

Essential Zinc

# Lone Mountain Zinc Project



### **Disclaimer**

This presentation contains a review of Nevada Zinc Corporation's ("Nevada Zinc" or "the Company") zinc sulfate project in Nevada, USA. This document is intended to be strictly informational. Readers are cautioned that the project is at the pre-development evaluation stage and are advised that estimates and projections contained herein are based on limited and incomplete data. More work is required before the mineralization on the project and its economic aspects can be confidently modelled. Therefore, the work results and estimates contained herein should be considered generally indicative only of the nature and quality of the project. No representation or prediction is intended as to the results of future work, nor can there be any promise that the information contained herein will be confirmed by future exploration or development, or that the project will otherwise prove to be economic.

### **Qualified Person**

Bruce Durham, P. Geo., is the Qualified Person (within the meaning of National Instrument 43-101) who has reviewed and approved the technical information contained in this presentation.

### **Forward-Looking Statements**

This presentation includes certain statements that are "forward-looking statements". All statements other than statements of historical fact included in this presentation, including, without limitation, statements regarding potential mineralization and resources and reserves, exploration results, and future development plans and objectives of the Company, are forward-looking statements that involve significant risks and uncertainties. There can be no assurance that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. The Company makes no undertaking to update any forward-looking statement.



# Investment Highlights

- Nevada Zinc is an exploration and development stage company working on the unique Lone Mountain zinc sulfate project in Nevada, USA
- Excellent infrastructure, top mining jurisdiction (Fraser Institute, 2020)
- Former producing mine; carbonate zinc oxide mineralization may best be suited for making zinc sulfate
- Pit constrained, high-grade Inferred Mineral Resource Estimate of 3,257,000 tonnes at 7.57% Zn and 0.70% Pb (July, 2018)
- Completed and filed PEA for production of zinc concentrate, low CAPEX for standard floatation (June, 2019)
- Excellent location, proximity to major US agricultural markets for zinc sulfate supply
- Entered into a strategic partnership agreement for zinc sulfate marketing development and offtake with Cameron Chemicals Inc. (July, 2020)
- Launched a multiphase pilot plant program to produce zinc sulfate bulk sample (March, 2021)
- Resource expansion and sulfide zone potential

# Management and Directors

## Management Team

Max Vichniakov  
President, CEO  
and Director

- Max has 20 years of experience in financial services, investment research, and corporate strategic advisory.
- The founder and Managing Principal at Northern Shoreline Corp., an agriculture and natural resources corporate strategic and financial advisory firm.
- Former sell-side equity research analyst covering agriculture, mining and minerals, transportation, and business income trusts with Octagon Capital, CIBC World Markets, and Canaccord Genuity.
- B.Sc. in Mechanical Engineering and an MBA.

Don Christie  
CFO, Secretary  
and Director

- Don is a CPA, President and CEO of Norvista Capital Corporation, a TSX-V listed resource merchant bank with a mandate to invest in resource exploration projects and smaller scale, pre-production projects.
- Previously he served as the Chief Financial Officer of Continental Gold Limited.
- Mr. Christie has over 25 years of experience in Canada's institutional equity and debt markets.

Marco Montecinos  
VP Exploration

- Marco is a seasoned geologist with over 35 years of experience in exploration projects.
- Former VP of Exploration at Caza Gold Corp., Senior Consultant to Intrepid Mines Ltd. in the Americas and Australia, VP of Exploration for Montana Gold.
- Worked with intermediate and senior producers including Francisco Gold, Phelps Dodge, Placer Dome, Billiton, Alta Gold and Nerco Minerals.
- Discovery of the Marlin Deposit in Guatemala and gold deposits in Nevada, Mexico, and Central America.
- Member of the Geologic Society of Nevada.

## Independent Directors

Jim Beqaj  
Director

- Jim has had a very successful career as a senior officer of a number of Canadian financial institutions with positions of President of CIBC Wood Gundy and Vice Chairman of BMO Nesbitt Burns.
- He is currently CEO of Beqaj International, an advisor in human resources to the Canadian and US financial services industry.

Eugene Lee  
Director

- Eugene is Director of Marketing at Hudbay Metal Marketing Inc.
- The Treasurer at the IZA (International Zinc Association).
- Eugene is principal at Capstone Advisory Group and was formerly CFO at Premier Royalty.

# Corporate profile

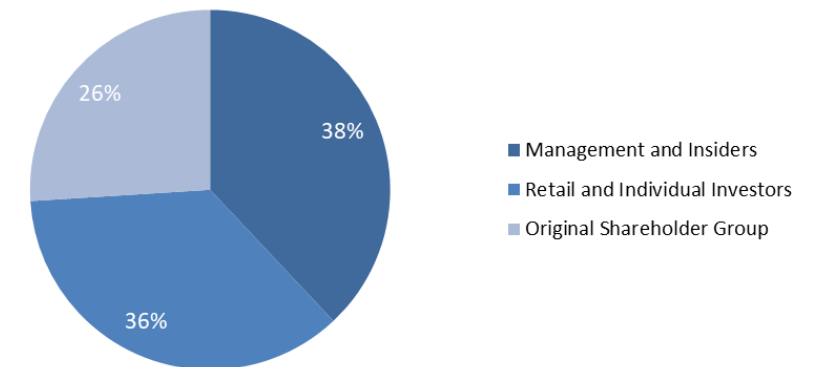
- TSXV: NZN
- Shares outstanding 84.3 million
- Share price \$0.08
- Current market cap. (July 30, 2021) \$6.745MM
- Options 8.0 million
- No debt
- No warrants

## Stock Performance



Source: TradingView

## Share Ownership



Source: Company reports



Plant and Soil Health

# Essential Zinc





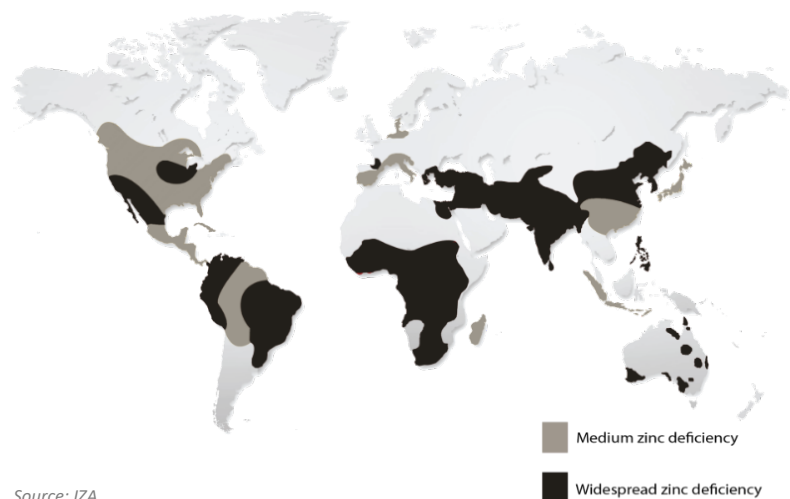
## Increasing consumer preference for 'healthy foods' bolsters demand for essential minerals like **Zinc (Zn)**

- Zinc is an essential trace mineral for people, animals and plants
- "Zinc is a unique element with antioxidant properties necessary for the activity of over 100 enzymes and a wide range of critical functions in a human body"
- "More than 2 billion people worldwide suffer from malnutrition. Not because they are getting too few calories, but because their food contains **insufficient essential minerals like zinc** - the phenomenon of '**hidden hunger**'"
- "Deficiencies of zinc and other essential minerals and vitamins are one of the leading causes of malnutrition worldwide."
- "It is estimated that more than 2 billion people suffer from zinc deficiency, a problem that can lead to a weakened immune system, lower IQ, and impaired growth."

