

Reshaping America's Uranium Landscape

PREMIER American Uranium

Purpose Built to Revitalize U.S. Domestic Uranium Production

INVESTOR PRESENTATION | MARCH 2024

TSXV: PUR www.premierur.com

PREMIER American Uranium

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The footnotes and appendices to this presentation contain important information.

Technical Disclosure and Qualified Person

Dean T. Wilton: PG, CPG, MAIG, a consultant of CUR who is a "Qualified Person", as defined in NI 43-101.

The data disclosed in this presentation is related to historical drilling results. PUR has not undertaken any independent investigation of the sampling, nor has it independently analyzed the results of the historical exploration work in order to verify the results. PUR considers these historical drill results relevant as the Company is using this data as a guide to plan exploration programs. The Company's current and future exploration work includes verification of the historical data through drilling.

A New U.S. Uranium Player

Purpose Built to Revitalize U.S. Domestic Uranium Production





Advancing Portfolio of Projects in Prolific U.S. Uranium Districts of Wyoming and Colorado



Led by Disciplined and Opportunistic Capital Allocators



Past Production with Historic Resource Base and Strong Discovery Potential



Highly Aligned, Long-term Shareholder Base



Well-Timed Opportunity With Strong Market Fundamentals and Need for U.S. Domestic Supply



Listed on the TSX Venture on December 1, 2023

See "Cautionary Note Regarding Forward-Looking Information".

Company Snapshot



CAPITAL STRUCTURE Shares Basic Shares Outstanding (M) 27.8 Options¹ (M) 2.0 Warrants² (M)3.1 **FD** Shares Outstanding (M) 32.9 Share Price (Feb 26, 2024) (C\$) \$2.22 \$1.24 - \$3.29 52-Week Low/High (C\$) \$61.72 **Basic Market Capitalization** (C\$M) Cash³ (C\$M) \$6.8

SHAREHOLDERS COMPOSITION



1 Strike price at \$1.50 expiring November 27, 2028

2 Strike prices from \$1.50 to \$2.00 expiring August 24, 2026 and November 27, 2026, respectively 3 Based on public disclosure as of September 30 2023

Uranium Fundamentals



In order to balance markets, a material increase in uranium prices will be required.

The size of the deficit will also necessitate higher cost mines (like those in the U.S.) previously thought uneconomic.



DEMAND OUTSTRIPPING SUPPLY

 Reactor Requirements
 Secondary Demand
 Change in Tails Assay

 Primary Mine Supply
 Restarts + Greenfield Supply
 Secondary Supply

Source: UxC LLC, World Nuclear Assoc, Company Reports, Canaccord Genuity estimates

See "Cautionary Note Regarding Forward-Looking Information".

A renewed period of long-term contracting may be the primary driver for higher prices as utilities focus on security of supply.

2022 was the best year in the last decade for contract volumes.



LONG-TERM CONTRACTING ON THE RISE

Source: UxC LLC, Canaccord Genuity

Uranium Price

16 year high driven by strong physical market demand. Future growth tied to role of nuclear in delivering low-carbon, baseload power.





A Nuclear and Uranium Resurgence in the U.S.

U.S. accounts for:30% worldwide nuclear power generation

Nuclear accounts for:

20% of U.S. electricity

50% of carbon-free electricity generation

Russian Suspension Agreement extended to:2040banning imports of uranium from Russia

Diablo Canyon Reactor kept online to at least: 2030 a major policy reversal by the most anti-nuclear U.S. state





The Inflation Reduction Act provides: \$30B of support for maintaining the U.S. nuclear fleet.

Recent reports show that the Biden Administration is pushing for a \$4.5B plan to purchase enriched uranium directly from domestic producers.

See appendix for sources

A National Security Concern

Nuclear is a Core, Clean Energy Electricity Source for the U.S.



Nuclear energy is a clean and reliable source of baseload energy and represents nearly 20% of all U.S. electrical energy.



Source: U.S. Energy Information Administration: Form EIA-851A, Domestic Uranium Production Report (Annual), and Form EIA-851Q, Domestic Uranium Production Report (Quarterly)

America Was Once a Prolific Uranium Miner

Its Resurgence is Vital for U.S. Energy Security

- Western utilities got comfortable with low-cost uranium imports, and **dependence on former Soviet bloc countries for fuel**.
- The Russian invasion of Ukraine has highlighted the **need for energy security** and the importance of non-reliance on countries who may not have the west's best interests at heart.
- This coincides with the **beginning of a contracting cycle that will require higher prices to incentivize new production** required to meet future demand.



