# **Lancaster Resources Inc.**

SUPPLYING THE TRANSITION TO A LOW CARBON ECONOMY

**CORPORATE PRESENTATION APRIL 2024** 

CSE: LCR | OTCQB: LANRF | FRA: 6UF0

# HIGHLIGHTS



Net Zero Lithium	We are developing carbon carbon-free lithium supply chain.	<b>G</b> Through the development <b>Net Zero</b>	The two properties, named <b>Catley Lake</b> and <b>Centennial East</b> , covering 3,036 and 5,081 hectares respectively, offer significant exploration upside and close proximity to Centennial, Dufferin, and Wide Lake deposits.	Uranium Energy Projects
Diversified Lithium Portfolio	Lithium brine at our <b>Alkali Flats</b> <b>Project in New Mexico</b> , strongly analogous to Clayton Valley. Hard Rock lithium at our <b>Trans Taiga</b> <b>Project in James Bay.</b>	<i>Lithium,</i> Lancaster will power the future of <b>Carbon free</b>	<b>The Piney Lake Gold Project is</b> <b>strategically positioned,</b> encircled by the prolific gold claims of SGO / SSR Mining, Piney Lake is in a region with a history of mineral discoveries.	The Piney Lake Gold Property
Drill Ready Project	Maiden drilling program is expected to be ready by April 2024 at our <b>Alkali Flats Project.</b>	lithium development and production	KorrAl's innovative satellite and Al technology, will <b>enhance the</b> <b>efficiency and accuracy of</b> <b>mineral exploration.</b>	KorrAl Technology

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# ENERGY TRANSITION OPPORTUNITY

"The energy transition is the greatest economic opportunity of our time. The world is shifting towards a low-carbon future, and those who invest in the transition today will reap the rewards tomorrow."

- Adnan Z. Amin, Former Director-General of the International Renewable Energy Agency



# WHY LITHIUM?

Lithium is essential for producing the lithium-ion batteries used in EV's, laptops, etc.

By 2040, lithium demand could grow by more than 12x.

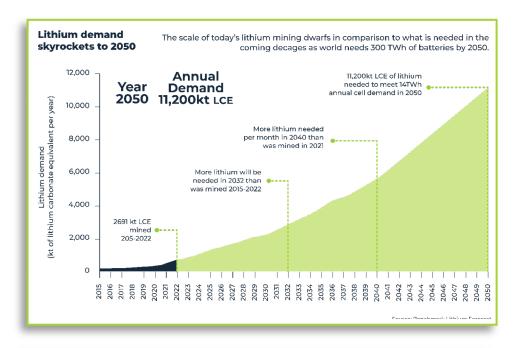
Currently ~87% of all lithium is sourced from Australia, Chile and China.

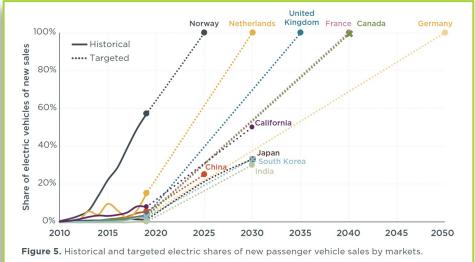
The U.S.A is currently home to only one largescale lithium mine, Silver Peak, in Nevada while Canada doesn't produce any lithium.

## EV MARKET FUELS LITHIUM DEMAND

"I don't see any major price decline any time soon because demand is going to keep growing as more EVs come into the market," says Morningstar analyst Seth Goldstein, who believes the top Lithium producers are undervalued."

- Mov. 9, 2022, The Globe & Mail <sup>1</sup>

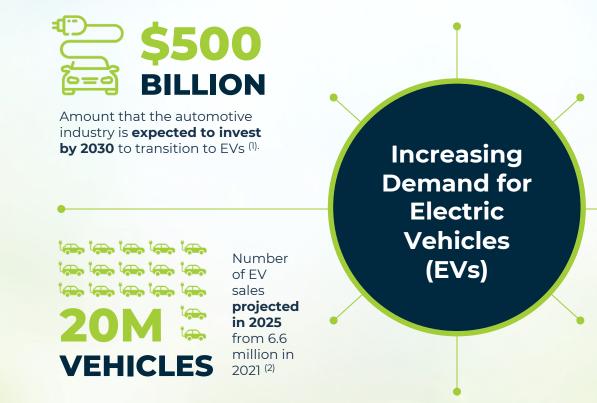




<u>https://www.stockwatch.com/News/Item/Z-C!LAC-3326280/C/LAC</u>
thtps://www.researchgate.net/figure/Historical-and-targeted-electric-shares-of-new-passenger-vehicle-sales-by-markets fig4 34367043

# **ELECTRIC VEHICLE MARKET**







Amount of carbon-dioxide equivalent of GHC emissions **were** saved by the use of EVs globally in 2021. <sup>(4)</sup>



Number of consumers looking to buy EVs globally in 2022 <sup>(5)</sup>

https://www.theatlantic.com/newsletters/archive/2021/09/electric-cars-have-hit-inflection-point/620233/

BNEF's Economic Transition Scenario, https://about.bnef.com/blog/net-zero-road-transport-by-2050-still-possible-as-electric-vehicles-set-to-guintuple-by-2025/

Projection by Bloomberg NEF, https://electrek.co/2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2022/05/31/this-is-where-electric-adoption-ado

ttps://www.virta.global/en/global-electric-vehicle-mar

EY Mobility Consumer Index (MCI), https://electrek.co/2022/05/31/this-is-where-electric-vehicle-adoption-is-headed-between-now-and-2025/

# WHY NOW – USA IRA



# **Clean Energy Funding**

In the Inflation Reduction Act

#### **Estimated Spending**

(2022-2031) USD

largest climate legislation in U.S. history. Here's a breakdown of all the clean energy and climate funding in the IRA.

The Inflation Reduction Act (IRA) is the

Total Spending (2022–2031) **\$392.5B** 

\*Indicates extensions or modifications of existing credits



#### Source: Congressional Budget Office

https://decarbonization.visualcapitalist.com/breaking-down-clean-energy-funding-in-the-inflation-reduction-act/

# Inflation Reduction Act

- The single largest investment in climate and energy in American history
- Enabling America to tackle the climate crisis and advancing environmental justice
- Securing America's position as a world leader in domestic clean energy manufacturing and putting the United States on a pathway to achieve climate goals, including a net-zero economy by 2050