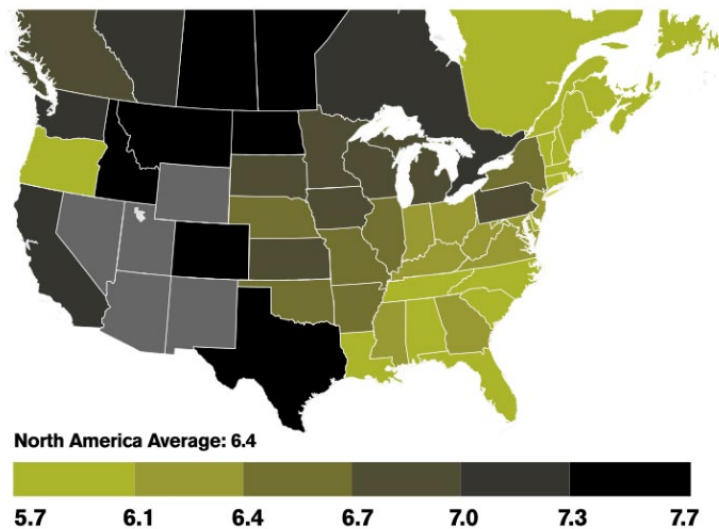
Source: Hortidaily: global greenhouse news, mbgfood, IZA, Company reports and estimates

Nevada Zinc (TSXV: NZN)





### MEDIAN SOIL pH



Values calculated in 2010 from 4.3 million samples.

## Zinc Deficiency in Food and Agriculture

- Zinc is one of the 17 essential nutrients that plants need for growth and reproduction
- Zinc is involved in enzyme systems and metabolic reactions, and is necessary for production of chlorophyll and carbohydrates
- Zinc deficiency is the most common micronutrient deficiency, occurring in 50% of the world's agricultural soils
- Key factors driving zinc deficiency:
  - - High soil pH
  - - Calcareous soils
  - - Zinc 'hungry' crops (i.e. corn, orchards, fruits and vegetables)
  - - Elevated soil phosphorus level
  - - Organic matter
  - - Weather conditions (i.e. cool & damp inhibits zinc up-take)
- New varieties of field crops with larger, healthier roots extract more nutrients from soils, including increased zinc up-take





corn



rice



beans



soybeans



wheat



tomatoes



onions



almonds



citrus



pecans



apples



pistachios



cotton



sorghum



table grapes



avocados

## Zinc Hungry Crops

- Zinc is an essential nutrient to all plants
- Certain crops require more zinc than the others and have the highest yield and economic response to zinc
- Zn is integral in the formation of roots in the plant's life cycle
- Increasing consumer preference for 'healthy foods' bolster demand for specialty crops category
- Agronomic recommendations start from a couple lbs of soluble zinc to 10-20 lbs/ac depending on crop, soil, climatic setting, abiotic stress, and geographic location
- Global agricultural micronutrients market is projected to grow 8.7% CAGR from 2020 to 2027 and reach USD \$12.2B by 2027. *(Agricultural Micronutrients Market - Global Opportunity Analysis and Industry Forecast (2020-2027))*

Source: Industry sources, Company reports and estimates



Source: Industry sources, University of Georgia Extension, Company reports and estimates

## Zinc Animal Feed

- Dairy and beef cattle, pork, chicken, turkey, and other farm animals require several minerals for optimal growth and reproduction including zinc
- Zinc is a component of many enzymes and is important for immunity, reproduction, and skin and hoof health
- Cattle have a limited ability to store zinc and supplementation is always necessary
- Minerals not provided by forage are supplied with a simple mineral supplement (i.e. feed grade zinc sulfate)
- Approximately 10-15% of the US zinc sulfate market is animal feed supplements
- Top milk producing states are California (19% of the total US dairy cow herd) and Wisconsin (14% of the total US dairy cow herd)



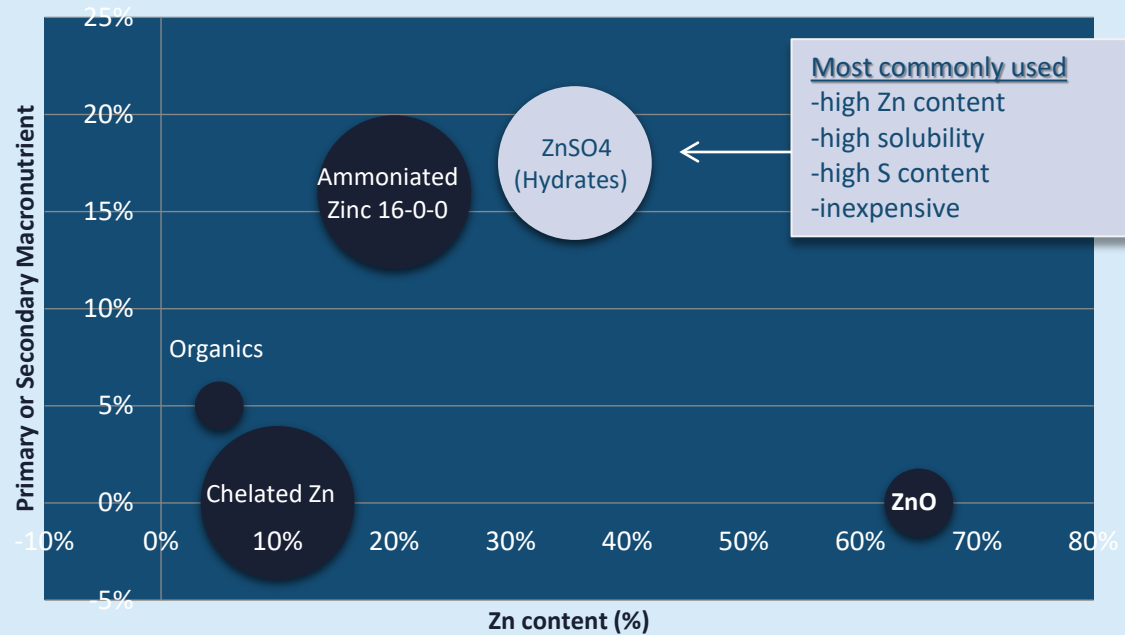
US Market

# Zinc Sulfate





Zinc Sulfate relative value: Solubility % (circle size), Zn content % , Macronutrient %