Source: U.S. Energy Information Administration: Form EIA-851A, Domestic Uranium Production Report (Annual), and Form EIA-851Q, Domestic Uranium Production Report (Quarterly)



CYCLONE Exploration **Rock Springs** WYOMING COLORADO UTAH Boulder Grand Junction **OUTLAW MESA** Exploration ATKINSON MESA Past production Premier Uranium ۲ Property MONOGRAM MESA Interstate Exploration City State SLICKROCK Exploration MILES. White Mesa Mill 65 Miles WWW.PREMIERUR.COM 11

Focused on Proven Uranium States

Critical Mass and Exposure to Historically Significant Uranium Resources

Wyoming¹

- Produced 230 million lbs of U308 since the first discovery
- Great Divide Basin, one of the least exploited of the Wyoming Basins known to contain significant deposits of uranium

Colorado

- Ranked 5th in Investment Attractiveness Index in 2022 by the Fraser Institute²
- Produced nearly 80m lbs U3O8 and more than 400m lbs V2O5 since 1945³
- Deposits are generally flat lying and tabular in shape, and range from several tens of thousands to a few million tons in size
- Deposits that occur in "clusters" such as in the Atkinson Mesa, Monogram Mesa, and Slick Rock districts tend to be larger and higher grade than other deposits in the Mineral Belt³

- Chenoweth, William L., 1981, "The Uranium-Vanadium Deposits of the Uravan Mineral Belt and Adjacent Areas, Colorado and Utah. In New



Wyoming – Great Divide Basin

One of the Leading Jurisdictions for U.S. Uranium Production





Cyclone Project, Wyoming

Significant Land Position with In-Situ Recovery (ISR) Potential

Overview

• 25,500 acres comprising: 1,061 claims totaling 21,220 acres and 7 state leases covering 4,280 acres.

Past Exploration

- ~80 holes drilled during 2007-2008.
- Mineralization encountered in several holes, with typical grades and thicknesses to uranium deposits elsewhere in the Great Divide Basin.

Geology

- Deposits hosted in flat-lying sandstones of Battle Spring Formation.
- Wide-spread alteration of host sandstones, with numerous roll-front uranium deposits associated with altered rocks.

Exploration Target

Range of 6.5 million short tons averaging 0.06% U3O8 (7.9 million lbs. U3O8) to 10.5 million short tons averaging 0.06% U3O8 (12.6 million lbs. U3O8).¹

Next Steps

- Review historical drill data.
- Permit and commence drilling targeted for 2024.

See "Cautionary Note Regarding Forward-Looking Information" and source information on slide 24





Colorado – Uravan Mineral Belt

Rich History Of Uranium Exploration And Production





Monogram Mesa, Colorado

Adjacent to Multiple Historic Mines that Produced Nearly 5Mlbs



Overview

- Total project covers 7,431 acres with 361 mining claims.
- Multiple historic mines on the NE side and West.
- Mines generally stable and dry, with numerous mineralized zones exposed.
- Paved highway within miles of the property.
- Mine roads crossing the property.
- Powerlines to the property.

Next Steps

- Exploration drilling program planned delineate mineralization.
- Potential acquisition of surrounding properties consolidating area.

HISTORICAL PRODUCTION¹

Area	Tons Produced (short tons)	U3O8 Grade (% U3O8)	Pounds of U3O8	V2O5 Grade (% V2O5)	Pounds of V2O5	
Monogram Mesa Mines	840,761	0.30	4,992,179	1.19	20,001,113	

1 Source: Nelson-Moore, James L, Donna Bishop Collins and A. L. Hornbaker, 1978; Radioactive Mineral Occurrences of Colorado, Colorado Geological Survey Bulletin 40, 1,054 pages, 18 figures, 3 tables, 12 plates.

See "Cautionary Note Regarding Forward-Looking Information".



Atkinson Mesa, Colorado

Most Substantial Uranium-Vanadium Production within the Entire Uravan Belt

Overview

- Total project covers 5,863 acres comprising: 172 mining claims and 4 DOE leases.
- Land package includes patented (fee simple) mining claims on the Dolores Bench.

Historical Production and Exploration

- Several small-scale mines on the project.
- Large-scale underground mine [the King Solomon mine] developed in 1975.¹

Next Steps

- Acquire historical drilling and mine production data.
- Undertake drilling program to confirm historical drill results and define the extent of mineralization in the central and northern parts of the properties.

HISTORICAL PRODUCTION¹

Area	Tons Produced (short tons)	U3O8 Grade (% U3O8)	Pounds of U3O8	V2O5 Grade (% V2O5)	Pounds of V2O5	
King Solomon Complex	1,230,0000	0.21	5,160,000	1.11	26,540,000	

1 Source: Goodnight, Chenoweth, Dayvault and Cotter, 2005: Geologic Road Log for Uravan Mineral belt Field Trip; Prepared for Geological Society of America 2005 Annual Meeting.