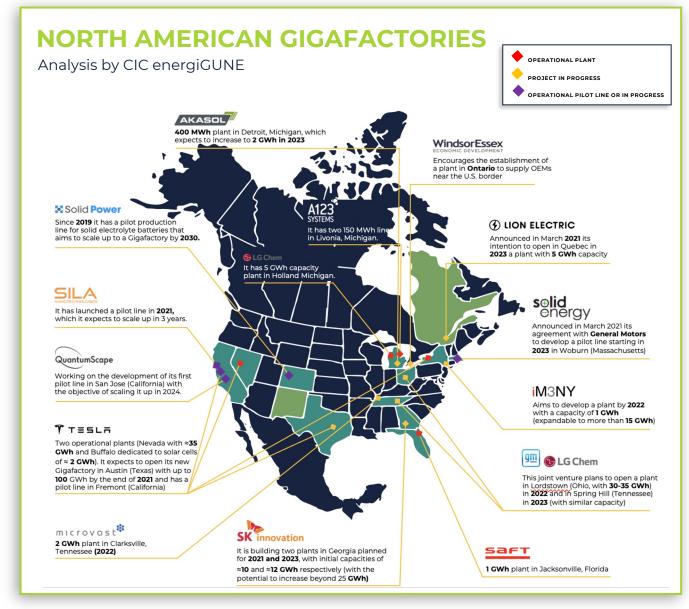


Access to CLEAN NET ZERO LITHIUM in the USA

# WHY NEW MEXICO & QUEBEC

# Location, Location, Location

- Both jurisdictions **are top-tier mining jurisdictions,** with Quebec Pegmatite being the most soughtafter globally
- New Mexico playas are **underexplored** for Lithium brines
- Close proximity to all Gigafactories/BESS plants in North America
- Near to major infrastructure such as highway, rail, and transmission lines
- Abundant Renewable Energy, with prolific solar and wind in NM and hydro in Quebec



https://medium.com/prime-movers-lab/does-the-u-s-have-enough-lithium-to-support-the-growing-ev-market-d73a44a969e5

#### https://www.nmstatelands.org/divisions/commercial-resources/renewable-energy/

# **New Mexico** is a Hub for Renewable

# Energy Production

 Second in the USA for **Solar** potential and tenth in **Wind** potential

**NEW MEXICO & QUEBEC** 

**RENEWABLE LEADERS** 

- Operating **Geothermal** power only 8mi to the south of Alkali Flats
- In discussions to initiate a Solar PV project in New Mexico alongside our Alkali Flat Lithium Project

**Quebec** boasts Canada's cleanest electricity with nearly all electricity from hydro power.





# **Net Zero Lithium**



# Clean Energy Sources used for Carbon Free Electric Vehicles

• Using the abundance of clean energy sources in New Mexico, Lancaster aims to develop a world-class lithium brine project at its Aklali Flats Project

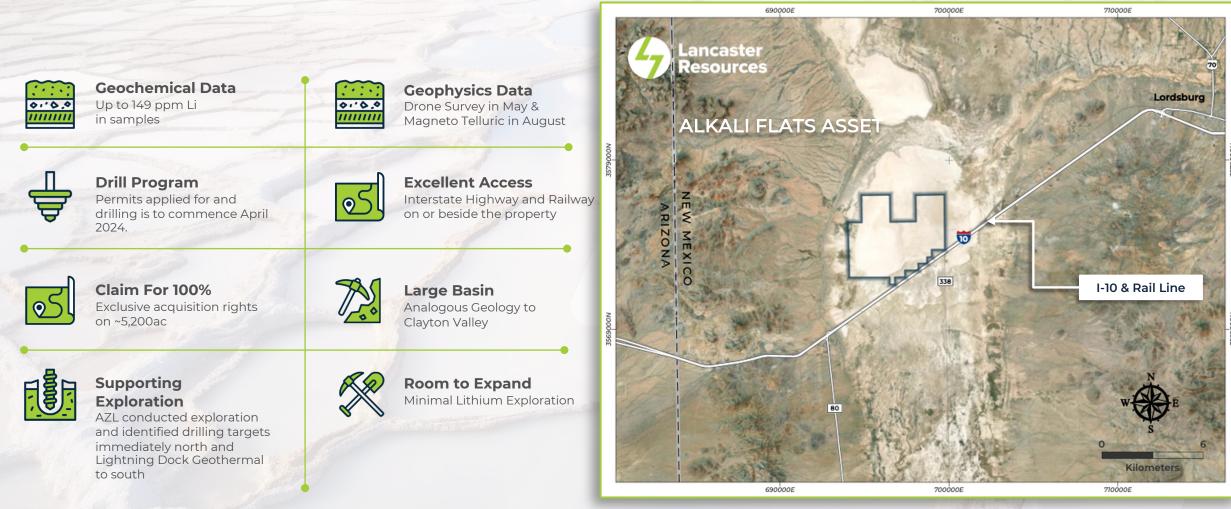
• Lancaster's management team is proud to work towards reducing the currently high carbon footprint of lithium production

• One of the only Lithium Exploration Companies looking ahead, building a complete carbon-free process



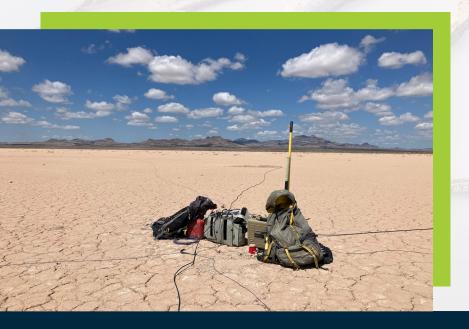
# ALKALI FLATS LITHIUM BRINE PROPERTY OVERVIEW

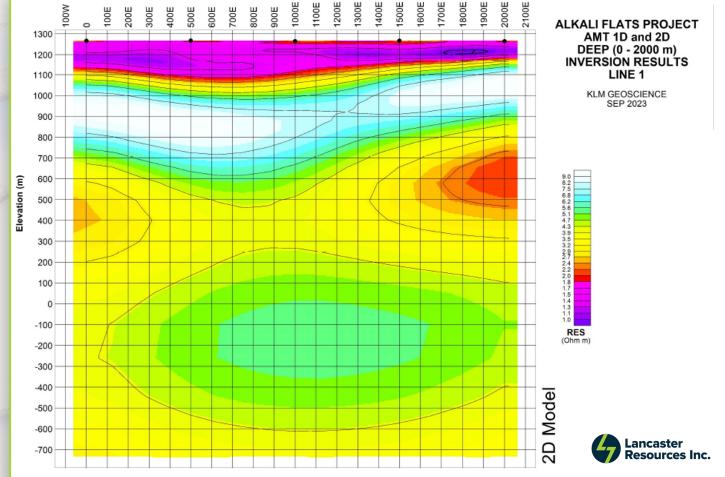




# ALKALI FLAT LITHIUM BRINE PROPERTY GEOPHYSICS

- Geophysics results from Q3 2023 successful magneto-telluric program. Built on May 2023 Drone program and AZL MT 2022 program
- Well-defined highly conductive subsurface targets
- Regulatory applications submitted for the April 2024 drilling program





Lancaster Resources Inc.

