

# **Forward Looking Statements**

This presentation contains forward-looking information (within the meaning of applicable Canadian securities legislation) that involves various risks and uncertainties regarding future events. Such forward-looking information includes statements based on current expectations involving a number of risks and uncertainties and such forward-looking statements are not guarantees of future performance of the Company, and include, without limitation, statements relating to plans for future exploration and the magnitude and quality of the mineralization at the Project. There are numerous risks and uncertainties that could cause actual results and the Company's plans and objectives to differ materially from those expressed in the forward-looking information in this news release, including without limitation, the following risks and uncertainties;; (i) risks inherent in the mining industry; (ii) regulatory and environmental risks; (iii) results of exploration activities and development of mineral properties; (i) risks relating to the estimation of mineral resources; (v) stock market volatility and capital market fluctuations; and (vi) general market and industry conditions. Actual results and future events could differ materially from those anticipated in such information. This forward-looking information is based on estimates and opinions of management on the date hereof and is expressly qualified by this notice. Risks and uncertainties about the Company's business are more fully discussed in the Company's disclosure materials filed with the securities regulatory authorities in Canada at www.sedarplus.com. The Company assumes no obligation to update any forward-looking information or to update the reasons why actual results could differ from such information unless required by applicable law.

References to Exploration Targets throughout this presentation should be read in the context of the following Cautionary Note Exploration Targets are conceptual in nature and there has been insufficient exploration to define them as Mineral Resources, and, while reasonable potential may exist, it is uncertain whether further exploration will result in the determination of a Mineral Resource or support a PEA report under NI 43-101. The Potash Exploration Targets are not being reported as part of any Mineral Resource or Mineral Resource.

The Agapito Report quantifies the Company's Green Lake Project's potash exploration potential in the form of a NI 43-101 Exploration Target. The Exploration Target estimate was prepared in accordance to the NI 43-101 guidelines of the Canadian securities regulators. It should be noted that Exploration Targets are conceptual in nature and there has been insufficient exploration to define them as Mineral Resources, and, while reasonable potential may exist, it is uncertain whether further exploration will result in the determination of a Mineral Resource under NI 43-101. The Exploration Target stated in the Agapito Report is not being reported as part of any Mineral Resource or Mineral Resource

Dean Besserer, a qualified person within the meaning of NI-43-101 has reviewed and is responsible for the technical details of this presentation.

# **About American Critical Minerals**

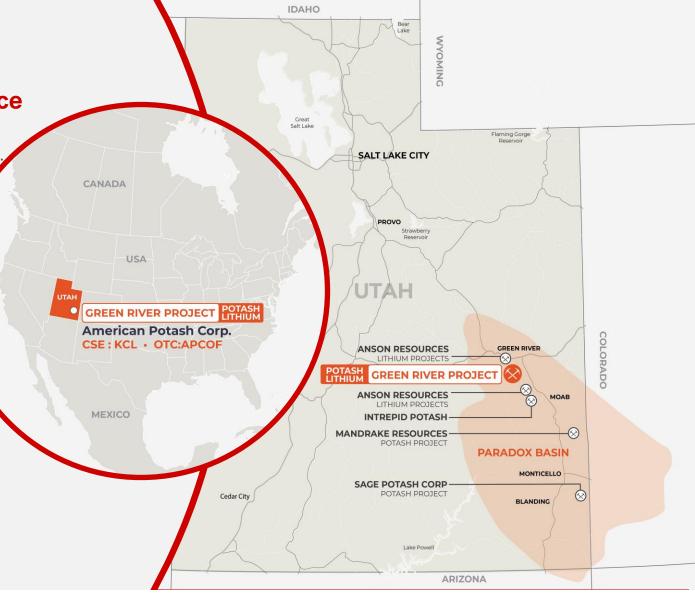
**Securing America's Supply Chain Independence** 

American Critical Minerals is a resource company focused on developing potash and lithium assets in the Paradox Basin in Utah.

Our Green River Potash and Lithium Project has:.

Proximity to large-scale potash production, lithium resources and highly successful Koch Pilot

Potash Exploration Target of 600 Million to 1 Billion tonnes of potash.\*



# We're Fueling American Independence

#### One location, Two Critical Minerals to help secure America's Supply Chains



#### SECURING AMERICA'S EV SUPPLY CHAIN

- ✓ American Demand for Lithium is increasing steadily, while U.S. production is declining to less then 1% of world supply
- ✓ America imports the majority of its processed / refined lithium requirements and needs to develop a secure domestic supply
- A potential global lithium shortage by 2026 illustrates a critical need for domestically produced lithium

#### **FUELING AMERICA THROUGH LITHIUM**

- ✓ Neighboring <u>Anson Resource's</u> Green River lithium project has an Exploration Target of 2.0 – 2.6M tonnes of LCE\*
- ✓ Koch Run Pilot just completed with highly successful results
- ✓ <u>Anson's Paradox</u> Lithium project to the S.E. has a JORC resource of 1.5M tonnes of lithium (LCE)\*\*
- ✓ American Critical Mineral's Green River project is located between these two projects and shares the same geology / same brines
- ✓ American Critical Mineral's lithium brine aquifers occur a half mile below its potash cycle
- Utilizing Direct Lithium Extraction provides rapid path to production with a low environmental impact