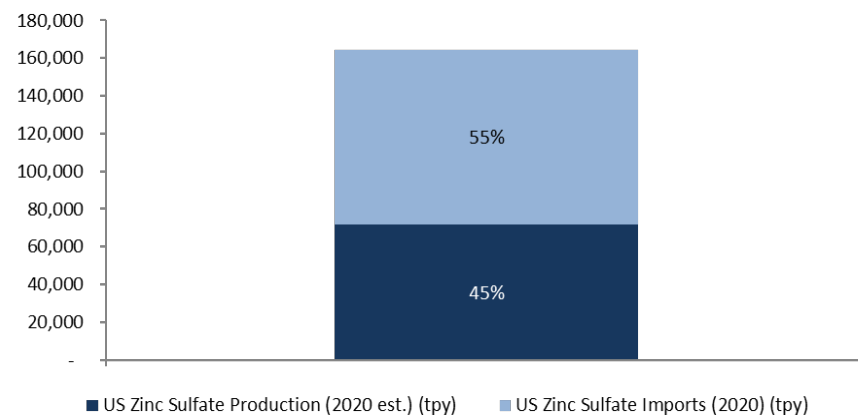
Most commonly used

- high Zn content
- high solubility
- high S content
- inexpensive

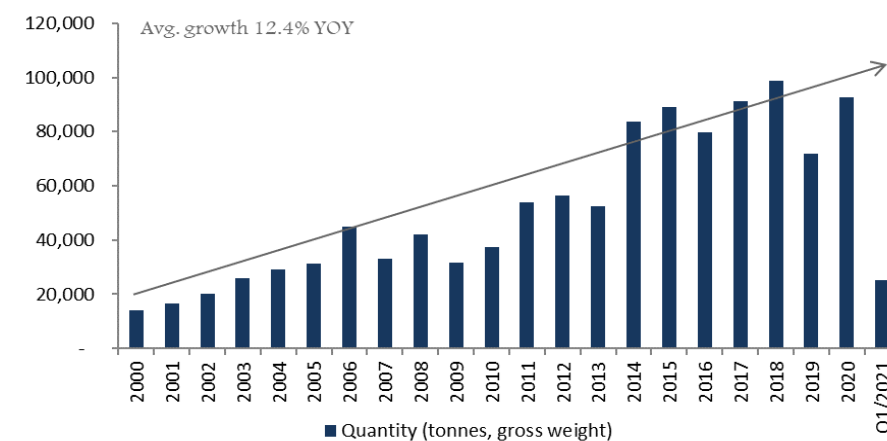
## Zinc Sulfate

- Zinc Sulfate Monohydrate (35.5% Zn 17.5% S) is the most commonly used product by growers due to its high zinc content, high solubility, high Sulfate-Sulfur (SO4-S) secondary macronutrient content, and low cost
- Solubility plays a critical role
- Macronutrients (Sulfur in Zinc Sulfate) delivers supplementary value
- Other zinc-based crop nutrient products include Chelated Zinc, Ammoniated Zinc, Zinc Oxide, and various Organics

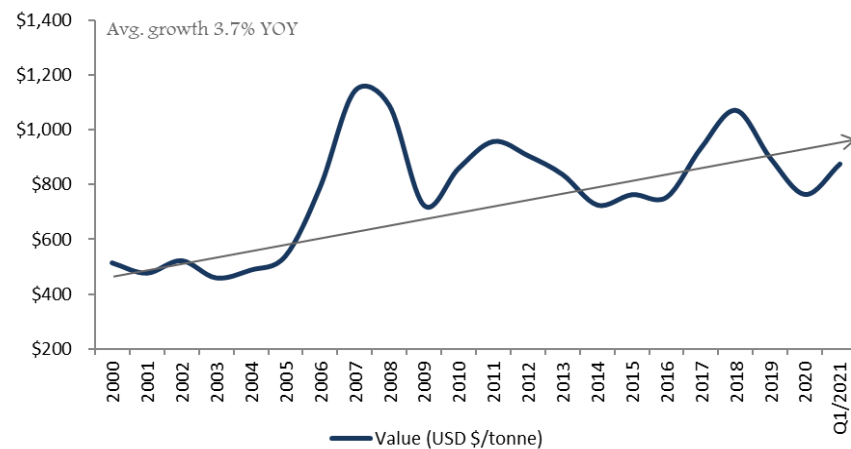
## Zinc Sulfate Market



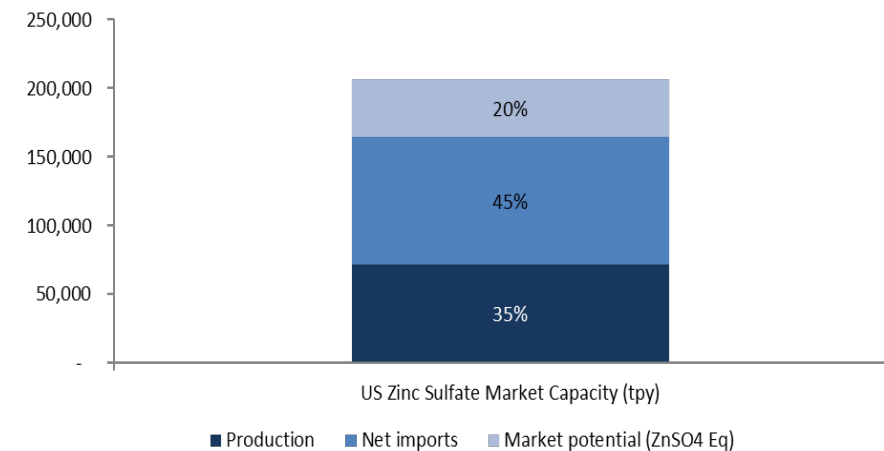
## Zinc Sulfate Imports



## Zinc Sulfate Import Prices



## Zinc Sulfate Market Potential (1)



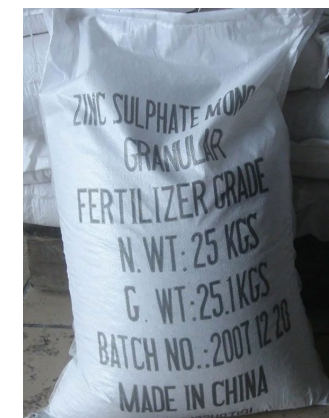
Source: Industry Reports, Company Reports and Estimates, USGS, (1) Company Estimates 2020