# OVERVIEW

**ALKALI FLAT LITHIUM BRINE PROPERTY** 



Geochemical Data

## Sampling Program completed in Q1 2023

- Identified 143 surface samples, averaging 113.8ppm Li with a maximum of 149.5ppm Li
  - 2<sup>nd</sup> highest sample in New Mexico and highly anomalous compared to regional data
  - Historical NURE sample of 124ppm in stream
- Additional pathfinder elements
   identified



**Nearby Exploration** 

## AZL, ACDC, and Lighting Dock Exploration

- Arizona Lithium completed an MT and Gravity geophysical program in 2022 and identified conductive aquifers for drilling 3 potential locations
- Lightning Dock Geothermal was started in 2013 with a 4MW plant. Significant drilling, geology, and exploration work was conducted
- ACDC Copper porphyry copper lease to the SW of the property and has completed, and reported, significant MT and other geophysical data for the area

The.



Excellent Geology

- 3 sources of Li identified including volcanic (~35Ma), intrusive formations and pegmatite, geothermal ground system (same as Lightning Dock, ~6mi south)
- Regional faulting structures, known geothermal hydrology, closed basin in an arid environment support concentration of lithium at depth
- Analogous to Clayton Valley



## ALKALI FLAT LITHIUM BRINE PROPERTY GEOLOGY





**Clayton Valley** 

Host to the only commercially producing lithium project in North America, started in 1966

- Lithium concentrations in the brines in Clayton Valley have been relatively consistent in the 150 -200 ppm (mg/litre) in recent history
- Similar concentrations in surface samples to Alkali Flats

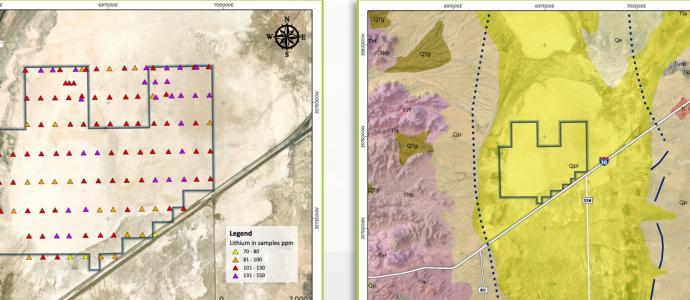
# Alkali Flat: The Next Clayton Valley?

- The Alkali Flat playa is understood to be a fault-bounded, large closed basin, ~315km<sup>2</sup>
- This basin has not yet been drilled for brines, Q3 2023 MT program to identify locations
- Playa basin includes the large Lightning Dock Geothermal Power
  Plant
- Similar in size (full playa), but significantly more mature lithium source (~35Ma vs ~5-17 Ma)

697000

691000

- ALKALI FLAT LITHIUM BRINE PROPERTY GEOLOGY
- Geochem Results from Q1 2023 sampling program (also showing Q3 geophysics program)
- Area Geology, showing the extent of playa infill along with Q3 2023 MT program
- Surface concentrations are relatively analogous to the surface concentrations for the deposits at Clayton Valley
- Alkali Flats source rocks are significantly older than geologically similar Clayton Valley (~35Ma vs ~15Ma)



Meters

2000006





Lancaster Resources

Kmb - Mancos Shale & Beartooth, Sarten Fm QTg - Gila Grp, Fm. or conglomerate

> Qpl - Lacustrine & playa deposits TKav - Andesitic to dacite lava, pyroclastic bx

Qe - Eolian deposits Qp - Piedmont alluvial deposits

TKI - Intrusive rocks Ti - Intrusive; intermediate to silicic TIa - Andesitic - dacite lavas, pyroclastic flow: TIrf - Rhyolitic lavas and tuffs

Alkali Flats Geologic Map Iidlago County, New Mexico

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Meters Spatial Reference PCS: NAD 1983 UTM Zone 12N

# ALKALI FLATS LITHIUM BRINE PROPERTY INFASTRUCTURE





## New Frontiers in Lithium Exploration

## Placer Mineral Claims & Significant Growth Potential

- 260 BLM Placer Mineral Claims, renewed through August 2024
- Immediately adjacent to USA I-10 Highway and Railroad
- Significant room to expand claim area



Abundant Clean Energy Sources

- Investigating ability to develop solar power plant for DLE and Brine production
- Geothermal power is ~8mi south at Lightning Dock
- Top 3 solar and wind opportunities in state of New Mexico

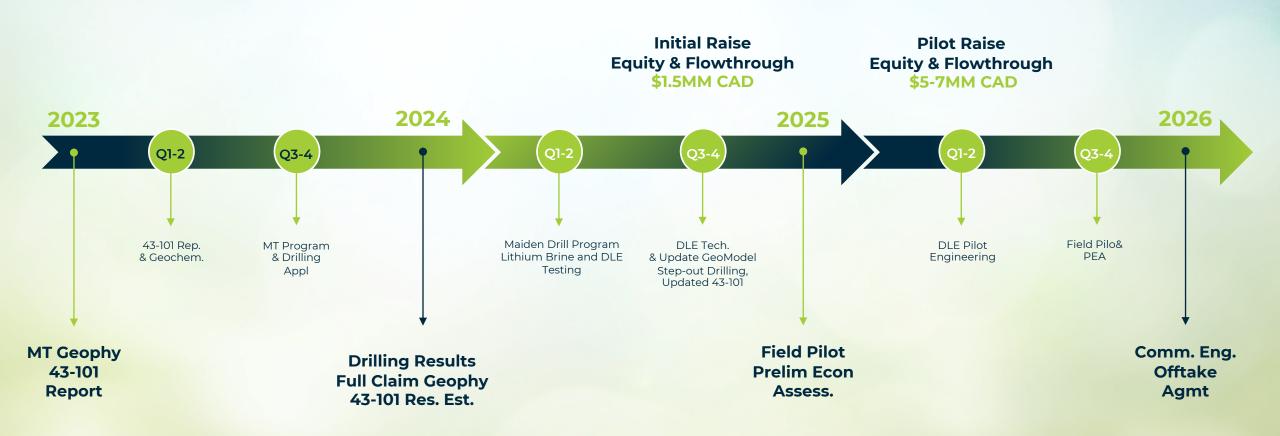
Access

Adjacent to Significant Transportation

- I-10 interstate highway runs through the south end of the Project
- The rail line in close proximity to Akali
   Flats

# ALKALI FLAT LITHIUM BRINE PROPERTY DEVELOPMENT PLAN





# TRANS-TAIGA LITHIUM PEGMATITE PROPERTY OVERVIEW





**Claim For 100%** Exclusive acquisition rights on 3,520 acres



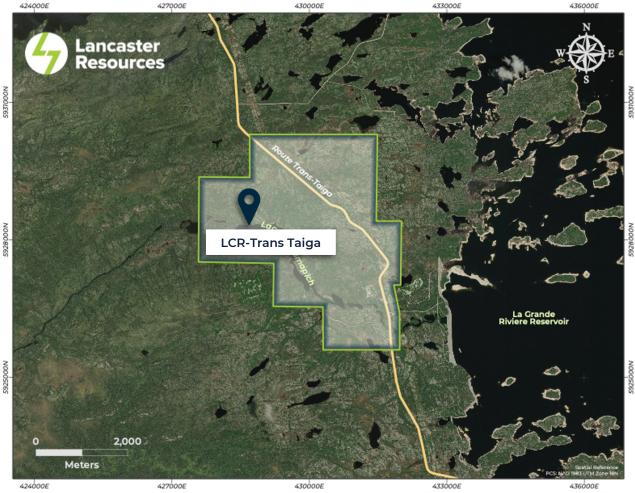
**Excellent Access** Gravel Road & Hydro ROW transects property



