



# **PRAIRIE CREEK**

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

TSX – NZC OTCQB – NORZF



**Rohan Hazelton, President & CEO** 

Red Cloud 2021 Oktoberfest Fall Mining Showcase October 18-20, 2021

### **Forward Looking Statements**



#### Cautionary Statement

For the full details of the 2017 Feasibility Study 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 October 31, 2017. 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 Canadian Zinc Corporation'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.

## **Company Overview**

A Premium Mine Developer





<u>World-class</u> project in Northwest Territories: long life, high returns, mitigated risks

Largest reserves/highest-grade Ag-Zn-Pb mine in Canada





Highly experienced Management Team and Board Supportive major shareholder with additional technical expertise (RCF)



<u>Shovel ready</u> and <u>permitted</u> to feasibility design (1,600 tpd) and access road Permits in process for 2400 tpd expansion

## **Notable Recent Activities**

New Management Appointed in Q2

4



- ✓ PEA Launched on 2,400 tpd Mine Plan
- Major permitting milestone achieved
  - 2,400 tpd expansion plan review to proceed <u>without</u> an Environmental Assessment required
- ✓ Final IBA signed with Lidlii Kue First Nation (Road Benefit Agreement)
- ✓ MOU signed with Parks Canada (valid for 5 years)
- ✓ Marketed equity offering completed for \$7.2M
- ✓ Auramet appointed as Financial Advisor to assist in project financing initiatives
- ✓ \$1 Million equity financing complete (Resource Capital Fund)
- ✓ MOU signed with Boliden to significantly increase zinc concentrate offtake



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.

New ESG Leadership Appointment: February 2021, Claudine Lee Appointed VP Corporate Social Responsibility

**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:** 

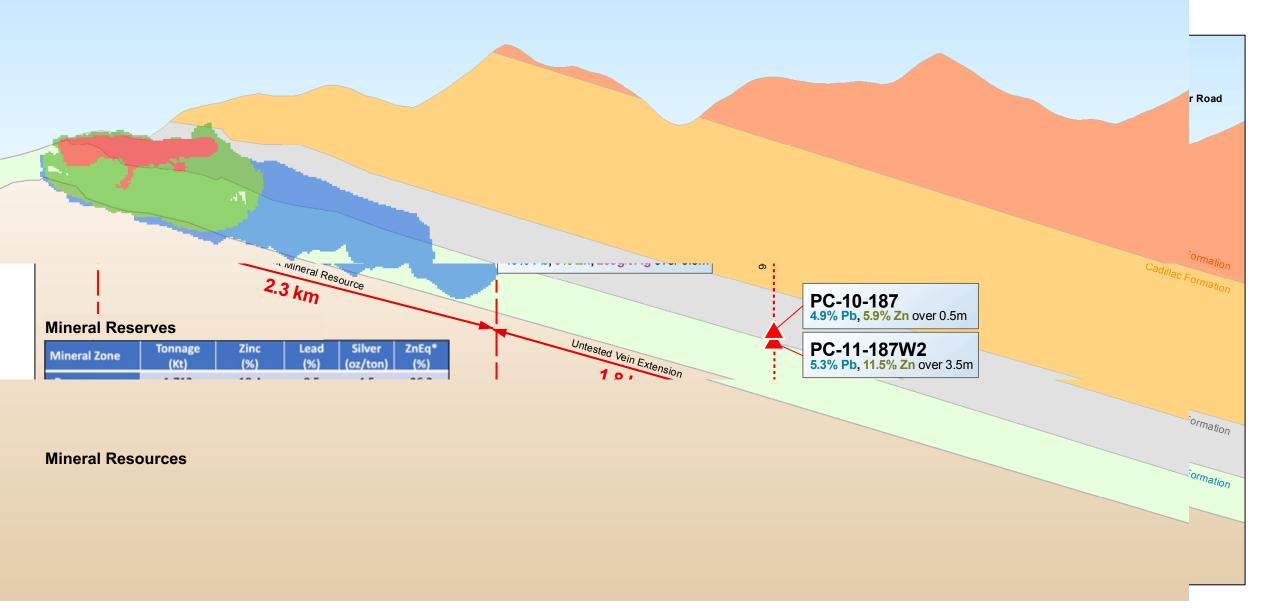
- Strong local Indigenous Support
  - Naha Dehé (Nahanni Butte) Dene Band (NDDB/NBDB) IBA signed
  - Liidlii Kue First Nation (LKFN) IBA signed
  - Acho Dene Koe First Nation (ADK) Benefit agreements in negotiation
- Long mine life providing long-term economic benefits