# Zinc Sulfate Imports

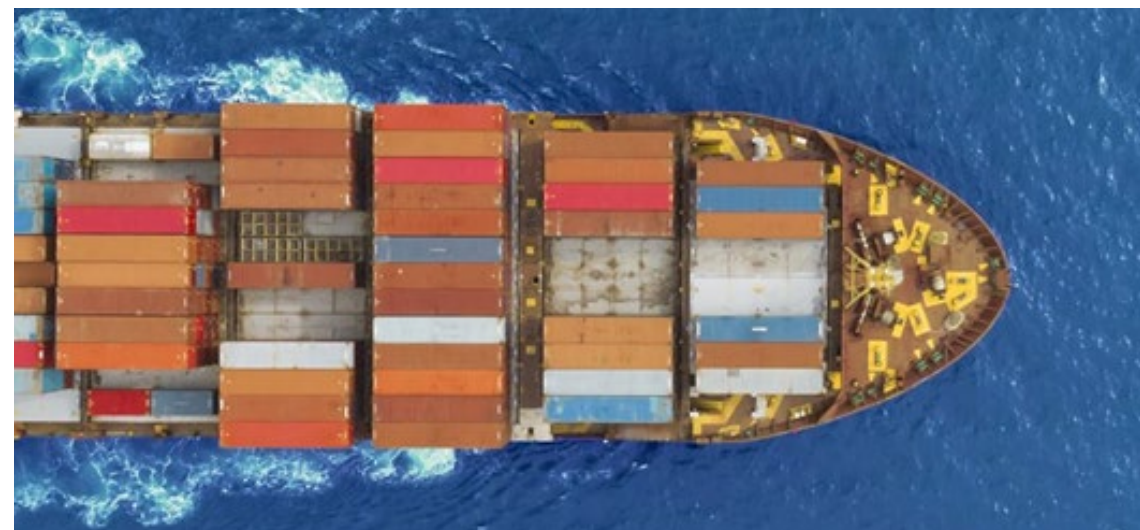
Zinc Sulfate Fertilizer / Feed Grade 50 lbs (Mexico)



Zinc Sulfate Fertilizer Grade 25kg (China)



Source: Industry sources, Company reports



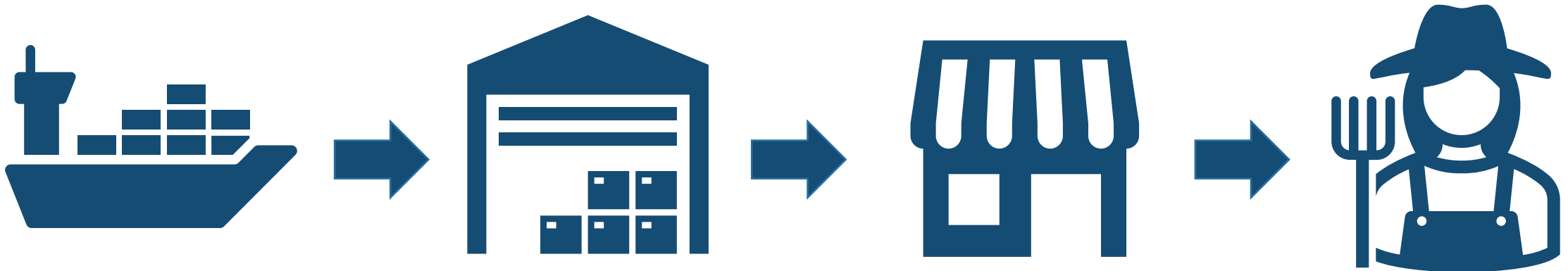


## Retail Zinc Sulfate Prices

- Delta between zinc sulfate import prices and retail prices in USD \$/ lbs.
- By the time zinc sulfate product reaches the farmgate prices increase 4-5x
- Retail prices reflect value-add created along the supply chain via transportation, distribution, marketing, storage, repackaging, customized formulations, blends, agronomic advisory services, and intermediaries' margins

~\$0.45/ lbs. of Zinc Sulfate  
(\$1.28/ lbs. of Zn metal eq.)

~\$1.50-\$2.50/ lbs. of Zinc Sulfate  
(\$4.22-\$7.04/ lbs. of Zn metal eq.)



Source: USGS, Industry reports, Company estimates as of March 2021

# Grain Prices

- Crop input (incl. Ag zinc sulfate) prices typically follow grain prices
- Grain prices are at multi-year highs

Corn Sep '21 (\$/bu.)



Soybeans Sep '21 (\$/bu.)



Wheat Sep '21 (\$/bu.)



