF |
|---------------------------|---------------|
| Shares Outstanding        | 684,517,082   |
| Warrants Outstanding      | 61,285,022    |
| Market Cap                | C\$41M        |
| Share Price (Nov 12)      | C\$0.06/sh    |
| Largest Shareholder (RCF) | 44%           |



## **Updated Mineral Resource Estimate**



Effective October 15, 2021

| Domain              | Classification | Tonnes    | ZnEq % | Ag ppm | Pb % | Zn % |
|---------------------|----------------|-----------|--------|--------|------|------|
|                     | Measured       | 903,000   | 30.3   | 206    | 11.2 | 12.9 |
| Main Quartz Zone    | Indicated      | 5,248,000 | 27.7   | 181    | 12.0 | 10.3 |
| (MQV)               | M & I          | 6,152,000 | 28.0   | 184    | 11.9 | 10.7 |
|                     | Inferred       | 3,849,000 | 31.4   | 207    | 8.4  | 16.7 |
|                     |                |           |        |        |      |      |
|                     | Measured       | 128,000   | 17.4   | 97     | 4.1  | 10.3 |
| Stockwork           | Indicated      | 2,754,000 | 12.6   | 63     | 3.2  | 7.6  |
| (STK)               | M & I          | 2,883,000 | 12.8   | 65     | 3.2  | 7.7  |
|                     | Inferred       | 2,187,000 | 12.7   | 67     | 4.0  | 6.7  |
|                     |                |           |        |        |      |      |
| Stratabound Massive | Indicated      | 722,000   | 16.4   | 53     | 5.1  | 9.7  |
| Sulphides (SMS)     | Inferred       | 367,000   | 15.4   | 47     | 4.4  | 9.6  |
|                     |                |           |        |        |      |      |
|                     | Measured       | 1,031,000 | 28.7   | 193    | 10.3 | 12.6 |
| TOTAL               | Indicated      | 8,724,000 | 22.0   | 133    | 8.6  | 9.4  |
|                     | M & I          | 9,755,000 | 22.7   | 139    | 8.8  | 9.7  |
|                     | Inferred       | 6,403,000 | 24.1   | 150    | 6.7  | 12.9 |

| Updated P            | rairie Creek R | esource Esti | Previous Resource Estimate |      |           |        |      |      |  |
|----------------------|----------------|--------------|----------------------------|------|-----------|--------|------|------|--|
|                      | September      |              | September                  | 2015 |           |        |      |      |  |
| MQV+STK+SMS          | Tonnes         | Ag ppm       | Pb %                       | Zn % | Tonnes    | Ag ppm | Pb % | Zn % |  |
| Measured             | 1,031,000      | 193          | 10.3                       | 12.6 | 1,482,000 | 200    | 10.8 | 13.2 |  |
| Indicated            | 8,724,000      | 133          | 8.6                        | 9.4  | 7,222,000 | 123    | 8.5  | 8.7  |  |
| Measured & Indicated | 9,755,000      | 139          | 8.8                        | 9.7  | 8,704,000 | 136    | 8.9  | 8.9  |  |
| Inferred             | 6,403,000      | 150          | 6.7                        | 12.9 | 7,049,000 | 166    | 7.7  | 11.3 |  |

<sup>1.</sup> Stated at a cut-off grade of 8% ZnEq based on prices of Zn = \$1.15 USD/lb, Pb = \$1.00 USD/lb, Ag = \$20.00 USD/troy oz. 2. Average overall processing recovery factors for the purposes of the resource estimate for Zn, Pb and Ag are 81.5%, 84.3%, and 95.1% respectively, with payables similarly as 85.0%, 94.8%, and 85.0%. Numbers may not compute exactly due to rounding. 3. ZnEq% = (Grade of Zn in %) + [(Grade of Pb in % \* Price of Pb in \$% \* Payable Ag in %)]/(Price of Zn in US\$/Ib\*22.046 \* Recovery of Ag in % \* Payable Ag in %)]/(Price of Zn in US\$/Ib\*22.046 \* Recovery of Zn in % \* Payable Zn in %). For the purposes of the stated mineral resource estimate, prices used are Zn = \$1.15 USD/lb, Pb = \$1.00 USD/lb, Ag = \$20.00 USD/troy oz, overall average LOM recoveries for Zn, Pb and Ag are 81.5%, 84.3%, and 95.1% respectively, with payables similarly as 85.0%, 94.8%, and 85.0%. For the purposes of the modelled mine physicals, prices used are Zn = \$1.20 USD/lb, Pb = \$1.05 USD/lb, Ag = \$24.00 USD/troy oz.