**Governance:** 

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



### Long Section View (Facing West)



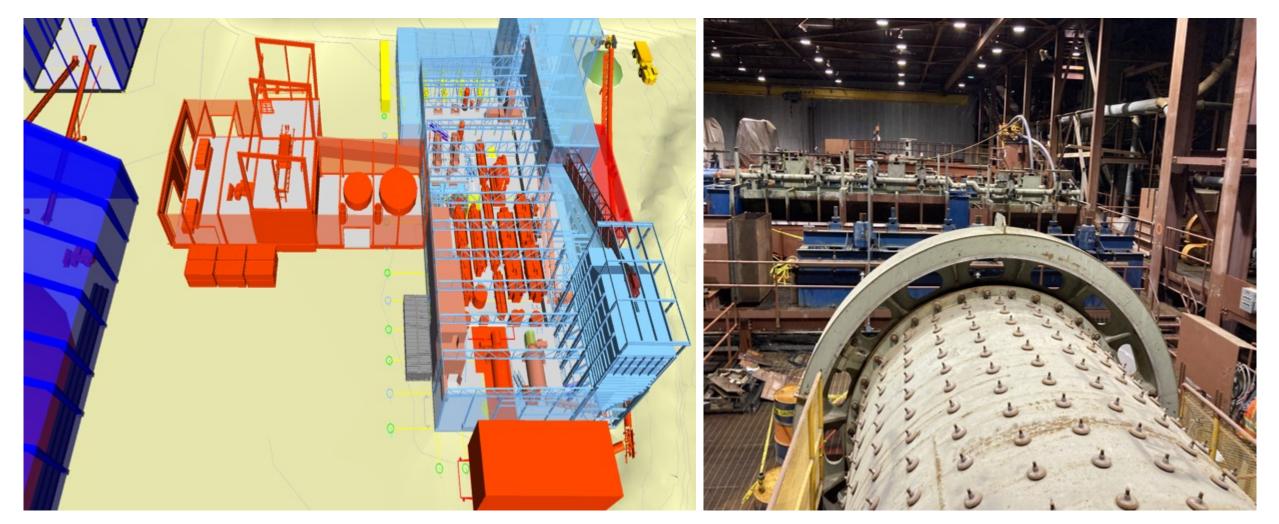
## Mill Expansion to 2,400 TPD

Existing Plant Capacity of 1,000 tpd



### **Conceptual Drawings of Plant Expansion Plans**

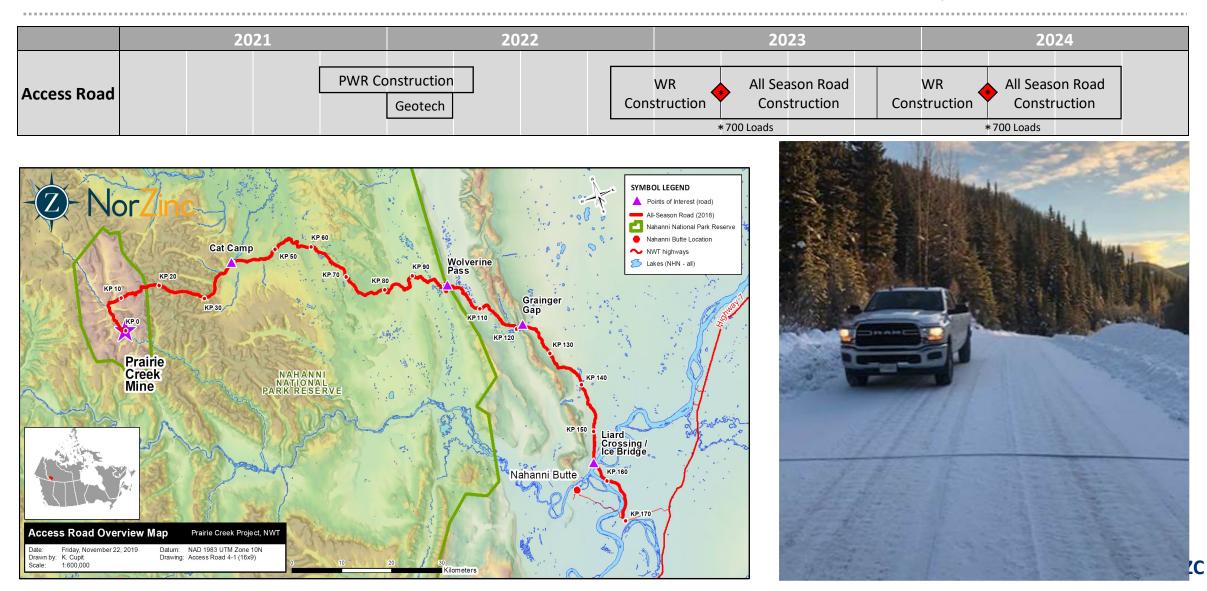
### Existing Mill to be Refurbished



## All Season Road – 180 km



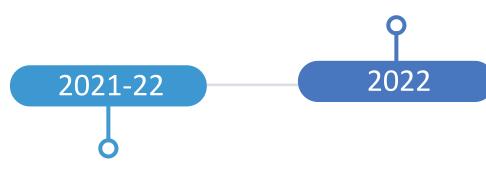
### Access Road Key Milestone for Mine Construction Timeline



### **Timeline** Prairie Creek Mine



- Process Plant & Infrastructure Engineering
- Updated Feasibility Study
- Final Offtake Agreements
- Complete Project Financing



- Financing
- Drilling Program
- PEA
- Metallurgical Study
- Winter Road
- Update Permits 2,400 tpd

Commissioning

- Ore Production Starts
- All Season Road Ready for Use



2023-24

### 6

All Season Road Construction Site Construction

9

## 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 FS Design
- 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\$34M
Share Price (Oct 12)	C\$0.05/sh
Largest Shareholder (RCF)	44%

# APPENDIX

TSX – NZC OTCOB – NORZF

### Appendix Mineral Reserves and Resources



#### Table ES.1.3 August 2017 Mineral Reserves Prairie Creek Mine

Mineral zone	Classification	Tonnes (t)	Silver (g/t)	Lead (%)	Zinc (%)	ZnEq (%)