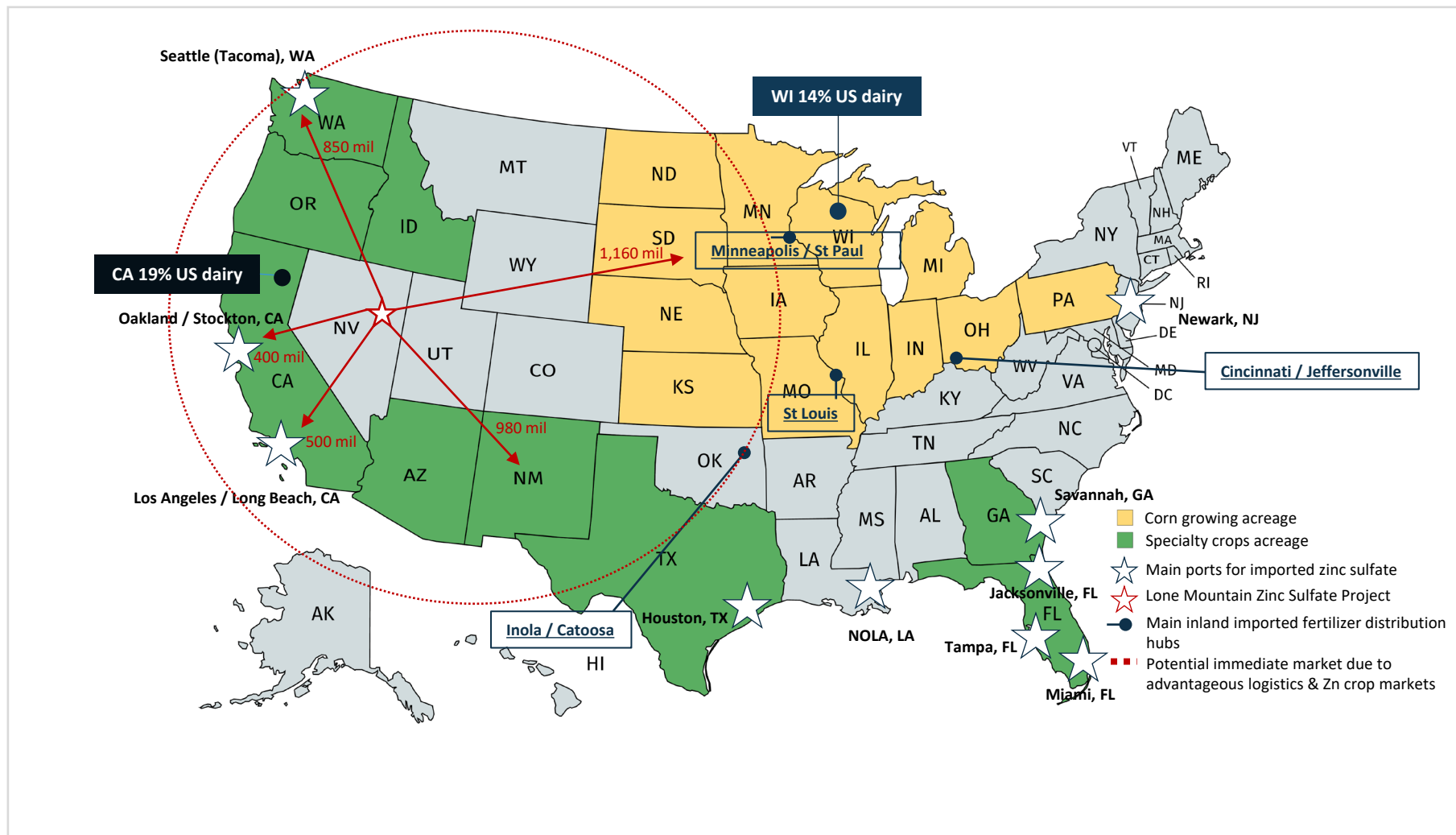
Source: CBOT



Nevada Zinc (TSXV: NZN)

# Nevada Distribution Advantage

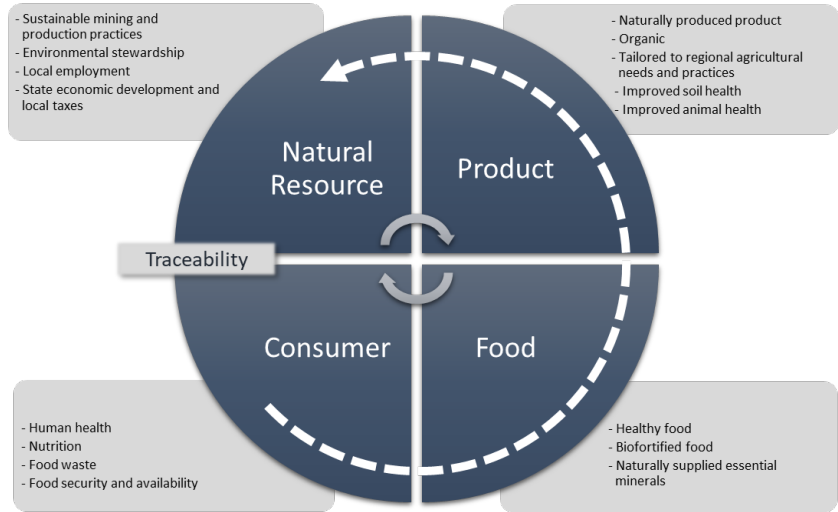




Source: Industry sources, Company reports and estimates

Economic,  
Social,  
and  
Environmental  
Sustainability

Traceability





Zinc Project

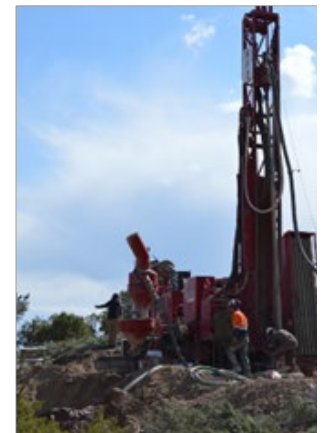
# Lone Mountain





# Location, Location, Location

- Top Mining Jurisdiction (Fraser Institute, 2020)
- 20 Miles West of the Town of Eureka, Nevada
- Excellent Infrastructure, Skilled Mining Labor Force and Supportive Community
- Historic Mountainview Zinc Mine
- Between 1942 and 1968, more than 5 million pounds of zinc, 650,000 pounds of lead and 4,000 oz. of silver were mined at Mountain View
- Near surface zinc mineralization
- Outstanding Drill Results
- Room for Expansion of Resource and New Discoveries
- Potential for Deep Sulfide



# Progress and Goals

- Acquired 100% interest in a strategic land position of more than 4,000 acres near Eureka, Nevada, USA
- Extensive geological and metallurgical work has been ongoing since 2014
- Acquired 100% interest in historic Mountain View Mine located on Lone Mountain Property (2015)
- Completed several drilling programs comprised of 85 reverse circulation (“RC”) and 13 core holes totaling 14,317 meters
- NI 43-101 Technical Report on the Lone Mountain Project (2017)
- NI 43-101 Inferred Mineral Resource Estimate (2018)
- PEA on zinc concentrate scenario (2019)
- Advanced zinc sulfate market studies (2019)
- Signed Collaboration Agreement for marketing development and offtake with US based Cameron Chemicals a leading producer of micronutrients (2020)
- Engaged Hazen Research to conduct a multiphase pilot plant program to produce zinc sulfate and estimate processing capital and operating costs (2021)





# Drill Results

- Phase 1-6 Drill Results Highlights

Hole ID	From (m)	To (m)	Length (m)	Zn (%)
LM-14-01	114.30	204.22	89.92	6.22
LM-14-04	121.92	167.03	<u>45.11</u>	<u>11.62</u>
LM-14-06	102.11	166.12	64.01	5.87
LM-14-09	114.30	254.51	140.21	4.04
LM-14-10	178.31	196.60	18.29	6.41
LM-14-12	138.68	164.59	25.91	5.21
LM-14-13	109.73	169.16	59.43	7.32
LM-14-14	120.40	185.93	65.53	4.49
LM-15-16	33.53	44.20	10.67	11.05
LM-15-18	27.43	74.68	47.25	6.14
LM-15-24	96.01	146.30	50.29	5.05
LM-15-27	126.49	245.36	<u>118.87</u>	<u>9.58</u>
LM-15-34	128.02	144.78	<u>16.76</u>	4.20
LM-15-36	146.30	237.74	<u>91.44</u>	<u>9.49</u>
LM-16-37	63.58	73.15	<u>4.57</u>	<u>4.45</u>
LM-16-38	41.15	65.53	24.38	7.70
LM-16-39	50.29	56.39	6.10	6.83
LM-16-40	30.48	35.05	4.57	7.00
LM-16-42	22.86	44.20	21.34	6.61

