Certain information contained in this presentation constitutes “forward-looking information” (as defined in the Securities Act (Ontario)) and “forward-looking statements” (as defined in the United States Private Securities Litigation Reform Act of 1995 and similar Canadian legislation concerning the business, operations and financial performance and condition of Western Uranium Corporation (“Western)). Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as “plans”, “expects” or “does not expect”, “is expected”, “budget”, “scheduled”, “estimates”, “forecasts”, “intends”, “anticipates” or “does not anticipate”, or “believes”, or variations of such words and phrases or state that certain actions, events or results “may”, “could”, “would”, “might” or “will be taken”, “occur”, “be achieved” or “has the potential to”. Forward-looking statements are based on the opinions and estimates of management as of the date such statements are made, and they are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of each of Western to be materially different from those expressed or implied by such forward-looking information. Western believes that the expectations reflected in this forward-looking information are reasonable, but no assurance can be given that these expectations will prove to be correct, and such forward-looking information included in this presentation should not be unduly relied upon. This information speaks only as of the date of this presentation. In particular, this presentation may contain forward-looking information pertaining to the following: the likelihood of the benefits to be derived from the Black Range transaction (the “Transaction”); the rationale of the Transaction; the estimates of each of Black Range’s and Western's mineral resources; expectations regarding the milling of ores and associated cash flows; and expectations with respect to the enhanced recoveries and efficiencies with respect to the application of the Ablation Mining Technologies (“Ablation”). There can be no assurance that such statements will prove to be accurate or that they will not differ materially from those anticipated in the forward-looking information. Accordingly, readers should not place undue reliance on forward-looking statements. These factors are not and should not be construed as being exhaustive. Statements relating to “mineral resources” are deemed to be forward-looking information, as they involve the implied assessment, based on certain estimates and assumptions that the mineral resources described can be profitably produced in the future. The forward-looking information contained in the presentation is expressly qualified by this cautionary statement.

Cautionary Note to United States Investors Concerning Estimates of Measured, Indicated and Inferred Mineral Resources: This presentation may use the terms “measured,” “indicated” and “inferred” mineral resources. United States investors are advised that while such terms are recognized and required by Canadian regulations, the United States Securities and Exchange Commission does not recognize them. “Inferred mineral resources” have a great amount of uncertainty as to their existence, and as to their economic and legal feasibility. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. Under Canadian rules, estimates of inferred mineral resource may not form the basis of feasibility or other economic studies. United States investors are cautioned not to assume that all or any part of measured or indicated mineral resource will ever be converted into mineral reserves. United States investors are also cautioned not to assume that all or any part of an inferred mineral resource exists, or is economically or legally mineable.

CAUTIONARY STATEMENTS: The operating parameters and recovery estimates derived from field trials have been developed by Western utilizing internal and skilled third party resources. No technical report developed in accordance with NI 43-101 standards has been undertaken to confirm such parameters and recoveries, which therefore cannot be relied upon.

June 2019
Among the largest U.S. Uranium and Vanadium in-situ resource holders (Historic resources formerly JORC and NI 43-101)

- Total uranium resource 70,000,000 lbs. +/-
- Total vanadium resource 35,000,000 lbs. +/- grading between 1.4-2.2%
- Co-credits lower the all-in sustaining cost (AISC)

Near-Term Production Strategy

- Focus on previously producing mines for low CAPEX, existing infrastructure & permitting
- Define and develop high-grade vanadium resource at the Sunday Mine Complex (SMC)
- Deliver SMC ore samples to multiple potential customers and joint venture partners
- Baseload SMC production with vanadium ore concentrate agreement
- Pursue uranium contracts and development at prices above current price levels (S232)

Ablation Mining Technology (“AMT”)

- Proprietary process improves efficiency and reduces costs for sandstone hosted deposits
- Upgrade current AMT production unit to optimize performance
- Advance AMT uranium regulatory framework
- Deploy AMT to lower production costs of Western resources
- Seek avenues to monetize alternative AMT applications for other metals and minerals
Applications and Advantages

URANIUM
• **Nuclear Reactor Fuel**: primary application
• **Highest energy density**: one 10 gram uranium pellet equals 17,000 cubic feet natural gas = 149 gallons oil = 1 ton of coal
• **Baseload Energy Source**: available 24/7
• **Carbon Free / Zero Emissions Energy Source**