**Nearby Exploration** Located between Patriot Corvette and Winsome Cancet deposits



**Geochemical & Geology** Historical data and pegmatite samples



## TRANS-TAIGA LITHIUM PEGMATITE PROPERTY GEOLOGY





### Claim for 100%

Property Acquired in June 2023

- 100% Option agreement
- 3,520 acres in most prospective lithium pegmatite areas globally
- Hydropower goes through property and could provide clean, near zero electricity



**Nearby Exploration** 

Significant Discoveries on nearby properties

- Patriot Battery Metals Corvette is ~120km east of Trans-Taiga (up to 5.1% Li<sub>2</sub>O)
- Winsome Resources Cancet is ~74km east (up to 5.6% Li<sub>2</sub>O)
- Loyal Lithium Brisk assets are ~2km to the northwest

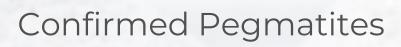


**Under Explored** 

Geology

- **Pegmatites confirmed on lease** through historical testing, including muscovite and tourmaline
- No exploration on property completed recently, highly prospective for future discoveries

# TRANS-TAIGA LITHIUM PEGMATITE PROPERTY GEOLOGY

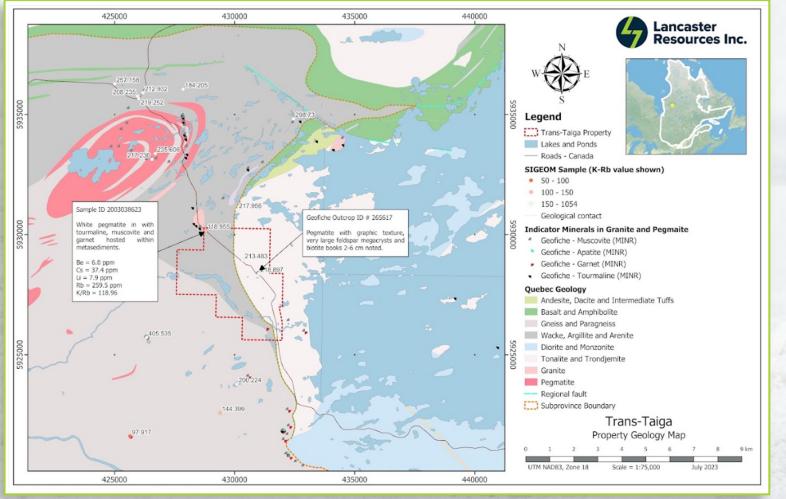


### **Public Databases Shown:**

- Pathfinder Minerals
- Known pegmatite outcroppings
- Faulting and Geology

#### Targeting Spring 2024 surface exploration and geophysics program

- Geophysics
- Field Geochemical / Grab Samples



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# TRANS-TAIGA LITHIUM PEGMATITE PROPERTY AREA MAP



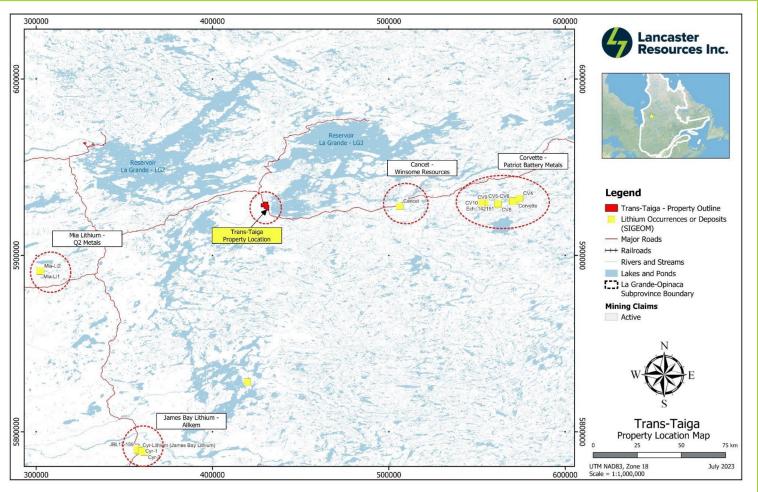
# Significant Discoveries on Nearby Properties

Reviewing options for adding high-quality claims

- Adjacent to Trans-Taiga
- Stand-alone

Utilizing existing public databases

- Pathfinder Minerals
- Known pegmatite outcroppings
- Faulting and Geology



# WHY URANIUM NOW? MARKET DATA





### **Uranium Price**

The monthly price of uranium worldwide (In U.S. dollars per pound)

# punod per dollars in U.S. Price i 40

# Market Opportunity

Uranium's price has historically experienced long bear markets and periods of exponential growth surrounding catalysts

The uranium market has begun a trend of price appreciation from under US\$20/lb. in November 2016 to the current price of **US\$91/lb.** 

More recently, the Sprott Physical Uranium Trust (SPUT) has significantly invested into physical uranium with now **over \$3.46 billion under** management and **over 61.7 million pounds purchased to date** (July 2021 – present)

Trading Economics: <u>https://tradingeconomics.com/commodities</u>

# **URANIUM IN CANADA**

Athabasca Basin



With known uranium resources of 694,000 tonnes of  $U_3O_8$  (588,500 tU), as well as much continuing exploration, Canada has a significant role in meeting future world demand.

#### JURISDICTION

Stable, supportive government and communities, skilled workforce and established infrastructure. Straightforward permitting.

#### **GLOBAL SUPPLIER**

Canada is the world's second-largest producer of uranium, accounting for roughly 13% of total global output.

#### THE HIGHEST GRADE

Canadian uranium mines are known for the highest grades in the world, up to 100x greater than the world average.<sup>2</sup>

#### **TOP-RATED**

Saskatchewan is one of the top-tier unconformity basins, and it is one of only a few in the world. It boasts the highest grade, with some projects exceeding 34% (ISO Energy Hurricane)

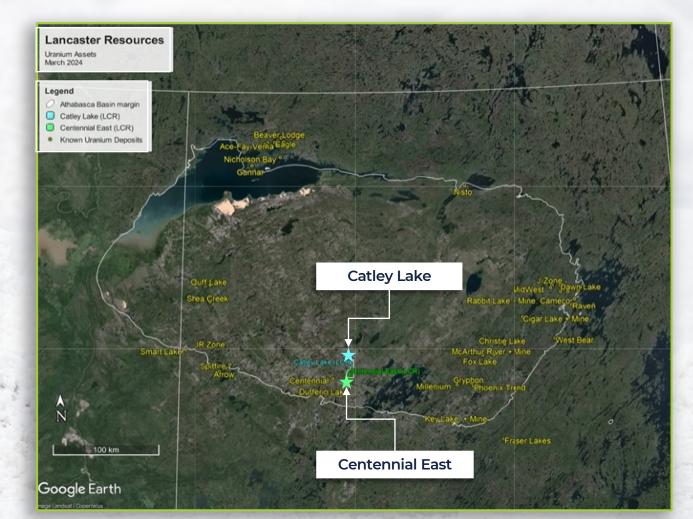
World Nuclear Association (WNA) data, 202
 Covernment of Canada

s://world-nuclear.org/information-library/country-profiles/countries-a-f/canada-uranium.aspx

# ATHABASCA BASIN PROPERTY REGION



- The two properties, named Catley Lake and Centennial East, cover 3,036 and 5,081 hectares respectively, offering significant exploration opportunities.
- Located in the world-class Athabasca Basin, Lancaster's two claims target high-grade uranium deposits in both basement and unconformity types.
- These strategic acquisitions reinforce Lancaster's dedication to discovering critical minerals in support of the energy transition.