Hole ID	From (m)	To (m)	Length (m)	Zn (%)
LM-16-43	208.79	233.17	<u>24.38</u>	<u>12.81</u>
LM-16-44	24.38	35.05	10.67	11.38
LM-16-45	92.96	100.58	7.62	5.17
LM-16-46	12.19	32.00	19.81	4.42
LM-16-47	9.14	0.22	13.72	4.57
LM-16-48	19.81	35.05	<u>15.24</u>	<u>11.89</u>
LM-16-49	21.34	59.44	<u>38.10</u>	3.48
LM-16-50	33.53	44.20	10.67	7.20
LM-16-52	28.96	41.15	12.19	11.56
LM-16-56	164.59	265.18	100.58	6.58
LM-16-57	6.10	53.34	47.24	6.01
LM-16-58	3.05	44.20	41.15	5.76
LM-16-61	74.68	89.92	15.24	6.47
LM-16-62	65.53	68.58	3.05	8.18
LM-16-77	21.34	57.91	36.58	4.39
LM-16-78	21.34	32.00	10.67	6.42
NLM-17-01	118.04	209.54	91.5	7.67
NLM-17-02	226.62	244.92	18.3	4.6
NLM-17-08	143.05	167.75	<u>24.70</u>	<u>23.06</u>
NLM-17-09	108.28	135.73	<u>27.45</u>	7.60
NLM-17-10	102.48	128.10	25.62	4.35

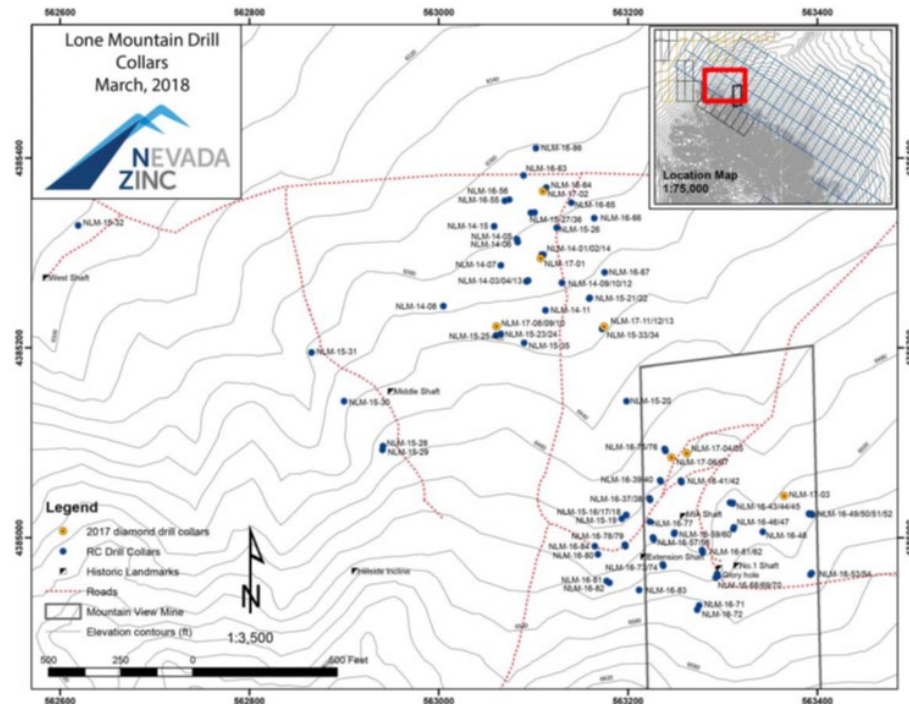


Source: Company Reports



# Mineral Resources

- Drilling program: 85 RC drill holes and 13 core drill holes from 2014-2017
- 12,234 meters of RC drilling, and 2,082 meters of core drilling
- Highlights: Hole LM-14-27, 9.58% Zn over 118.87m, including 27.82% Zn over 15.24m
- Completed NI 43-101 inferred Resource Estimate. Open pit constrained 3,257,000 tonnes grading 7.57% Zn and 0.70% Pb (NI 43-101 Initial Mineral Resource Estimate and Technical Report, P&E Mining Consultants Inc. Report 342, July 22, 2018)
- No drilling to test for deep zinc sulfide mineralization completed to-date
- Mineralization remains open for significant expansion
- Identified geochemical targets for potential gold exploration



Source: NI 43-101 & 43-101F1 Initial Mineral Resource Estimate and Technical Report On The Lone Mountain Property, Eureka County, Nevada, USA For Nevada Zinc Corporation, P&E Mining Consultants Inc. Report 342, Effective Date: July 22, 2018, Company Reports

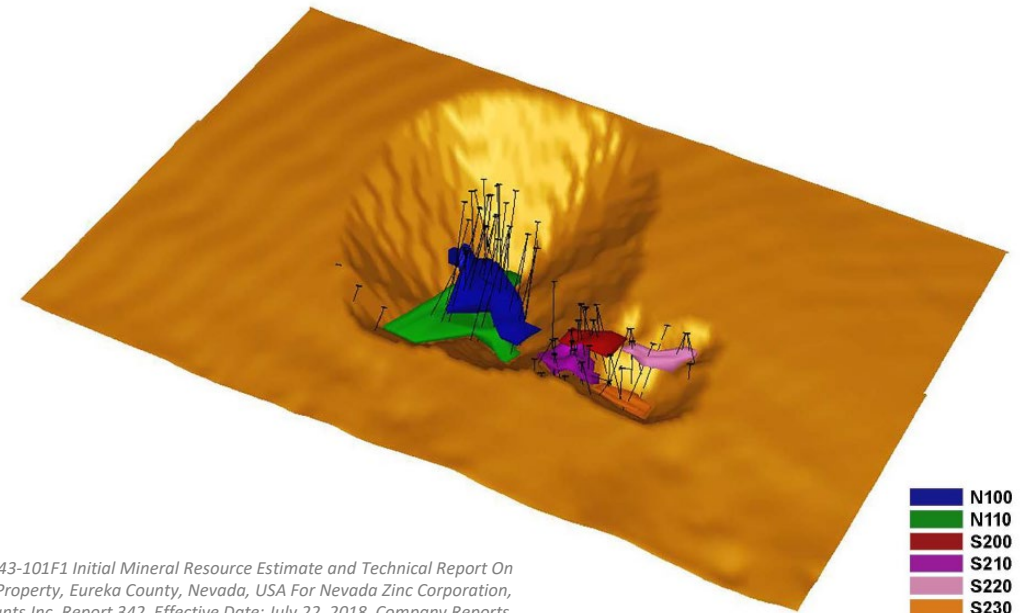
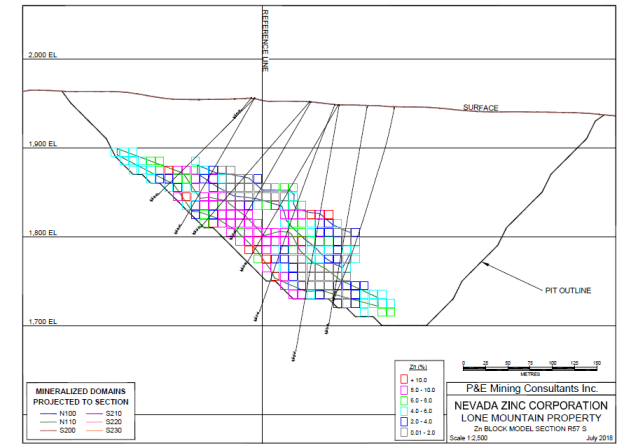
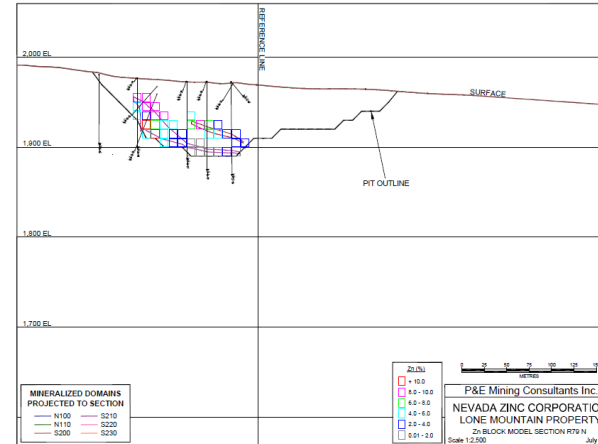
## Inferred Mineral Resources <sup>(1-5)</sup>