See "Cautionary Note Regarding Forward-Looking Information".

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Proven and Experienced Leadership

Disciplined Capital Allocators







Chief Executive Officer & Director

- Co-founder of Sachem Cove Partners and Founder of Lloyd Harbor Capital, an SEC-Registered Investment Adviser
- Founded North Shore Indices Inc. which launched URNM, a uranium mining ETF in 2019 and raised +\$1 billion before selling to NYSE listed, Sprott Asset Management



Greg Duras Chief Financial Officer

- 20+ years in resource sector in corporate development, financial management and cost control
- CFO of several publicly traded companies, CPA



Jason Atkinson Corporate Development

- 10+ years in private equity, venture capital, IB and corporate finance
- Played crucial role in raising capital and offering advisory services to both private and publicly listed uranium companies



Marty Tunney

Chairman

- Mining engineer with significant technical and capital markets experience
- Current COO of IsoEnergy Ltd.



Daniel Nauth Director

Lawyer with a specialty in U.S.-Canada cross-border capital markets, M&A and corporate and securities transactions and regulatory compliance



Michael Harrison

Director

- 25+ years of executive, financial and technical experience in the mining industry
- Managing Partner at Sprott Inc.

Technical Advisors

Unparalleled Experience in U.S. Uranium Mining and Exploration





Ted Wilton – Geologist

- 50+ years, including 25+ in uranium
- VP-Uranium for Freeport Minerals, VP and Chief Geologist for Uranium Resources Inc.
- Involved in discovering 8 deposits containing more than 10 m oz Au in US, and Australia

Mike Neumann – Environmental and Regulatory Affairs

- 40+ years in environmental and regulatory affairs
- Specialized in uranium mine permitting in US and Kazakhstan
- Gained regulatory approval for expansion of Daneros, compliance for Tony M, and Rim in the US



Tyler Johnson – Geologist

- 14+ years formerly with Denison and Energy Fuels
- Geologist specializing in exploration, mine development, and resource estimation on uranium and vanadium projects



Joshua Holland – Environmental and Regulatory Affairs

- 19+ years in mining industry and manufacturing
- Former Director of Environmental and Government Affairs for an advanced battery graphite mining and manufacturing startup
- Specialize din permitting, government relations, and operations



Catalysts

Why Invest?





- Cyclone Baseline environmental studies and drill program
- Monogram Mesa Develop drill program on-trend exploration

Corporate

M&A – Continue to develop the U.S. pipeline through further consolidation and acquisitions

- Add seasoned team members
- U.S. Listing Apply to list shares on the OTC



Led by Disciplined and Opportunistic Capital Allocators



Highly aligned, long-term oriented shareholder base.



Well-Timed Opportunity with Strong Market Fundamentals and Need for U.S. Domestic Supply



Advancing Portfolio of Projects in Prolific U.S. Uranium Districts of Colorado and Wyoming



Past Production with Historic Resource Base and Strong Discovery Potential

See "Cautionary Note Regarding Forward-Looking Information".



Appendix

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Key Project Attributes for Success in the U.S.



				I	Exploratio	n		Development				Near-Term Production							
	Premier Ura	American nium	Kraken Energy	Strathmore Plus	GTI Energy	Okapi Resources	American Future Fuel	Western Vana	Uranium & adium	Laramide Resources	Anfield	Energy	IsoEne	rgy		enCore	e Energy		Peninsula Energy
Primary Asset(s)	Cyclone	Colorado Portfolio	Apex	Night Owl	Thor	Tallahassee	Caboletta	Sunday Mine Complex	San Rafael	Churchrock	Velvet- Wood & Frank M	Slick Rock & West Slope	Coles Hill	Tony M, Daneros, Rim	South Texas Hub (3 ISR facilities)	Dewey- Burdock	Gas Hills	Crownpoint Hosta Butte	Lance
Proposed Mine Type ^{1,2}	ISR	Conv.	Conv.	N/A	ISR	Conv.	Conv.	Conv.	Conv.	ISR	Conv.	Conv.	Conv.	Conv.	ISR	ISR	ISR	ISR	ISR
U.S. State	Wyoming	Colorado	Nevada	Wyoming	Wyoming	Colorado	New Mexico	Colorado	Utah	New Mexico	Utah	Colorado	Virginia	Utah	Texas	South Dakota	Wyoming	New Mexico	Wyoming
Stage	Exploration	Exploration	Exploration	Exploration	Exploration	Resource	Resource	C&M	Resource	Resource	PEA (2016)	Brownfield	PEA (2010)	Resource	C&M	PEA (2019)	PEA (2021)	Resource	C&M, DFS (2022)
State With Uranium Mine	✓	✓		✓	✓	✓		✓	✓		✓	✓	✓		✓		✓		✓
Advanced Permitting Status	✓	✓						✓		✓		✓	✓		✓	✓		✓	✓
Proximity to Production Facility	✓	✓		✓	✓			✓	✓		✓	✓	✓		✓				✓
Mineral Resource (M lbs eU3O8)	N/A	N/A	N/A	N/A	N/A	M&I – 22.1 Inferred – 27.8	Historic – 19.0 ³	M&I – 1.0 Inferred – 1.9	M&I – 3.4 Inferred – 1.9	Inferred – 50.8	Historic – 7.6	Historic – 35.9	Historic – 163.1 ³	M&I – 7.5 Inferred – 2.3	Historic –20.2 ³	M&I – 17.1 Inferred – 0.7	M&I – 10.8 Inferred – 0.5	M&I – 26.6 Inferred – 6.1	M&I – 15.8 Inferred – 37.8