#### SECURING AMERICA'S FOOD / FARMING INDEPENDENCE

- American Demand for Potash is increasing rapidly, while U.S. production is declining
- ✓ America imports over 92% of its Potash and needs a secure domestic supply (Source; USGS)
- ✓ American Critical Minerals offers an entry point for investors to take advantage of this growing Potash opportunity

#### FEEDING AMERICA THROUGH POTASH

- ✓ Potash greatly improves crop yields / protects against disease
- ✓ Re-established as a Critical Mineral by recent Executive Order
- ✓ Company's Green River Project in Paradox Basin has a massive Exploration Target of 600M to 1B tonnes of high-grade potash
- ✓ Located in an established Potash mining region, with access to infrastructure and a safe, secure supply chain to American Farmers
- Processing innovation utilizing latest Solution Mining Techniques leads to greater efficiencies and lower environmental impacts
- ✓ A clear, definable path to implementation.

<sup>\*</sup>NR https://wcsecure.weblink.com.au/pdf/ASN/02631599.pdf

<sup>\*\*</sup> NR https://wcsecure.weblink.com.au/pdf/ASN/02725482.pdf

<sup>\*\*</sup> Disclaimer:: JORC defined mineral resource estimates are typically similar to but not necessarily equivalent to CIM NI-43-101 defined mineral resource estimates and there is no guarantee similar resources exist on the Company's project

# The Paradox Basin: A Potash and Lithium Exploration Hotbed – The only US Super Potash Basin

The Green River Project is located within the historic Paradox Basin which contains:

- Established and ongoing Potash production
- Large established resources for Lithium & Successful Pilot
- Large Exploration targets for both Potash and Lithium

The geologic province known as the Paradox Basin extends approximately 160 km (100 miles) in width and 320 km (200 miles) in length in a northwest-southeast direction spanning southeastern Utah and southwestern Colorado.

During middle Pennsylvanian age subsidence (310-330 Ma) the Paradox Basin formed as a restricted shallow marine environment and was filled with 1500-1800 m (5000-6000 ft) of cyclical evaporite and sedimentary sequences with potash noted in 17 of the 29 evaporite cycles (Hite 1960, 1983).



# The Paradox Basin: Known Potash and Lithium Zones

The Paradox Basin contains large aquifers of brines that have been trapped and contain concentrated lithium, bromine and boron.

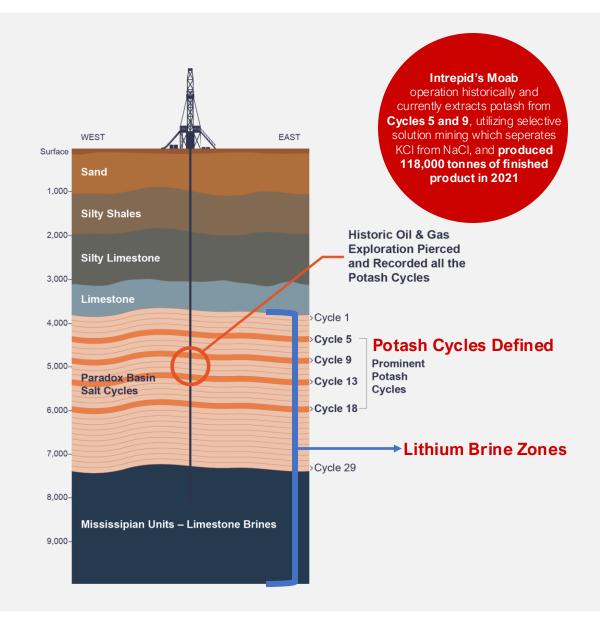
The Basin also contains a proven productive potash horizon, known as **Cycle 5**, that has been mined since **1963**.

Cycle 5 and recently Cycle 9 host the nearby, long-producing and currently-active Moab solar solution mine, operated by Intrepid Potash (NYSE-IPI ~ US\$500M Market Cap) - largest US potash producer

This same stratigraphic horizon extends to American Critical Mineral's project, where an Exploration Target\*\* from 600 million to 1 billion tonnes of sylvinite, with an average grade ranging from 19% to 29% KCL, has been estimated in a NI-43-101 compliant technical report prepared by Agapito Associates Inc. (October 2012).