## Geology

World-Class Geology



3 sulphide mineralization styles at Prairie Creek

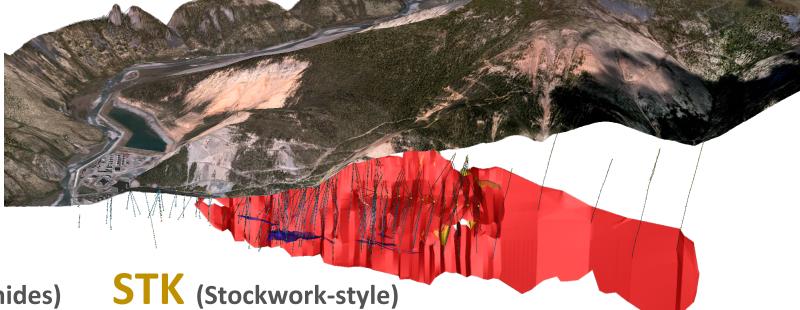
## MQV (Main Quartz Vein)

Steeply dipping 3-5m wide fault infilled with quartz carbonate dolomite, with abundant galena and sphalerite, with lesser pyrite and tennantite-tetrahedrite.

## **SMS** (Stratabound Massive Sulphides)

Occurs as stratabound semi-massive sphalerite-galena-pyrite replacement, with typically half the lead and a third of the silver grades, and predates the MQV and STK.

Occurs as parallel vertical high-grade galena and sphalerite veins up to 60cm wide, but spaced far enough apart that in bulk, grades less than the MQV and SMS.



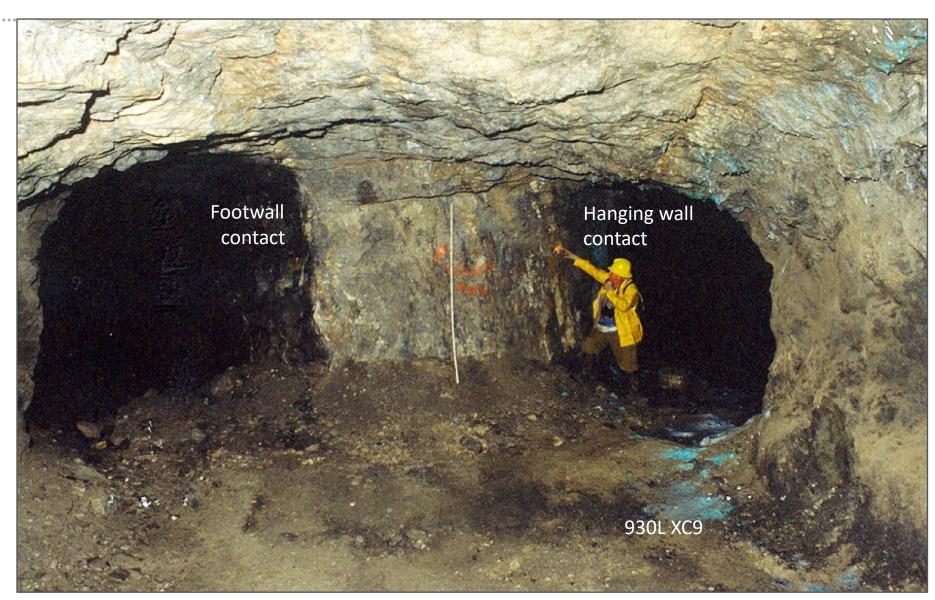
## **Main Quartz Vein**

Consistent Ore Body Ideal for Long-Hole Open Stoping



MQV in the underground workings (930 Level XC9)