1 Proposed Mine Type ISR refers to In-Situ Recovery

2 Proposed Mine Type Conv. refers to Conventual Uranium

3 These estimates are "historic estimates" and are not considered current by CUR pursuant to NI 43-101. A Qualified Person has not done sufficient work to classify the historical estimates as current mineral resources or mineral resources or mineral resources.

Outlaw Mesa & Slick Rock, Colorado

Multiple Historic Mines with Exploration Potential



Overview

- Outlaw Mesa Total project covers 5,759 acres with 2 DOE leases.
- Slick Rock Total project covers 1,226 acres with 2 DOE leases.

Historical Production and Exploration

- Historic production from multiple mines, including the well known:
 - Slick Rock
 - Calamity Mines
- All leases contain uranium & vanadium mineralization

Next Steps

- New 10-year leases signed with the US Department of Energy in Jan 2020
- Data review and drill targeting.

HISTORICAL PRODUCTION¹

Property	Tons (short)	Grade (%U3O8)	Pounds U3O8	Grade V2O5	Pounds V2O5
Slick Rock	434,300	0.34	2,953,600	1.30	11,333,800
Outlaw & Calamity Mesas	423,500	0.34	2,917,200	1.29	10,994,500



1 Source: Nelson-Moore, James L, Donna Bishop Collins and A. L. Hornbaker, 1978; Radioactive Mineral Occurrences of Colorado, Colorado Geological Survey Bulletin 40, 1,054 pages, 18 figures, 3 tables, 12 plates.

Sources

Sources for Slide 8

- 1. https://world-nuclear.org/information-library/country-profiles/countries-t-z/usa-nuclear-power.aspx#:~:text=The%20USA%20is%20the%20world's,19%25%20of%20total%20electrical%20output.
- 2. https://www.vox.com/energy-and-environment/2018/5/10/17334474/nuclear-power-renewables-plants-retirements-us
- 3. https://newsdirect.com/news/uranium-supply-security-will-remain-a-top-priority-in-2023-263885365
- 4. https://www.eia.gov/todayinenergy/detail.php?id=44416
- 5. The Northern Miner March 2 2020 Issue 5
- 6. https://www.appropriations.senate.gov/news/congress-reaches-deal-files-fy21-omnibus-to-fund-govt-provide-covid-relief
- 7. https://www.world-nuclear-news.org/Articles/US-NNSA-initiates-process-to-purchase-strategic-ur
- 8. https://www.congress.gov/bill/117th-congress/senate-bill/3856#:~:text=S.,uranium%20from%20the%20Russian%20Federation.
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- 10. https://www.utilitydive.com/news/california-diablo-canyon-nuclear-plant-open-newsom-bill/629727/
- 11. https://www.bloomberg.com/news/articles/2022-06-07/us-seeks-4-3-billion-for-nuclear-fuel-to-wean-off-russia-supply

Source for Slide 12

1. As determined by BRS Engineering, sufficient historical exploration data is available for the North and East claim blocks to define an exploration target , which shows a range of 6.5 million short tons averaging 0.06% U3O8 (12.6 million lbs. U3O8).1 The potential quantity and grade of this exploration target is conceptual in nature and based on the geologic interpretation that mineralization is Sandstone Type mineralization, aerial radiometric anomalies, and indications of the presence of oxidation reduction interfaces with mineralization from available drill data. There has been insufficient exploration to define a mineral resource and it is uncertain if a mineral resource will be delineated. For the definition of the exploration target, the following criteria based on direct knowledge and experience in the area and similar sandstone hosted uranium deposits in Wyoming was used: (i) a minimum cut-off grade of 0.02% U3O8 and a grade thickness product (GT) of 0.10, (ii) a radiometric disequilibrium factor of 1, and (iii) a bulk density of 16 cubic feet per ton.





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