Neighboring Anson Resources:

- Lithium resource 1.5m tonnes of lithium (LCE)\* / 7.6 m tonnes
   Bromine
- Lithium Exploration Target up to 2.6m tonnes LCE DFS confirms strong Project Economics
- · Highly successful Pilot with Koch just completed



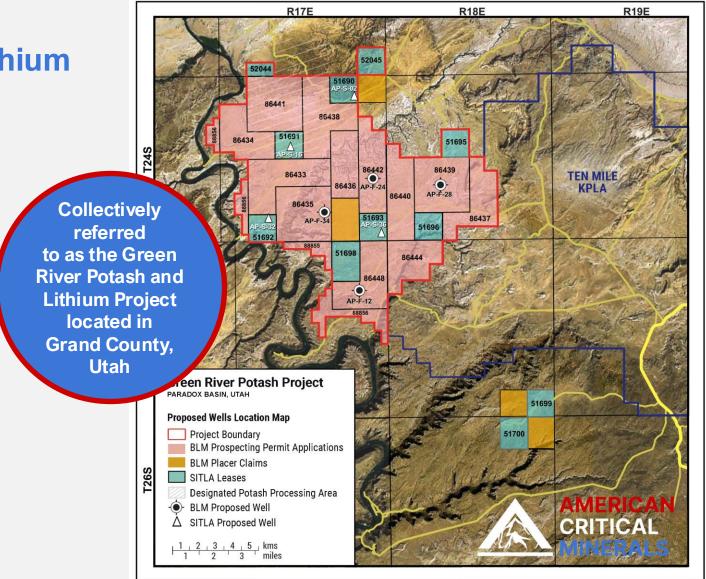
# Project Overview: The Green River Potash and Lithium Project

#### 100% interest

American Critical Minerals Corp. through its wholly owned subsidiary, American Potash LLC 11 State of Utah Potash and Lithium leases totaling 7,050 acres,

1094 Federal Lithium brine claims (21,900 acres)

11 Federal Potash
Prospecting Permits
covering 25,000 acres



# Favorable Geology for Thick High Grade Potash Resources

The Green River Project is in the Heart of the best fairway for Potash in the Basin

Thick potash packages (2-6m) - high grades

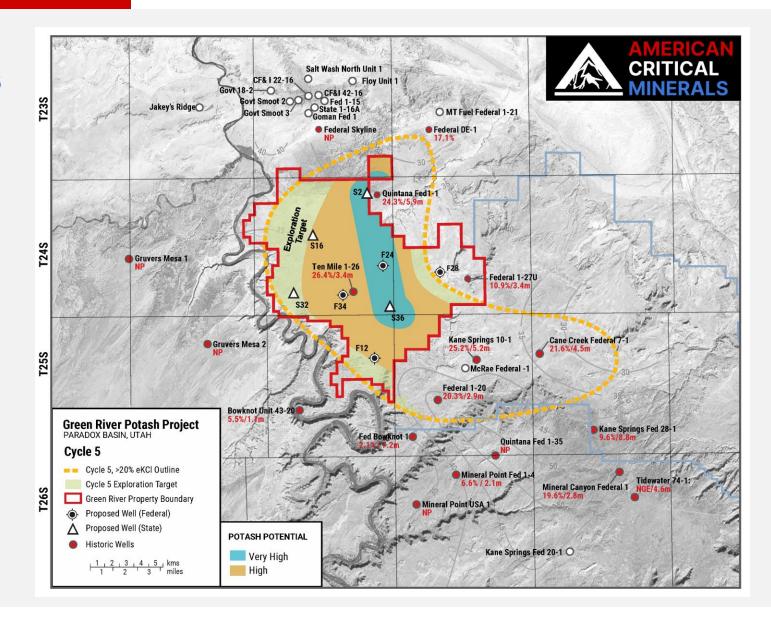
Intrepid Potash has been producing nearby for over 50 years from the same potash cycles successfully using Solution Mining

Cycle 5 is in 'Goldilocks Zone' for potash mining optimum depth (5,000 ft) that balances out brine temperature with drill costs/complexity

EXPLORATION TARGET: 600 million to 1 billion tonnes of sylvinite KCL (Potash) Grade 19%-29% Key Rock Units: Potash Cycle 5, 9 and 18

The Basin itself has:

HISTORIC WELLS: 22 historic oil and gas wells drilled in the Paradox Basin with a number across / adjacent to our acreage – Good Drill Control / Logs



# **Favorable Geology for Rich Lithium Resources**

The Green River Project is well situated in the Paradox Basin

Neighboring Anson Resources has a JORC defined:

**RESOURCE**: 1.5M tonnes of lithium (LCE)\*

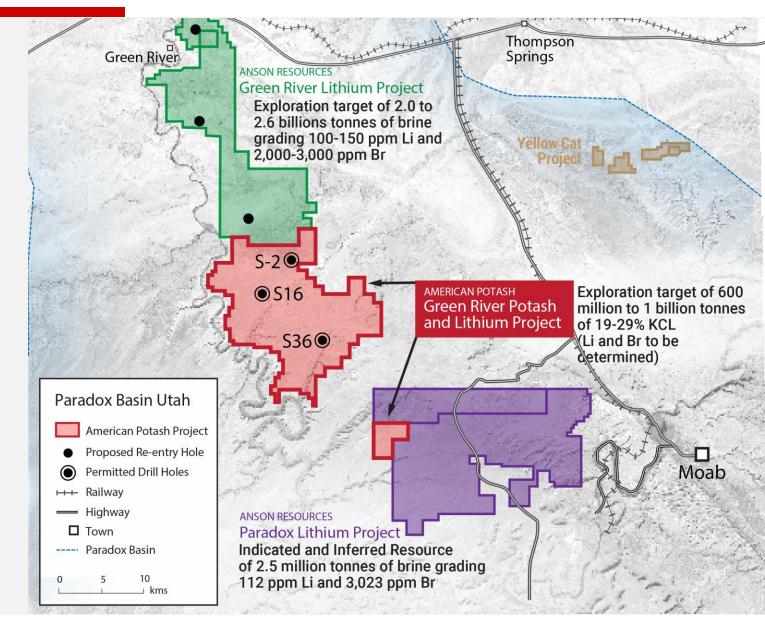
**EXPLORATION TARGET**: 2.0 – 2.6 million tonnes of LCE grading 171 ppm Li on average and 2,000 - 3,000 ppm Br.