Cut-Off Zn %	Tonnage (‘000)	Zn %	Pb %	Zn (M lb)
2.0%	3,257	7.57	0.7	543

1. Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, marketing, or other relevant issues.
2. Mineral Resources were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.
3. The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.
4. Contained metal may differ due to rounding.
5. Inferred Mineral Resources are reported within an optimized pit shell.

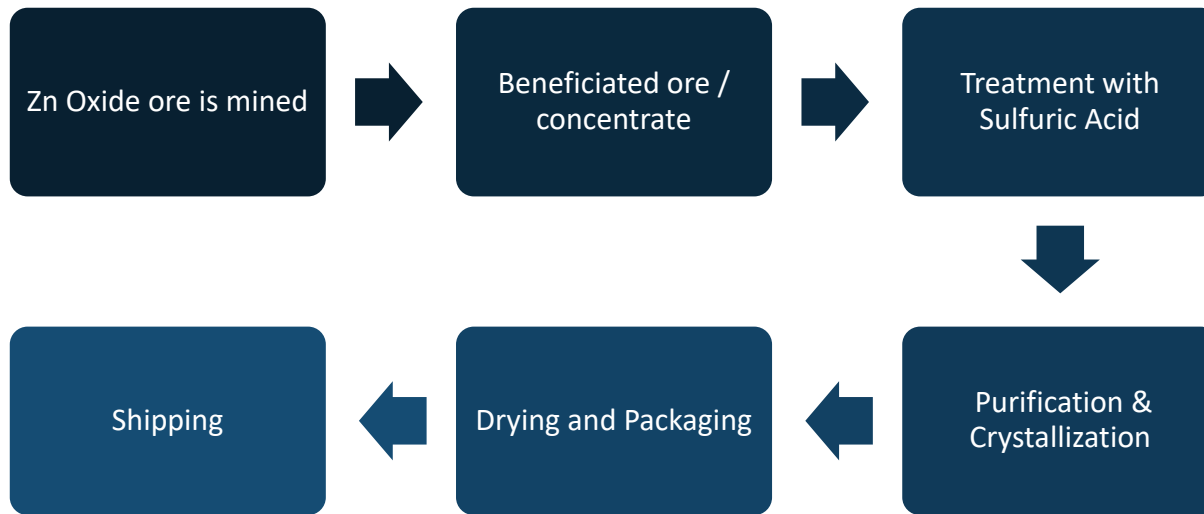
# Optimized Open-Pit Shell

- Mineralization is zinc oxide-carbonate (smithsonite and hemimorphite) with only minor lead mineralization
- Mineral Resources have been constrained within an optimized pit shell
- Coherent zinc geochemical targets still mostly untested
- CSAMT geophysics defines main structural target for at least 3km
- Drilling has tested the mineralization from surface to depths of 290 meters



Source: NI 43-101 & 43-101F1 Initial Mineral Resource Estimate and Technical Report On The Lone Mountain Property, Eureka County, Nevada, USA For Nevada Zinc Corporation, P&E Mining Consultants Inc. Report 342, Effective Date: July 22, 2018, Company Reports

# Zinc Sulfate Production Process



Source: Industry Reports, Company Reports and Estimates

- Envisioned production capacity of ~ 25,000tpy of Zinc Sulfate Monohydrate ( $\text{ZnSO}_4 \cdot \text{H}_2\text{O}$ )
  - Agricultural and animal nutrition grades
  - Powder, granular
  - OMRI certified (organic)
- Nevada plant location provides a competitive supply chain advantage to key Western and Midwestern US markets
  - Excellent access to rail line and uncongested highways
  - Access to main US growing regions
  - Access to ports on Gulf & Pacific coasts
- Envisioned production process
  - High purity, high grade zinc oxide bearing rock is mined, crushed and concentrated
  - Concentrate is easily dissolved with sulfuric acid
  - Purification and crystallization of zinc sulfate
  - Drying and packaging
  - Shipping



# Technical Consultants



Peimeng Ling & Associates Limited



Outotec



Multiphase Pilot Plant Program to Produce Zinc Sulfate (*March 2021*)

43-101 Independent Preliminary Economic Assessment Lone Mountain Project (*June 2019*)

43-101 Inferred Resource Estimate (*July 2018*)

Metallurgical Testing On Sample Material From The Lone Mountain Project. Leach Testing. Building on test work for PEA parameters

Chemical and Mineralogical Characterization and Indicative Leaching Tests For Lone Mountain Unconcentrated Mineralized Sample

Heavy Liquid Separation Tests and Analysis

## Strategic Partner and Offtake

- Strategic partnership agreement for marketing development and offtake with Cameron Chemicals Inc. (Cameron Micronutrients, AMP, Ultra Yield Micronutrients), whereby Cameron will acquire 100% of Nevada Zinc's zinc sulfate in the initial phase of production
- Leading US producer of micronutrients products for agricultural, turf, horticultural and ornamental use since 1986
- Corporate offices and production facilities in Virginia Beach, VA, Reese, MI, and Moxee, WA
- Distribution networks in the U.S., Canada, Southeast Asia, Korea and South America