Main quartz vein (MQV)	Proven	1,524,171	161.43	8.90	10.22	26.84
	Probable	4,190,187	144.76	9.96	8.20	25.70
	Total	5,714,358	149.21	9.67	8.74	26.00
Stockwork (STK)	Proven	188,173	108.19	4.84	11.56	21.22
	Probable	1,188,366	63.81	3.54	6.86	13.46
	Total	1,376,539	69.88	3.72	7.50	14.52
Stratabound (SMS)	Proven	-	-	-	-	-
	Probable	980,566	54.90	5.06	9.64	17.97
	Total	980,566	54.90	5.06	9.64	17.97
Total	Proven	1,712,344	155.58	8.45	10.36	26.22
	Probable	6,359,119	115.78	8.00	8.17	22.22
	Total	8,071,463	124.22	8.10	8.64	23.07

The Mineral Reserves are as of 2 August 2017, and based on a design cut-off grade of 11% ZnEq for longhole open stoping ("LHOS"), 11% ZnEq for mechanized drift-and-fill ("DAF"), an incremental stoping cut-off grade of 10% ZnEq, and 6% ZnEq cut-off grade for development ore. Cut-off grades are based on a zinc metal price of US\$1.00/lb, recovery of 75% and payable of 85%; a lead metal price of US\$1.00/lb, recovery of 88% and payable of 95%; and a silver metal price of US\$18/oz, recovery of 92% and payable of 81%. Exchange rate used is C\$1.25= US\$1.00. Average planned dilution, unplanned dilution and mining recovery factors of 13%, 11% and 95%, respectively, for LHOS; and 18%, 6% and 98%, respectively, for DAF are assumed.