HIGHLY SUCCESSFUL PILOT WITH KOCH

The Basin itself has:

**HISTORIC WELLS:** 22 historic oil and gas wells drilled in the Paradox Basin returned lithium values up to 500 ppm Li

The same geology hosting these resources and exploration targets extends throughout our Green River Potash and Lithium Project.



<sup>\*</sup> Disclaimer:: JORC defined mineral resource estimates are typically similar to but not necessarily equivalent to CIM NI-43-101 defined mineral resource estimates and there is no quarantee similar resources exist on the Company's project

# **Key Project Advantages**



PERMITS FOR SEVEN POTASH AND LITHIUM DRILL HOLES ALREADY SECURED. 3 on State

Lands / 4 on Federal Lands. One of only 2 Companies with Federal Prospecting Licenses for Potash in Paradox Basin – Multi year process.



LOCATED IN A PRIME LOCATION IN UTAH,

**USA,** close to major rail hubs, airport, roads, power, water, towns and labour market. Perfectly positioned to serve the EV Industry and American Farmers



#### KNOWN, LITHIUM BRINE RESOURCES,

neighboring Anson Resources - Resource of 1.5M tonnes of lithium (LCE)\* + further Exploration Target of 2 – 2.6M tonnes LCE. Possibly 56B tonnes of lithium rich brines.

Highly successful Pilot with Koch Tech Solutions and Offtake with LG Solution



LARGE EXPLORATION TARGET FROM 600 MILLION TO 1 BILLION TONNES OF 19 -29%

**KCL.** Potentially one of the Largest Sources of Potash in America. Only 3-4 drill holes needed to establish a resource.



KNOWN, PROVEN, PRODUCTIVE POTASH HORIZON, CYCLE 5, which neighboring Intrepid Potash's Moab Mine has been producing from since 1963.



**COMPETITIVE EDGE** as a premium received for proximity to massive US market with established access. Not imported!

# **The Lithium Opportunity in America**

Investing in U.S. based lithium mining will help secure American EV Battery supply chains.

#### **Declining U.S. Production**



US Lithium Mined Production has dropped from 37% of global lithium production to 1% from  $1995-2021^2$ 

Despite having 4% of the world's lithium reserves<sup>5</sup>

#### **Rising Demand**



IN 2024 the U.S. consumed 3.400 metric tonnes of lithium<sup>1</sup>

#### **Foreign Dependence**



70% of Global lithium production is dominated by Australia and Chile<sup>3</sup> China dominates the FV battery supply chain, supplying 56% of the EV batteries worldwide<sup>8</sup>

#### **Critical Need**



"Global lithium supply is expected to enter a deficit relative to demand by 2025."

BMI. a Fitch Solutions research unit

#### The Need For U.S. **Lithium Production**



The US Department of Energy has committed \$2.91B to help secure the U.S. supply chain for advanced batteries. presently dominated by China<sup>7</sup>

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### **KCLI's Lithium Solution**

#### **Geologic Advantage**

Shared Geology with neighboring projects could potentially lead to a large exploration target, utilizing the same wells as Potash.

# **Environmentally Sound, Cost-Effective**

Direct Lithium Extraction technologies offer a low cost, low water usage and environmentally sound solution compared to hard rock mines.

#### **Rapid Speed To Market**

Direct Lithium Extraction (DLE) of Lithium Brines allows for rapid processing, leading to faster marketing of battery grade Li

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# The Potash Problem in America – Huge Reliance on Overseas Markets

Investing in U.S. based potash sources, will help to secure American Farming Independence and Food Security with U.S. based supply.

#### Declining <u>U.S.</u> Production



Potash production in America has consistently declined since 1999.