# ATHABASCA BASIN PROPERTY ASSETS



#### **Properties:**

- Catley Lake: 3,036 hectares
- Centennial East: 5,081 hectares

### **Mineralization:**

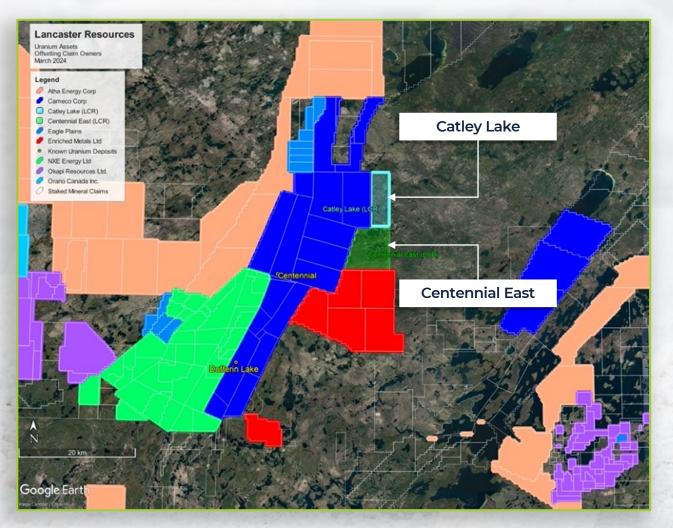
- The Centennial deposit has shown assays up to 8.78% U308 over 33.9m below the Athabasca sandstone and Virgin River unconformity.
- Concentrations of **U308 up to 25.6%** were observed over 0.5m in a drillhole assay.

### **Cameco Dufferin Deposit:**

• Approximately 24km southwest of Lancaster's claims is the Cameco Dufferin deposit, which has shown assays of up to 1.73% U308 over 6.5m

#### **Exploration Plans:**

- Lancaster plans to progress the exploration on the claims using new, modern technologies.
- These technologies aim to identify favorable geology, structures, and corridors that could host high concentrations of uranium.



# NELSON LAKE COPPER PROPERTY OVERVIEW



Excellent Access

## Why Nelson Lake Area?

- Existing 43-101 on adjacent assets
- Good access with hydropower ROW and Janice Lake All season trail, two provincial highways nearby
- The proximity of only ~50km to Key Lake uranium mine and mil
- Two recent copper properties:
  - Cosa Resources-Heron Property
  - Janice Lake Property
- Target sedimentary hosted copper deposits Janice Lake FM, Rafuse FM, etc.



**Room to Expand** 

## Nelson Lake Claim Block

- ~5746ha (14,199ac) of contiguous claims
- Targeting sedimentary copper deposits
   in the Wollaston copper belt
- Significant copper, uranium, and REE critical mineral showings in past geological work around the claim block, but minimal to no exploration samples taken within ~4.5km
- Janice Lake FM, within the Wollaston domain, is source of Heron and Janice Lake copper properties deposits
- Trends NE-SW



**Geochemical & Geology** 

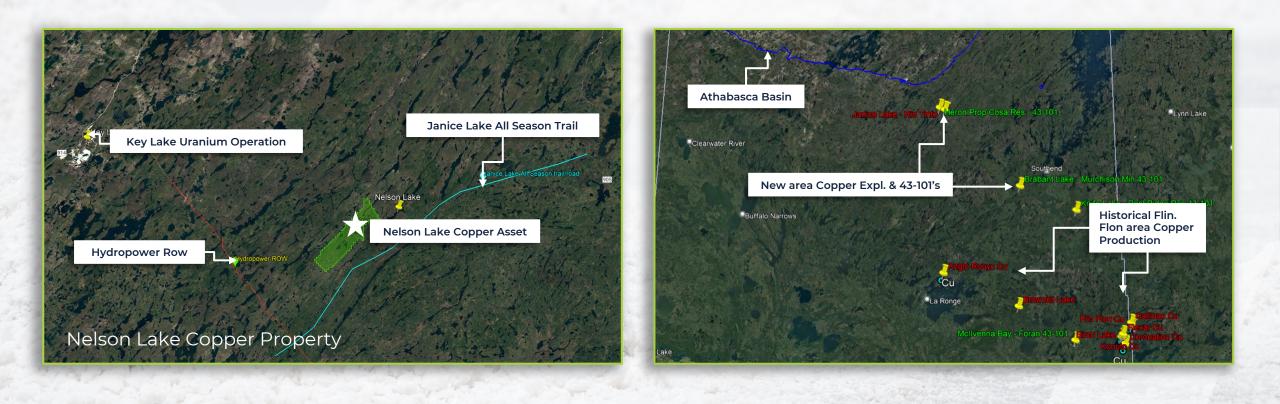
ancaster Resources Inc.

## Tier 1 Mining Jurisdiction

- Saskatchewan Ranked #3 Globally behind Nevada and Western Australia
- Significant mining in the Athabasca basin for Uranium production and REE exploration
- Historical copper production near Flin Flon and extending to the northwest as well as the Athabasca basin
- Excellent geology for numerous critical mineral deposits including copper, uranium, REE, gold
- Focus on underexplored copper areas, with significant upside in other critical minerals such as Uranium and Gold

# NELSON LAKE COPPER PROPERTY LOCATION AND GEOLOGY

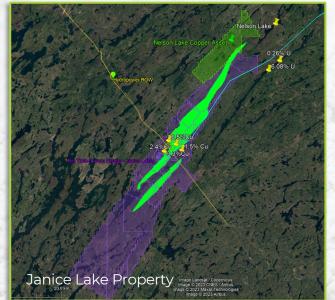




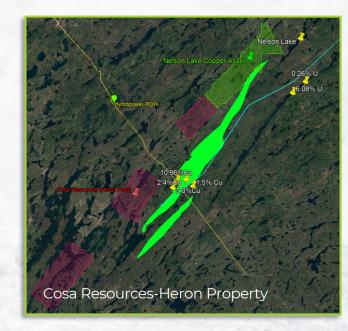
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# NELSON LAKE COPPER PROPERTY PREVIOUS WORK