Intercept > **50% ZnEq:** 5.9% Pb, 39.4% Zn and 177g/t Ag over 1.9m



# **Preliminary Economic Assessment for Prairie Creek**



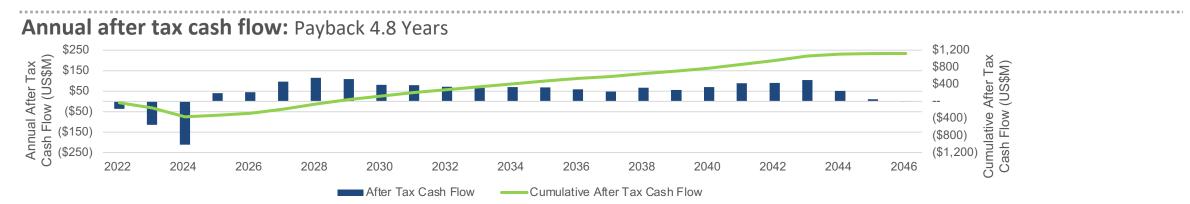
Robust Results based on 2,400 tpd throughput rate

- PEA provides economic assessment for an underground mine development based on 2,400 tonnes per day
- High-grade updated Mineral Resource Estimate:
  - 9.8 Mt of Measured & Indicated Resources at 22.7% ZnEq
  - 6.4 Mt of Inferred Resources at 24.1% ZnEq
- At recent zinc spot price of approximately \$1.50/lb zinc, after-tax NPV8% increases to \$479 and IRR increases to 22.8%
- Low LOM C1 and C3 by-product costs of \$0.19/lb Zn and \$0.60/lb Zn place Prairie Creek in the lowest third of zinc mines once in operation
- Significant opportunity to improve initial costs through cost optimization

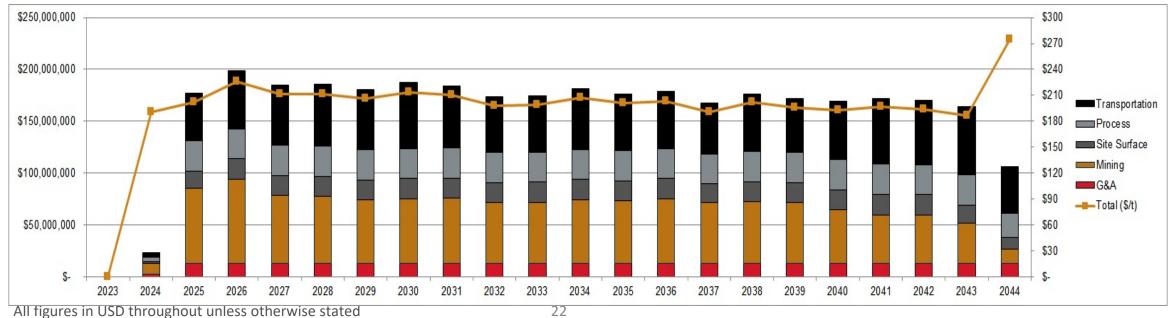
## **PEA 2,400 TPD**

### Strong Average Annual Cash Flow





Annual cash operating costs by area: (LOM: 7% G&A, 32% Mining, 10% Site Surface, 16% Process, 34% Transportation)



## **Management Team**

### An Experienced Team of Mine Builders and Operators



#### Rohan Hazelton, President, CEO & Director

Mr. Hazelton is a Chartered Professional Accountant (CPA, CA) with more than 25 years of international finance experience, 20 of those years dedicated to the mining industry. He was previously the CFO of Cerrado Gold and Ascendant Resources and also Co-founder and CEO of KORE Mining. He was one of the founding members of Goldcorp (Wheaton River) with 15 years of progressively senior positions including VP Finance, CFO Mexican Operations and VP Strategy and contributed to 5 mine builds. He was also a founding member of Wheaton Precious Minerals (Silver Wheaton). He is a graduate of Harvard University in Applied Math and Economics.

### Scott Fulton, VP, Project Development

Mr. Fulton has 25 years of multi-industry experience with the last 12 years spent in mine construction and development as a Project Manager for Wood (formerly Amec Foster Wheeler), where he executed a number of new mine builds in Canada and the US, including New Afton, Kitsault, Mount Emmons, Brucejack, Rainy River and Carlsbad East. Prior to that, he worked on significant industrial projects at Hatch. Mr. Fulton is a P.Eng. and has an honours degree in Mechanical Engineering.