1999: 1480t. | 2022: 480t.1

# Global Supply Chain Disruptions



The Russia/Ukraine war resulted in sanctions on a significant supply of Potash from Russia/Belarus

#### **Rising Demand**



2022E Global supply gap



#### **Rising Costs**



Supply chain disruptions and fertilizer price increases lead to higher costs for American Farmers

#### **Rising Prices**



Higher costs for American farmers leads to higher prices for American consumers and Tariffs / Trade disputes will exacerbate this Trend

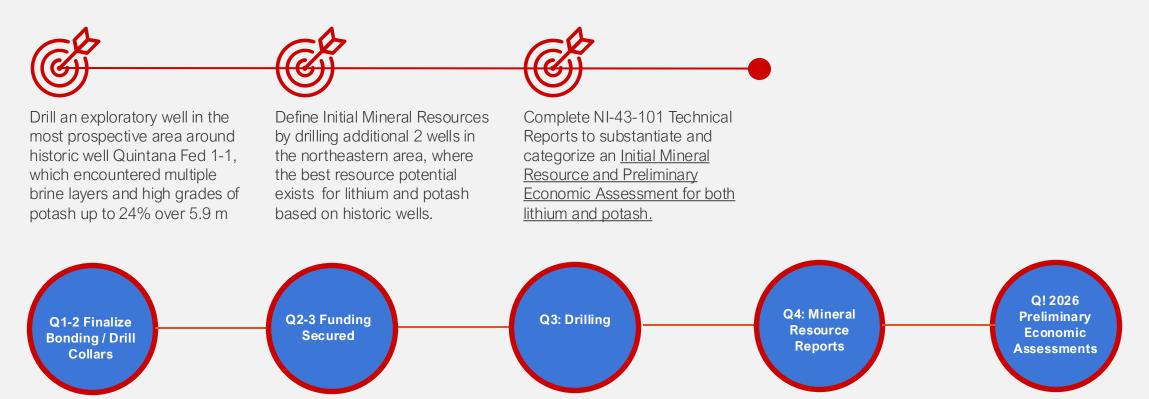
<sup>1.</sup> USGS MCS2000, MCS2022

<sup>2.</sup> Source: IHS July 2022 Potash Outlook, Bloomberg



# Our Objectives 2025-2026

The primary objective - to drill for Potash and Lithium to convert Exploration Target to an Initial Potash Resource & Define Initial Lithium Resource



#### **Our Team**

#### Simon Clarke, LLB, Dip LP

President, CEO & Director

Chair of Myriad Uranium

Former CEO & Director of American Lithium Corp. – \$1.2 B Market Valuation at height of last lithium cycle; Senior Management / Director Jervois Global; Founder, CEO & Director M2 Cobalt sold to Jervois Global; Founder & Director of Osum Oil Sands approx. 25k bbls / day producer, sold in 2021 for approx. \$400m.

#### Dean Besserer, BSc, PGeo.

**COO & Director** 

More than three decades of mineral exploration experience working in over 50 countries, leading projects with annual exploration budgets exceeding US\$20 million.

Vice-President and Partner at APEX Geoscience Ltd., a consulting firm with offices in Canada, South America and Australia

Director of Brilliant Mining, Niblack Resources, Sentosa Mining, CEO of Zeus Minerals former VP Exploration M2 Cobalt

He is a Professional Geologist and a "Qualified Person" as defined in National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101").

#### Colin Healey, Bcom, MBA, MET

**Director** 

Currently CEO of Premier American Uranium Inc.; over 20 years of extensive experience as a finance and management professional. including 16 years in Equity Research as a Mining and Special Situations Analyst at Haywood Securities, covering uranium, lithium, other commodities.

#### Eric Miller,

Director

President of Rideau Potomac Strategy Group, a consultancy that advises public and private sector clients globally on economic and regulatory policies, sustainability, government affairs, business strategy, and geo-political matters.. Advises mining companies on critical minerals policies and funding.

Eric was first representative of Canada's Department of Industry (ISED) in the United States. He is a Global Fellow at the Woodrow Wilson Center in Washington, a Fellow with the Canadian Global Affairs Institute, and a Fellow with the Canadian Chamber of Commerce's Future of Business Centre.

#### Steve Vanry, CFA, CIM

**Director / Audit Chair** 

25 years of professional experience in senior management and director positions with public and private companies, providing expertise in capital markets, strategic planning, regulatory compliance and accounting and financial reporting, focused on mining, oil and gas, renewable energy and energy technology.

#### John A. Greig, MSc, PGeo.

Sr. Advisor

Put together original Green River Project land package. Founder of Sutton Resources Ltd. (TSX and NASDAQ); Founder of Cumberland Resources Ltd. (TSX and AMEX) and Founder of EuroZinc Mining Corp. (TSX and AMEX).

Director of Winspear Resources Ltd. (TSX-V), owned 70% of the Snap Lake diamond deposit (now a mine) Northwest Territories, Canada: Director of Dynamic Oil and Gas Inc. (TSX and NASDAQ), sold to an income trust for approx. \$105 million; Director of Shellbridge Oil and Gas Inc. (TSX-V) sold to True Energy for approx. \$60 million in shares of True Energy Trust.