- Rio Tinto optioned into the property in 2019 for \$30mm in exploration. Forum bought back in March 2023
- Rio built a 110km Janice Lake winter road for 50 person camp to explore 39,943ha
- 2018 drilling 18.5m @ 0.94%-Cu & 6.7g/T-Ag along with 5.2m @ 2.22%-Cu a& 16.5g/T-Ag
- Targeting the eastern margin of the Wollaston domain
- Intersected up too 0.51%-Cu over 51.8m (JANL-0016)
- Historical sampling showing up to 11% Cu



- 3 distinct properties, combined ~11,122ha, optioned in
- 43-101 report January 2022
- Targeting eastern margin of Wollaston domain
- Exploration work identified a target on the northern claim block adjacent to Nelson Lake claim

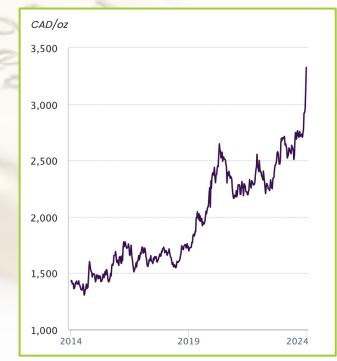
# **GLOBAL GOLD DEMAND MARKET DATA**

Gold's diverse uses – in jewelry, technology and by central banks and investors – mean different sectors of the gold market rise to prominence at different points in the global economic cycle. This diversity of gold demand and the self-balancing nature of the gold market underpin gold's robust gualities as an investment asset. The Global Financial Crisis coincided with a significant shift Eastwards in demand for gold. This was driven not only by cultural affinity but also by wealth creation and income growth in some of the world's most dynamic and rapidly growing economies.

"Gold is among Canada's most valuable mined commodities, with a production value of \$13.2 billion in 2022."

## Gold Key Facts:

- Total gold supply in 2023 increased 3% y/y as mine supply and recycling both posted growth.
- Jewellery: Gold jewellery represents the largest source of annual demand for gold per sector. India and China are by far the largest jewellery markets, accounting for over 50% of the global total.
- Technology: Gold is used as an industrial metal in a broad range of applications, but demand is driven by the electronics sector which accounts for ~80% of gold used in technology.



Gold Price in the last 10 years

Data as of 12 April, 2024

# PINEY LAKE GOLD PROPERTY OVERVIEW





#### Geology

- Historical datasets
- The property sits within the Glennie Domain and mafic to mafelsic lithology
- Tabbernor fault and shear zone is just to the east of the property
- The lithology of property is basic volcanic, quartz diorite-tonalite to granodiorite, and quartz-diorite

# 

### Geochemical

- Nearby historical geochemical sampling indicates past gold showings to the north on a north-south trend
- 7.55g/T Au (~375m)
- 7.3g/T Au and 11.4g/T Ag (~1400m)
- 8.52g/T Au (~2.75km)
- 41.35g/T Au (~4.1km)



### **Past Exploration**

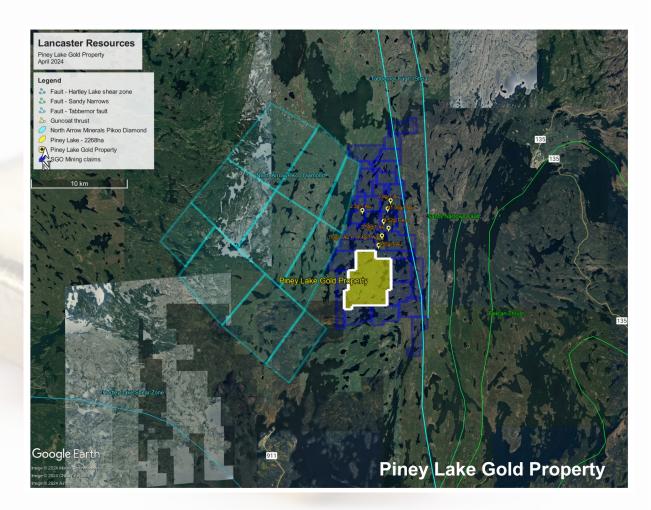
- The general area was explored for gold in the 1990's by Placer Dome Mines and 2010-2012 by Thurloe Gold Syndicate
- 2013 North Arrow Minerals announced diamond discovery just to the west of claims
- 2014 Alto Minerals explored the area focusing on diamond and kimberlite intrusions

# PINEY LAKE GOLD PROPERTY LOCATION



#### Geography

- Located ~65km east of the La Ronge Provincial Park
- 2267.8ha
- Only 2.5km west of North Arrow Minerals diamond property, Pikoo
- Surrounded by SGO / SSR Mining gold claims
- Access to Pelican Narrows is available by provincial highway with claims being ~18km to the southwest on Highway 135 or to Deschambault Lake on Highway 911



# **Our Technology & Technical Services**





KLM Geophysical Exploration specializes in geophysical mapping such as MT/AMT/IP and has strong experience in lithium brine exploration.

Earthex Geophysical Solutions Inc.

is highly specialized in geophysical

prospecting, using cutting-edge technologies and data analysis

methodology.

## **EXPERTISE:**



DATA INTERPRETATION & INTEGRATION



**3D MODELLING, TARGET ID** 



GEOPHYSICAL PROGRAM, PLANNING, TENDERING, QC AND SUPERVISION



FAST AND COST EFFECTIVE DISCOVERY



Carlin Trend is a highly respected mining services provider, focusing on land claims and BLM support



HIGHLY EXPERIENCED TEAMS

# MANAGEMENT TEAM

## Lancaster Resources Inc.

#### Penny White, BA, LLB President and CEO

Penny White is an accomplished business leader with over 20 years of experience in the capital markets. As the President and CEO of Lancaster Resources Inc., she brings a wealth of expertise and leadership to the company.

Penny has a diverse background, with experience in sectors such as mining, pharmaceuticals, and clean energy. She was an initial officer and director of a pharmaceutical company that was later acquired for \$342 million, and was the Chairman of Highbury Energy for 10 years, overseeing the development of the company's gasification technology and registration of a patent to create high-grade synthetic gas from biomass. She has been recognized in PROFIT Magazine's W100 list of top entrepreneurs and has raised over \$50 million for companies she has founded.

In addition to her Law Degree, Penny has completed the Oxford Leading Sustainable Corporations Programme and the Oxford Climate Emergency Programme from Saïd Business School, University of Oxford. She is deeply committed to fighting climate change and working towards a more sustainable future. She believes that by taking care of our planet, we can create a better world for ourselves and future generations.

#### Andrew Watson, P. ENG. VP, Engineering and Operations & QP

Andrew Watson has 21 years of rich technical leadership, operations, corporate strategy, and commercialization experience in lithium, hydrogen, and conventional oil and gas production.

His experience includes working as COO of Prism Diversified, leading the technical development on two substantial battery metal critical mineral opportunities and spearheading the Lithium brine development opportunities on over 850 square miles of highly prospective brine resource. Additionally, Mr. Watson is leading engineering and economic studies for a surface ore body with a focus on recovery technologies that minimize environmental impact.