#### Table ES.1.2 September 2015 Mineral Resources Prairie Creek Mine

Mineral zone	Classification	Tonnes (t)	Silver (g/t)	Lead (%)	Zinc (%)
Main quartz vein (MQV)	Measured	1,313,000	211	11.5	13.2
	Indicated	4,227,000	168	11.6	9.2
	Measured & Indicated	5,540,000	178	11.6	10.2
	Inferred	5,269,000	199	8.7	12.9
Stockwork (STK)	Measured	169,000	116	5.3	12.6
	Indicated	1,953,000	61	3.5	6.6
	Measured & Indicated	2,122,000	66	3.6	7.1
	Inferred	1,610,000	70	4.6	6.2
Stratabound (SMS)	Indicated	1,042,000	54	5.2	10.8
	Measured & Indicated	1,042,000	54	5.2	10.8
	Inferred	170,000	60	6.3	11.2
Total	Measured	1,482,000	200	10.8	13.2
	Indicated	7,222,000	123	8.5	8.7
	Measured & Indicated	8,704,000	136	8.9	9.5
	Inferred	7,049,000	166	7.7	11.3

Mineral Resources are stated as of 10 September 2015.

Mineral Resources include those Resources converted to Mineral Reserves.

Stated at a cut-off grade of 8% ZnEq based on prices of US\$1.00/lb for both zinc and lead and US\$20/oz for silver.

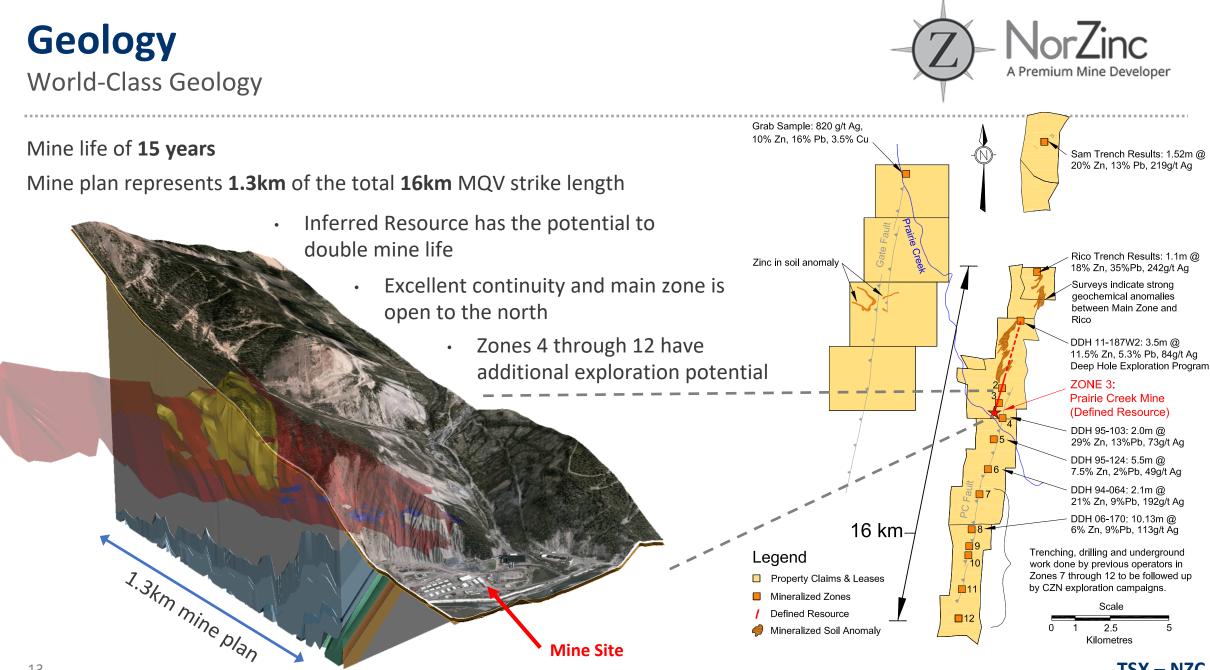
Average processing recovery factors of 78% for zinc, 89% for lead, and 93% for silver.