**CAMERON**★  
**MICRONUTRIENTS**

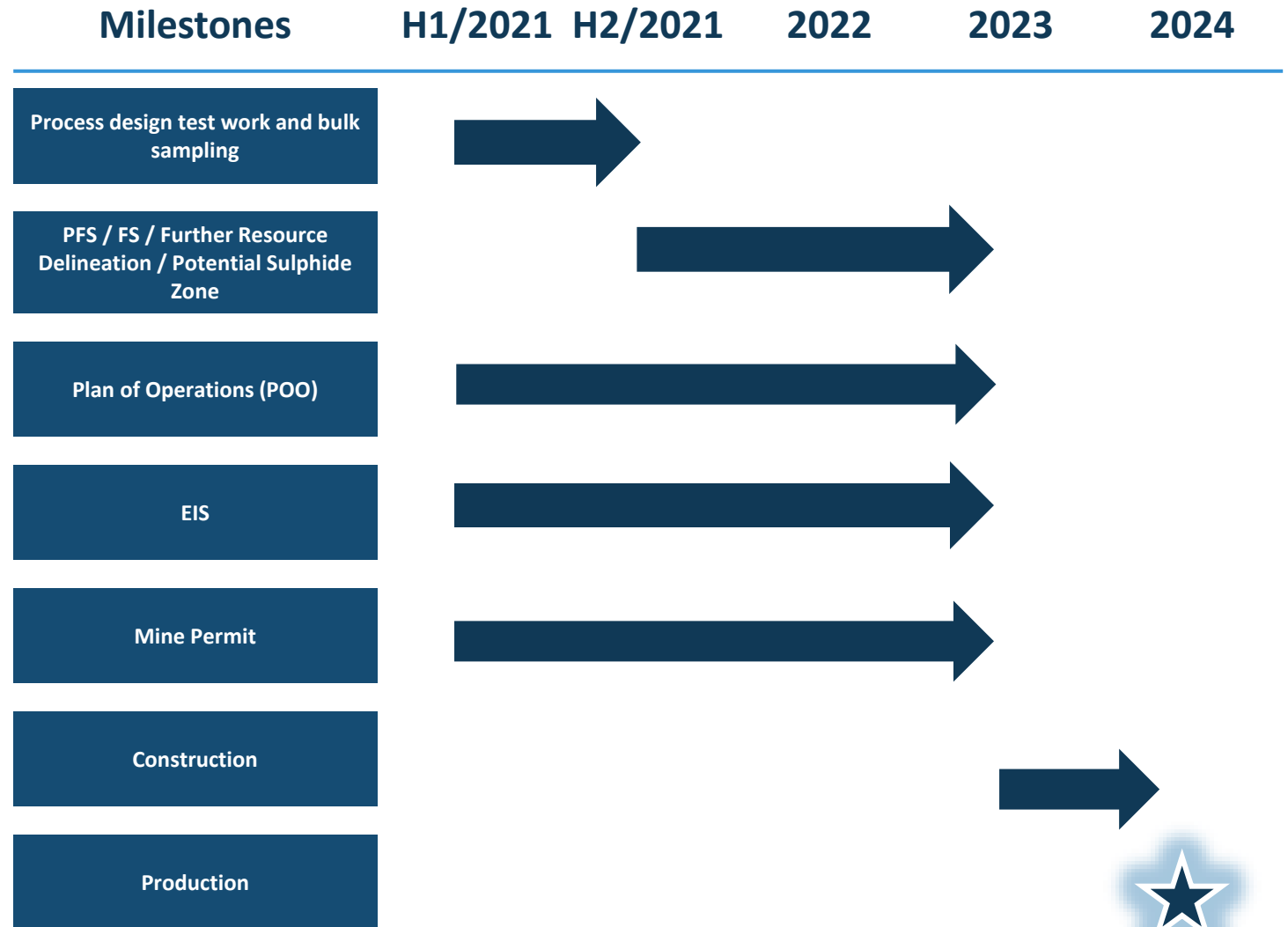


**UltraYield**™  
**MICRONUTRIENTS**

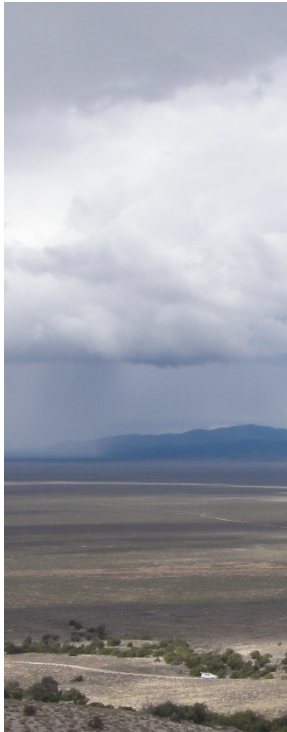
**AMP**™  
Advanced Micronutrient Products



# Development Plan



# Why Nevada Zinc?



*- Growing Zinc Sulfate Market with Significant Imports*



*- Near Surface High-Grade Zinc Oxide and Carbonate Mineralization Ideally Suited for Zinc Sulfate Production*



*- Top Global Mining Jurisdiction and Developed Infrastructure*



*- Strategic Partnership Agreement for Marketing and Offtake with Cameron Chemicals (USA)*



*- Multiphase Pilot Plant Program*



*- North American Distribution Advantage*



*- 100% Owned Land Package With Extensive Drilling and Metallurgical Test Work*



*- Upside Potential to Expand Current Resource and Exploration for Potential Sulfide Zone*



# Appendix

PEA reflects a scenario of producing **zinc oxide concentrate** and delivery to a smelter

Net cash production cost \$0.41/lb of zinc, including G&A and concentrate shipping

## PRELIMINARY ECONOMIC ASSESSMENT (PEA)

Production Metrics	
Mining and Milling (tpd)	800
Zinc Recovery (%)	80%
Zinc Oxide concentrate annual production (mt, dry)	35,500
Concentrate Zn Grade (%)	45%
Mine life	12 years

Project Economics	
(\$USD)	
Zinc Price est.	\$2,500/t
<b>Pre-tax NPV (8% Discount)</b>	\$56.4 million
<b>Pre-tax IRR</b>	40%
<b>After-tax NPV (8% Discount)</b>	\$43.2 million
<b>After-tax IRR</b>	35%
After-tax CF (avg. 12 year life)	\$8.9 million
Payback	2.7 years

Capex Estimates	
(\$USD)	
<b>Capital Costs</b>	
Mine site pre-strip	\$2.0 million
Process Plant, Infrastructure, Tailings	\$17.0 million
Contingency (30%)	<u>\$5.7 million</u>
Production Capital Costs	\$24.7 million
Mine Closure and Owner's cost	\$1.5 million
Sustaining Capital (LOM)	<u>\$2.2 million</u>
Total capital costs	\$28.4 million

Opex Estimates	
(\$USD)	
<b>Operating Costs (LOM)</b>	
Mining	\$19.5/tonne feed
Crushing and haulage	\$3.0/tonne feed
Processing plant	\$22.2/tonne feed
Transportation	\$5.0/tonne feed
G&A	<u>\$2.0/tonne feed</u>
Total opex	\$51.7/tonne feed

*Caution to readers: The PEA is preliminary in nature and there is no certainty the results of the PEA will be realized. The PEA is based on inferred mineral resources that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. A Mineral Resource is not a Mineral Reserve and does not have demonstrated economic viability. Additional drilling and studies are required to upgrade the Inferred Mineral Resource to a Mineral Reserve.*

*Source: NI 43-101 Preliminary Economic Assessment And Technical Report On The Lone Mountain Property, Eureka County, Nevada, USA For Nevada Zinc Corporation, Submitted By Peimeng Ling & Associates Limited. Effective Date: June 27, 2019 Signing Date: September 26, 2019, Company Reports*

# Contacts

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