#### Peter Portka, CFO

Mr. Portka is a mining financial professional with extensive metals and mining experience in corporate finance, corporate development, public accounting and M&A advisory. He was most recently the VP Finance of Quintana Resources Capital, a US-based mining investment company and prior to that held senior positions at Sandstorm Gold and Sandstorm Metals & Energy. Mr. Portka holds Chartered Professional Accountant and Chartered Financial Analyst designations and has a Bachelor of Commerce degree from the University of British Columbia.

#### Claudine Lee, VP, CSR

Ms. Lee joined NorZinc in February 2021 as the VP of Corporate Social Responsibility She was most recently Head of Health, Safety, Environment Communities and Training at Dominion Diamond Mines. In this position, she was responsible for the implementation and maintenance of Dominion's Health, Safety, Risk and Hygiene and Environment programs and policies ensuring compliance with all federal and territorial regulations. Ms. Lee holds a MSc in Geology/Environmental Geochemistry from Queen's University and an Honours BSc in Geology and Environmental Science. She started her career as an Exploration Geologist.

### **David Harpley, VP Permitting**

David Harpley is currently VP Permitting, has been with NorZinc since 2004, and was responsible for obtaining permits for the Mine and all-season Road. He is an environmental specialist with 42 years' experience. In addition to permitting, he has undertaken and managed baseline studies, impact assessments, reclamation and closure plan developments and site assessments. David has a B.Sc. in Geology and an M.Sc. in Mining and Mineral Exploration.

#### **Joseph Lanzon, VP Corporate Affairs**

Mr. Lanzon has over 20 years of executive management experience in Mining, government regulatory approaches and in developing community partnerships with Indigenous, Federal, and Provincial governments. Mr. Lanzon previously worked for the Government of Canada, assisting on two Royal Commissions. He holds both a Bachelor and master's degree in Public Administration (BPA)(MPA) and has competed the Executive Leadership Program ELP (2001) an Executive Business program at McGill university.

## **Board of Directors**

### An Experienced and Supportive Board



#### John Warwick, Chairman of the Board

Mr. Warwick is a corporate director. Prior to 2015, he was the Managing Director, Investment Banking, founding partner and Head of Corporate Finance of Paradigm Capital Corporation where he advised and assisted companies on financing and capital structure matters.

### **Gary Sugar, Director**

Mr. Sugar has an extensive career in the investment banking industry, serving more than 30 years with RBC Capital Markets including 24 years as a Managing Director. Gary recently served as a director of Osisko Mining Corporation, Stillwater Mining Company and Romarco Minerals Inc., and serves as a director of Seabridge Gold Inc. Gary holds a BSc in Geology and an MBA, both from the University of Toronto.

### **Shelley Brown, Director**

Ms. Brown has a distinguished 40-year career in accounting and more than 25 years of board experience serving on not-for-profit, association, and for-profit corporate boards, including Deloitte Canada and the Accounting Standards Board Oversight Council. She is a recognized leader in diversity and inclusion, having been listed on Canada's Top 100 Most Powerful Women for four years.

### **Stephen Flewelling, Director**

Mr. Flewelling has more than 30 years experience in exploration, feasibility planning, project development, construction and operations. He is currently Chief Development Officer at Noront Resources. Stephen is a graduate of the Engineering program at Queen's University.

#### **Anita Perry, Director**

Ms. Perry is a senior executive skilled in reputation and issues management, government affairs and stakeholder relations in Calgary. She recently retired from BP Canada after 14 years where she led all external relations and interface strategies for BP in Canada as Vice President of Communications and External Affairs. She obtained her Bachelor of Arts at the University of Regina majoring in Political Science.

### Ian Ward, Director

Mr. Ward is a Professional Engineer and metallurgist with extensive experience in the processing of gold and base metal ores, industrial minerals, and with grinding systems and effluent treatment. From 2010 to 2015 he was Senior Advisor and VP of Metallurgy and Processing for Kinross Gold Corporation, and prior thereto Senior VP, Project Development for Mustang Minerals Corp. and President and Principal Metallurgist with Micon International Limited. He is a Qualified Person and co-author for a number of NI 43-101 compliant Technical Reports.



# **CONTACT**

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