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# **Corporate Structure and Info**

#### **Share Information Post Financing / Roll Back**

| Exchange                  | CSE   OTC   FRA             |
|---------------------------|-----------------------------|
| Symbol                    | KCLI   APCOF   2P3          |
| Issued and O/S            | 54,830,980                  |
| Fully Diluted:            | 80,103,475                  |
| 52 week range (high-low): | 0.03 - 0.10<br>(0.075-0.25) |



#### **Corporate Directory**

#### **Corporate Office**

1100–1199 West Hastings Street. Vancouver, B.C. V6E 3T5 Tel: 604-551-9665 email:info@acmineralscorp.com

#### Website

www.acmineralscorp.com

#### Legal:

Cassels 885 West Georgia Street Vancouver, B. C. V6C 3E8

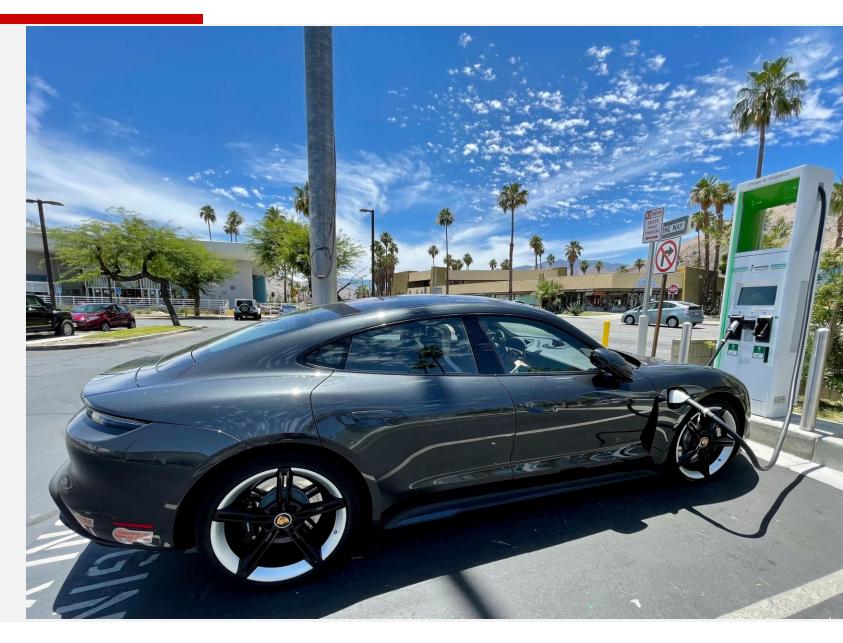
#### Auditors:

Dale Matheson Carr- Hilton Labonte (DMCL) 1500-1700,1140 W. Pender St. Vancouver, B.C. V6E 4G1

#### **Transfer Agent:**

Computershare 510 Burrard St., 2nd Flr Vancouver B.C. V6C 3B9

# **About Lithium: Green Energy for a Greener Future**



# **The Current State of Play**

Lithium is a key component of rechargeable batteries commonly used in laptops, cell phones and most notably, electric vehicles.



By 2040, the global lithium supply is expected to increase **40x** 



Nearly **90%** of total lithium demand is from advanced energy technology



The average electric vehicle can require about

17.6 pounds of lithium

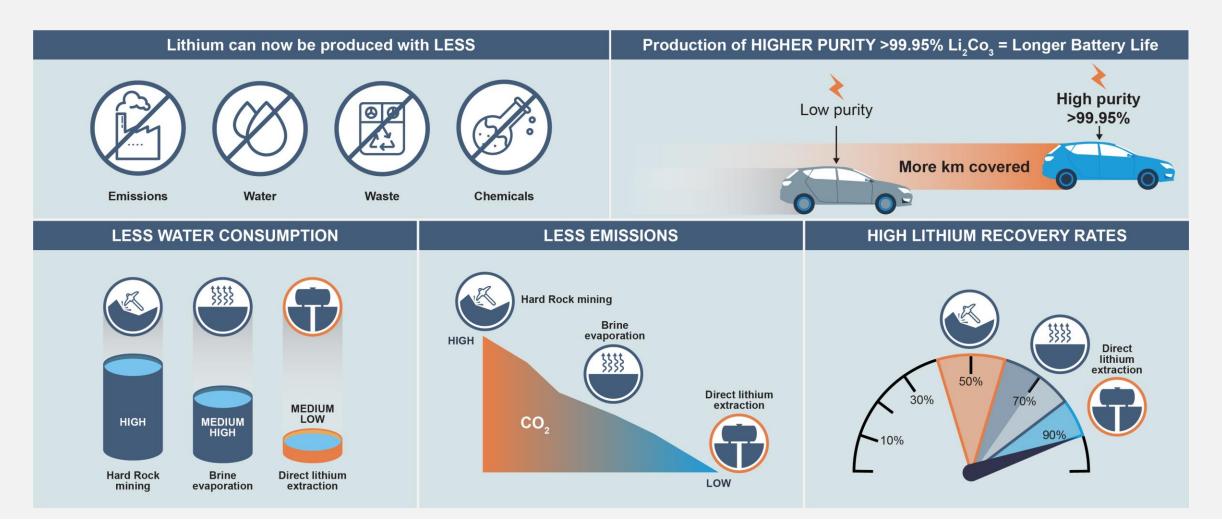
**14**<sub>M</sub>

EV sales projected by the end of 2023



By 2040, EV sales could exceed **70 million** cars compared to only **3 million** in 2020, causing mineral demands to increase **25x** current levels.