Average payables of 85% for zinc, 95% for lead, and 81% for silver.

ZnEq = (grade of Zn in %) + [(grade of lead in % \* price of lead in US\$/lb \* 22.046 \* recovery of lead in % \* payable lead in %) + (grade of silver in g/t \* (price of silver in US\$/Troy oz/ 31.10348) \* recovery of silver in % \* payable silver in %)] / (price of zinc in US\$/lb\*22.046 \* recovery of zinc in % \* payable zinc in %).

\$ Exchange rate = 1 C/US.

Numbers may not compute exactly due to rounding.



## Main Quartz Vein – World Class Geology



Consistent Ore Body Ideal for Long-Hole Open Stoping

MQV in the underground workings (930 Level XC9)

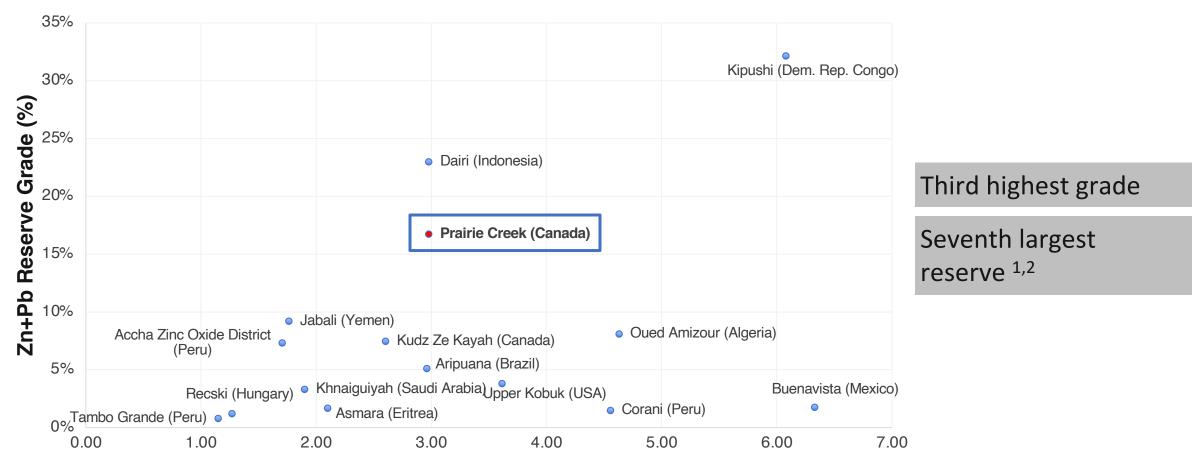
Intercept > **50% ZnEq:** 5.9% Pb, 39.4% Zn and 177g/t Ag over 1.9m



## Peer Grade and Reserve Comparison



### Prairie Creek Mine



### Blbs of contained Zn+Pb Reserves

1. Source SNL Market Intelligence: Global primary zinc/lead development deposits, excluding China and Russia with greater than 500,000t of contained zinc

2. Does not include silver (Prairie Creek reserve silver grade of 3.6 oz/ton)

### **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

Rohan Hazelton, President & CEO Toll Free: 1-866-688-2001 ir@norzinc.com

OFFICE 701 West Georgia Street, Ste 1875 Vancouver, BC V7Y 1G5

TSX – NZC OTCQB – NORZF