He has acted as VP Engineering & Operations at CleanInnoGen Energy, where he led the development of the world's first-of-a-kind pilot project to capture industrial waste heat to produce on-site, low-cost, nearzero emission hydrogen and oxygen. Prior to this, he was the VP Engineering & Operations at Hyak Energy, where he managed the operations of a 60MM bbl medium crude oil field in SW Saskatchewan, using an Alkali-Surfactant-Polymer chemical enhanced oil recovery scheme, increased production by over 250%, and spearheaded corporate sale leading to a successful divestment in January 2020.

#### Rick Huang, BA, CGA, MBA Chief Financial Officer & Corporate Secretary

Rick Huang has been the CFO of Lancaster Resources for 2 years. He has over 15 years' experience as a director and officer in public companies. Between 2012 and 2014, he chaired the compensation and corporate governance committee for Great Northern Gold Exploration Corporation. For 11 years, from 2007 to 2018, he was the CFO of Hanwei Energy Services Corp. (TSX: HE), managing its finance, banking, and compliance departments. He has overseen accounting for subsidiaries in Canada, China, and Kazakhstan. His roles have encompassed investor relations, AGM preparations, and international joint venture negotiations. His experience also spans roles at companies like Pepsi Bottling Group (Canada) and Coca-Cola China. Mr. Huang has been involved with Datable Technology Corp. (TSXV: TTM) since May 2015 and previously with Poydras Gaming Finance Corp. (TSXV: PYD). He's been a designated CPA. CGA since 2005 and has an MBA from the University of Western Ontario. 2001.

## **TECHNICAL TEAM**



### Rodney Blakestad, j.D., c.p.g.

#### **Exploration Consultant**

Rodney Blakestad is a highly experienced consulting geologist with a successful career spanning over 40 years. Throughout his career, Rodney has been involved in the discovery of numerous commercial-grade deposits, including the bulk-tonnage potential of the largest operating gold mine in Alaska (Fort Knox, now at 10M ounces), the first leached-cap porphyry systems discovered in Alaska (Taurus-Bluff and others), Cerro Caliche bulk-tonnage gold discovery near Cucurpe, Sonora, Mexico, the Anderson Mountain and Red Mountain VMS deposits in the Alaska range, USA, and numerous volcanogenic massive sulfide deposits (VMS) in the Delta District, Alaska, USA. He has also discovered several gold placers in Alaska, USA.

In addition to his geological expertise, Rodney has a Juris Doctor from the University of Denver Law School, where he studied natural resources and environmental law. This background has led him to focus on brine lithium deposits that can be processed with minimal surface degradation, water consumption, and use alternatives to fossil fuels for the entire recovery process.

Rodney is a Certified Professional Geologist with the American Institute of Professional Geologists and a registered Professional Geologist in the State of Alaska. He has also been a Board of Director and/or Vice President of Exploration for several publicly traded companies.

#### William Feyerabend, CPG QP & Advisory Board

Mr. Feyerabend is experienced with the exploration and development of lithium projects across the American West, Mexico and South America. He has authored technical reports for claim blocks in Nevada's Lithium development epicentre, including the Clayton and Fish Lake Valleys. His expertise in lithium exploration began in 2015, with a specific focus on Esmeralda County, NV and especially Clayton Valley. Notably, Mr. Feyerabend sat the discovery well for Pure Energy.

He has extensive experience in generating lithium brine targets, and serving as a Qualified Person for lithium projects in Nevada, California, Utah, and Argentina. He has had roles with major companies such as US Borax and Gold Fields Mining and played a part in the discovery and development of four significant mineral projects.

His international exposure is equally extensive, having worked on projects in Argentina, Bolivia, Chile, China, Colombia, Ghana, Guyana, Mexico, Peru, Saudi Arabia, United States, and Venezuela. He has worked at every level, from property examination and regional planning to discovery and development, and continued exploration on producing properties. He has written more than 35 technical reports in 43-101 format for properties across six countries on four continents.

#### Gary Lohman, B.Sc., Geo, QP & Advisory Board

Gary Lohman is one of the founding members and currently serves as the Chief Operating Officer for both Royal Stewart Resources Corp and Thistle Resources Corp. He also holds the position of Vice President at Nine Mile Metals. With four decades of management experience, he brings a wealth of knowledge in precious and base metal exploration, both inside and outside the mining industry. A graduate of the esteemed Geology Programme at the University of Toronto in 1981, Mr. Lohman's proficiency spans across various geological, geochemical, and geophysical exploration techniques. He has applied these skills in numerous geological contexts, including Volcanogenic Massive Sulphides (VMS), Porphyry Copper / Molybdenum, and Iron Oxide Copper Gold (IOCG) style deposits. His expansive experience extends to conducting evaluations and research on bonanza grade and bulk tonnage gold-silver properties located in Canada, Mexico, California, Ecuador, and Chile. He has also evaluated and researched a variety of industrial mineral projects, dealing with graphite, titanium, zeolites, and building stone. Furthermore, he serves as President of Atacama Copper Exploration Limited in Chile, a private Canadian exploration company that focuses on large-scale IOCG-Cobalt exploration. In addition to his key roles, Mr. Lohman maintains several board positions. These include Atacama Copper Exploration Limited (Canada & amp; Chile), Minotaur Atlantic Exploration Limited (NS, Canada), Royal Stewart Resources Corp. (NB, Canada), and Cogonov Inc. (NS, Canada). Operating from Bathurst, New Brunswick year-round, Gary is engaged in exploration activities and collaborates with various provincial government departments, including the Department of Mines and Forestry.

# **BOARD OF DIRECTORS**

#### Penny White, BA, LLB

#### **President and CEO, Director**

Penny White is an accomplished business leader with over 20 years of experience in the capital markets. As the President and CEO of Lancaster Resources Inc., she brings a wealth of expertise and leadership to the company.

Penny has a diverse background, with experience in sectors such as mining, pharmaceuticals, and clean energy. She was an initial officer and director of a pharmaceutical company that was later acquired for \$342 million, and was the Chairman of Highbury Energy for 10 years, overseeing the development of the company's gasification technology and registration of a patent to create high-grade synthetic gas from biomass. She has been recognized in PROFIT Magazine's W100 list of top entrepreneurs and has raised over \$50 million for companies she has founded.

In addition to her Law Degree, Penny has completed the Oxford Leading Sustainable Corporations Programme and the Oxford Climate Emergency Programme from Saïd Business School, University of Oxford. She is deeply committed to fighting climate change and working towards a more sustainable future. She believes that by taking care of our planet, we can create a better world for ourselves and future generations.

#### Andrew Watson, P. ENG.

#### VP, Engineering and Operations & QP

Andrew Watson has 21 years of rich technical leadership, operations, corporate strategy, and commercialization experience in lithium, hydrogen, and conventional oil and gas production.