# **Clean Lithium: Game Changing**



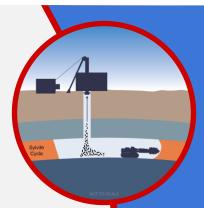
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# **Responsible Lithium Development**

#### **Lower Cost, Lower Environmental Impact**

American Critical Minerals is committed to lithium extraction with less environmental impact.

Compared to other lithium extraction operations, DLE methods provide a lower environmental impact at a lower cost with better lithium recovery rates.



# Most Lithium operations fall into three basic types.

#### **Hard Rock Mining**

- More expensive
- Higher environmental impact



#### **Direct Lithium Extraction**

- Low environmental impact
- Cost-effective
- Faster
- Higher Lithium recovery rates



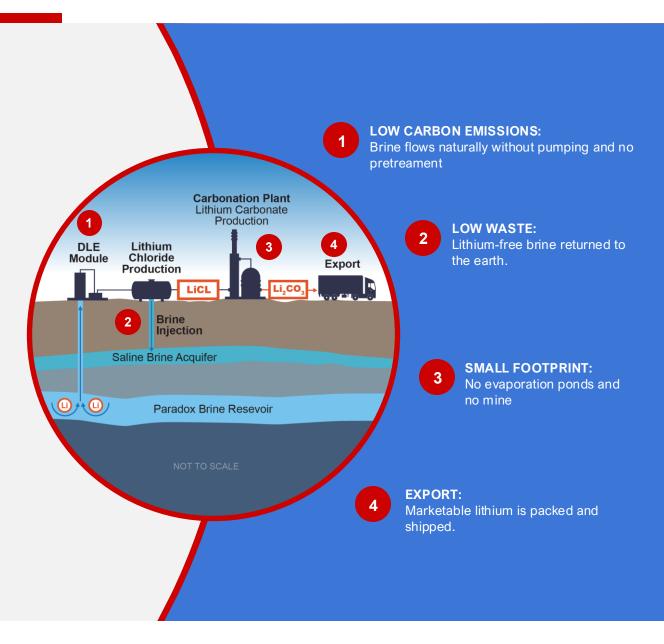
#### **Traditional Brine Ponds**

- High land area requirement
- Time-consuming
- Higher water usage
- Lower Lithium recovery rates

### **Direct Lithium Extraction**

# **Direct Lithium Extraction (DLE): A Real Game Changer**

DLE Methods allow for the extraction of lithium brine in an environmentally responsible process that uses less water, is more cost effective than hard rock mining and allows for rapid speed to market. It requires less land and can reduce production times to days rather than months or years. Anson currently utilizes a DLE technology already in production and is also piloting with Koch Technology Solutions





### **Direct Potash Extraction** (D.P.E) Responsible Resource Development

#### **Increasing Efficiency with a Lower Environmental Impact**

Solution mining is more cost effective and has a lower environmental impact then conventional mining.

Technology developed in Utah will assist in the reduction of water usage in the processing of potash.



Up to 90% water savings

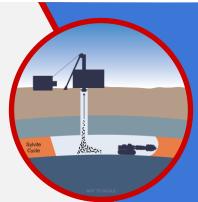
American Critical Minerals has identified **Avara Purestream** technology for the use in processing on site. Developed at Utah State University, it is estimated that using the Avara system will **reduce water use by 90%** when compared to the water required for evaporation pool processing.

#### For example:

IPI used
1,100 acre feet
of water to
produce 110,000 T
of potash in 2022

One acre foot of water is equal to 326,000 gallons, or enough water to cover an acre of land 1-foot deep