His experience includes working as COO of Prism Diversified, leading the technical development on two substantial battery metal critical mineral opportunities and spearheading the Lithium brine development opportunities on over 850 square miles of highly prospective brine resource. Additionally, Mr. Watson is leading engineering and economic studies for a surface ore body with a focus on recovery technologies that minimize environmental impact.

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#### Danny Kang Director

Mr. Kang has a decade-long established career in banking and compliance. His experience spans a period from July 2012 to December 2016 at Tricor Group, an industry-leading business expansion specialist firm. There, he became instrumental in guiding American and European companies through the intricate maze of corporate compliance and tax requirements embedded in the Japanese system, demonstrating his adeptness in managing complex financial environments.

At Tricor, his professional network and collaborations encompassed clients from an impressive range of industries, from technology to fashion. Among his most notable clientele were world-renowned organizations such as Uber, Mercedes Benz, BBC News, and lifestyle brand Tommy Bahama. This breadth of exposure not only enriched his experience but also equipped him with the unique ability to adapt and perform in multifaceted corporate environments.

Beyond his role at Tricor, Mr. Kang has been entrusted with significant responsibilities as a director and an audit committee member for several private and publicly listed companies.

Mr. Kang graduated from Haverford College with a Bachelor of Arts degree and he completed the General Course at the London School of Economics.

#### Vincent Cheng, CPA

#### Director

Vincent brings a wealth of expertise and a robust background in accounting and corporate development within the mining sector. He began his distinguished career at PricewaterhouseCoopers in the mining assurance team in Toronto, where he earned his Chartered Professional Accountant designation. Following his tenure at PricewaterhouseCoopers, Vincent joined Yamana Gold Inc. (now Pan American Silver), serving as a Senior Analyst on the corporate reporting team.

Most recently, Vincent held the position of Senior Associate of Corporate Development and Investor Relations at Forbes & Manhattan, a prominent family office and merchant bank focused on the global mining and resource sector. He has continued to shape the industry landscape through his current role as a strategic consultant for various junior mining companies, including Emerita Resources Corp., Halcones Precious Metals Corp., and Lithium Ionic Corp.

Vincent is a proud alumnus of the Beedie School of Business at Simon Fraser University, where he graduated with Honours in Accounting.



#### **Heather Williamson**

#### Director

Ms. Heather Williamson stands out as a skilled professional within the finance and legal fields, boasting over two decades of impressive hands-on experience in the industry. She has accrued a wealth of knowledge and skills through her roles as a corporate secretary for a multitude of publicly traded companies, where she was responsible for managing a vast array of responsibilities encompassing corporate and securities compliance.

Her experience also includes paralegal work and corporate finance, where she worked for various public corporations. These include established organizations such as Boston Pizza International Inc. and Angiotech Pharmaceuticals Inc.

She has overseen over \$10 million in financing for a publicly traded company, including the execution of all facets of an initial public offering. She has skills in diverse areas such as finance closings, orchestrating IPOs, RTOs, conducting Annual General Meetings (AGMs), and adhering to strict securities and stock exchange regulations.

She is currently an MBA Candidate earning her Master of Business Administration (MBA) in Executive Management from Royal Roads University in early 2024.

# **ADVISORY BOARD**

#### Greg Foofat, BA Advisor

Brings over 20 years of robust experience in Investor Relations, Corporate Communications, Capital Markets, Corporate Governance, and Corporate Strategy. Greg has contributed to transactions exceeding \$24 billion in M&A and A&D, as well as approximately \$5 billion in equity and debt financing.

His analytical prowess contributed to a twoperson team being ranked #1 in idea generation and #3 in overall small and midcap oil and gas equity research by Brendan Wood International in 2010. Greg is an invaluable addition to our advisory board, bringing a wealth of knowledge and strategic insight.

#### Patrick Laperrière Advisor

Brings more than 25 years of extensive experience in capital markets, recognized for his expertise as a portfolio manager overseeing small-cap and mining portfolios for Canada's largest pension funds. He has also led substantial equity raises for Canadian brokerage firms and provided seasoned guidance on investment strategies and sector allocation.

Patrick's recent role as the Director of Investor Relations and Corporate Development at Critical Elements Lithium emphasized his leadership in the development of a significant lithium project in Northern Quebec.

#### Jay Swartzentruber Advisor

With over 30 years in commercial building and development, particularly in constructing water and wastewater treatment facilities, joins Lancaster from his current role as Director at CanAm Metals Inc. Under his direction, CanAm is set to produce lithium and gold with exceptionally low production costs.

Jay is committed to sustainable and profitable mining practices, supported by strategic partnerships with Hargrove Engineering and Constructors and Lawrence Livermore National Labs, which focus on advanced research and development.

# **INVESTMENT HIGHLIGHTS**





Top Tier Resource Jurisdiction



Growing Demand For Critical Minerals

# **CAPITALIZATION TABLE**

**Total Outstanding Shares** 

50,188,872

Reserved for Issuance

29,761,749



Renewable Power Potential



Early Stage Valuation

# LEGAL DISCLAIMER



#### WARNING

This management presentation was prepared as a summary overview only of the current affairs of Lancaster Resources Inc. (the "Company" and "Lancaster Resources") and was not prepared for the purpose of assisting prospective investors in making a decision to invest in any security. The Company does not make any representation as to the completeness, truth or accuracy of the information contained in this presentation. The Company expressly warns readers not to rely on this information for investment purposes. The information contained herein is not and should not be construed as either a private or private offer or solicitation to purchase securities in the capital stock of the Company, nor as legal, financial or tax advice. The reader is referred to their professional legal, financial and tax advisors regarding investment related decisions respecting the securities of the Company. No securities regulatory authority or similar authority has reviewed or in any way passed on the accuracy or adequacy of this presentation.

The disclosure of technical information in this presentation has been prepared in accordance with Canadian regulatory requirements as set out in National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101") and reviewed and approved by Andrew Watson, P. Eng, VP, Engineering and Operations who acts as the Company's Qualified Person, and is not independent of the Company.

#### FORWARD LOOKING INFORMATION

Certain statements in this presentation constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 and Canadian securities legislation. Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the "Company, or other future events, including forecast production, earnings and cash flows, to be materially different from any future results, performances or achievements or other events expressly or implicitly predicted by such forward-looking statements. Such risks, uncertainties and other factors include, but are not limited to, factors associated with fluctuations in the market price of lithium, mining industry risks, recent operating losses, uncertainty of title to properties, risk associated with foreign operations, environmental risks and hazards, proposed legislation affecting the mining industry, litigation, governmental regulation of the mining industry, properties without known mineable reserves, uncertainty as to calculations of reserves, mineral deposits and grades, requirement of additional financing, uninsured risks, competition, dependence on key management personnel, potential volatility of market price of the Company's common shares, dilution and certain anti-takeover effects. Such information contained herein represents management's best judgment as of the date hereof based on information currently available. The Company does not intend to update this information and disclaims any legal liability to the contrary.

# Lancaster Resources Inc.

SUPPLYING THE TRANSITION TO A LOW CARBON ECONOMY

**PENNY WHITE .** PRESIDENT & CEO

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