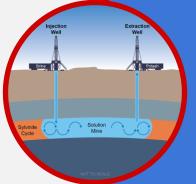
369M gallons of water



# Most potash operations fall into three basic types.

#### **Conventional Mining**

- More expensive
- Higher environmental impact



#### **Solution Mining**

- Cost-effective
- Efficient
- Safer



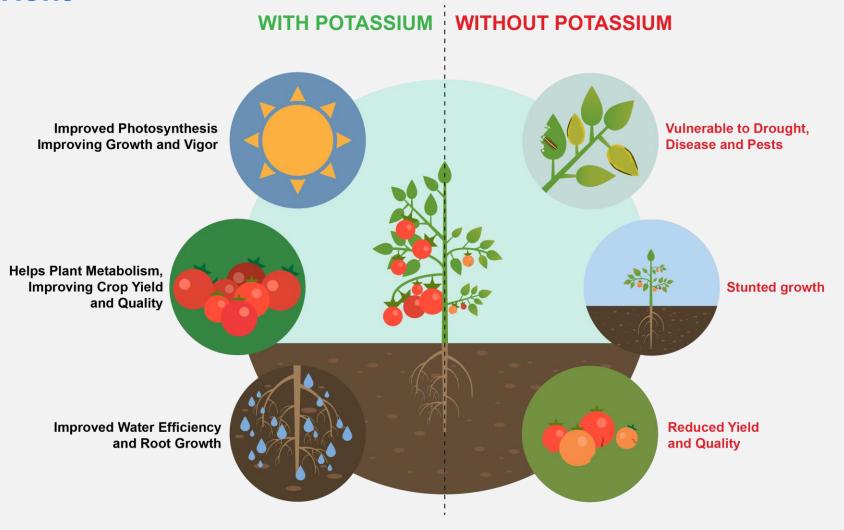
#### **Natural Brines**

- Costly
- Time-consuming

### **Potassium: A Vital Nutrient**

# Potassium is required in large quantities by all plants and animals.

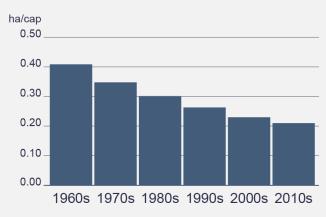
- Potash is a potassium-rich salt and a vital nutrient required to grow crops.
- Potassium is essential to both supporting and strengthening crops.
- There is no substitute for potassium.

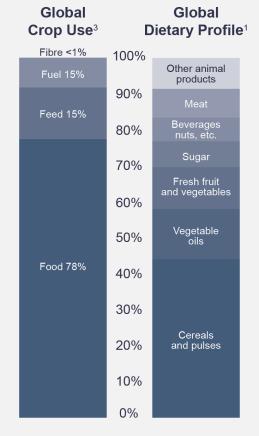


# **Crop Yields Hold the Key to Future Food Security**

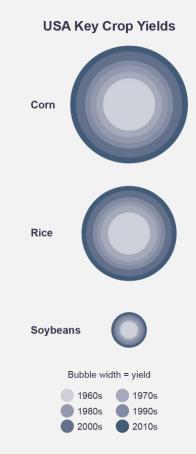
Fertilizers like Potash have helped grow crop yields to offset the decline in cropland and changing diets.

#### **Cropland Per Capita in Steady Decline**





Animal feeds and global dietary changes show the need for crop fertilizer.



Crop yields have grown with the introduction of fertilizers like potash.

#### **Potash Demand Continues**

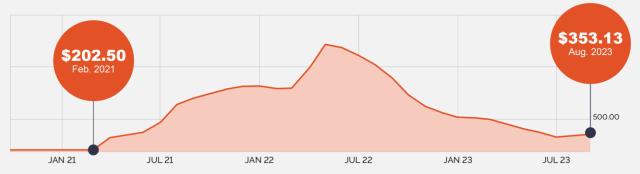
Investing in potash production will help offset potash demand.

Consistent annual growth has been between 2.5% and 3% percent since 2000, and it is projected to continue.



The Canadian and U.S. potash demand is forecast to grow to an estimated 12.55 million Mt in 2030.

#### 3-Year Potassium Chloride (Muriate of Potash) Spot Price (I:PCMPSP)



# The increased demand and disrupted supply has been reflected in the price of fertilizer.

Potash price has soared from US\$202.50 (Feb. '21 ) to US \$353.13 (Aug. '23)

# Potash: Low Emission, Environmentally Friendly Fertilizer

MOP is a critical nutrient with a lower environmental footprint and greenhouse gases

#### Potash has a lower footprint of greenhouse gas emissions

| Scope 1+2► ▼Scope 3¹            | <b>Low</b><br><100 kg CO <sub>2</sub> e/t | Medium<br><1,000 kg CO <sub>2</sub> e/t | <b>High</b> >1,000 kg CO <sub>2</sub> e/t |
|---------------------------------|---|---|---|
| <b>Low</b><br><100 kg CO₂e/t    | potash <sup>2</sup>                       |   |   |
| Medium                          |   | phosphate <sup>3</sup>                  |   |
| <b>High</b><br>>1,000 kg CO₂e/t |   |   | nitrogen <sup>4</sup>                     |

#### Not all fertilisers have the same environmental footprint:

- Potash has low emissions in production and distribution
- Potash doesn't release CO<sub>2</sub> or N<sub>2</sub>O
- Potash **doesn't** pollute waterways

Original source: Potash outlook briefing June 17, 2021

<sup>1.</sup> Scope 3 impact relates only to emissions associated with downstream processing and use, not other considerations such as transportation.

<sup>2.</sup> Based on MOP produced by flotation and without downstream processing.

<sup>3.</sup> Based on ammonium phosphates (DAP/MAP).

<sup>4.</sup> Based on ure

Note: a) Scope 1+2 emissions for flotation-based MOP ~50-80 kg CO<sub>2</sub>e/t, other production routes are 100-500kg. High nutrient concentration (60% K<sub>2</sub>O) maximises efficiency in transportation and spreading.

b) From BHP research conducted so far, nitrogen-based fertilisers rather than potash appear to have a larger downstream emissions impact. However, trying to estimate the GHG contribution impact of fertiliser on soils and crops is very complicated. We continue to develop and improve our knowledge in this area.



#### AMERICAN CRITICAL MINERALS CORP.

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