VANADIUM
• **Steel Making**: as primary application where adding 2 lbs vanadium to 1 ton of steel doubles its strength and reduces weight (90% global demand)
• **Vanadium Redox Flow Batteries (VRFB)**: large scale and grid storage applications supported by scalability, lifespan, charge / discharge, and non-flammability properties (10% global demand)
MARKET DYNAMICS
• Currently, ~90% of Vanadium is used in steel making
• Significant supply reduction from China, Russia, and South Africa
• China new rebar standard (effective November 2018; summer 2019)
• China switch from exporter to importer created global supply deficit

GROWTH DYNAMICS
• Steel production growth forecasted from global infrastructure plans
• VRFB growth to support non-baseload energy sources (renewables)
• Vanadium Redox Flow Battery Farm growth in (China, Japan, Australia); Dalian China farm developed by battery manufacturer
Vanadium V2O5 & FeV Price (USD$)
Sunday Mine Complex
Already Permitted

- A complex of 5 interconnected underground mines (most recently mined in 2009)
- Uranium and vanadium mines with historic production (Union Carbide, Denison)
- Strong grades present at the Sunday Mine Complex: $U_3O_8$ (~0.25% to 0.36%) and $V_2O_5$ (~1.49% to 2.16%)
- Large surface stockpile of ~100,000 tons
- Western’s Sunday Mine Complex vanadium project site
Sunday Mine Complex
High-Grade Ore Bodies

Uranium-Vanadium Seam

Vanadium Seam

14% Vanadium Ore

www.western-uranium.com
Sunday Mine Complex

- Vanadium Project
Uranium Industry

MARKET DYNAMICS

• China: ~40 operational nuclear plants and expanding quickly
• More than 50 new nuclear reactors being built around the world predominantly in China, Middle East, Russia, India, Africa & LATAM
• Big uranium producers cutting production- Cameco & Kazatomprom
• During YTD 2018, uranium spot rallied from ~$22 to ~$29 per pound

UNITED STATES DYNAMICS

• 98 U.S. nuclear reactors consume 50m lbs p.a. of uranium
• Section 232 uranium investigation by U.S. Department of Commerce is industry changing for U.S. uranium producers; Determination from President Trump before July 14, 2019.
• Small Modular Reactors (SMR): advancing toward mid-2020’s install
Uranium U3O8 Price (in USD$)

(1) Uranium U3O8 Spot Price- industry average prices derived from Ux Consulting (UxC) and TradeTech month-end average

(2) Uranium Markets BPR broker quote on Friday 6/14/2019
Uranium Mining and Nuclear Fuel Cycle **WINNERS!**

- **Russia** #1 provider of enrichment services in the world; provided ~35% of enrichment services during 2018 for U.S. civilian nuclear power reactors
- **Russia** is considering banning uranium sales to U.S. utilities because of the sanctions and tariffs applied by the U.S.
- **Kazakhstan** #1 uranium miner which produces the largest share of uranium from mines ~40% of world supply
- **Kazakhstan** exports have benefited from a 87% currency devaluation relative to the U.S. dollar
- **China** #1 in the world in adding nuclear capacity with 56 reactors under construction and in planning
- **China** dominance of supply is growing through joint ventures, investments, supply agreements, and acquisitions of formerly private sector mines
- **China** is securing its nuclear fuel cycle by working toward self-sufficiency in each processing step of the nuclear fuel cycle
- **State-Owned Enterprises** provided more than 60% of uranium in 2017, and that percentage is increasing as free market mines continue closing

STATE-OWNED ENTERPRISES ARE THRIVING BY OVERSUPPLYING URANIUM TO DRIVE DOWN PRICES SO THE PRIVATE SECTOR CAN'T COMPETE
Section 232 Uranium Petition

U.S. Historical Uranium Production Broken Down by Periods

- **1953 to 1980**: U.S. world's leading producer of uranium
- **1985 to 1989**: U.S. providing ~50% of domestic uranium requirements
- **1990**: U.S. production dips below 10 million lbs. for first year since 1955
- **2001**: U.S. production dips below 5 million lbs. for first year since 1954
- **2006 to 2014**: U.S. production stabilizes in the range of 4 million +/- lbs per year
- **2015 to 2019**: U.S. production crash in millions of lbs: 3.34 (2015); 2.92 (2016); 2.44 (2017); 1.47 (2018); 0.23 (2019)²

Lowest **QUARTERLY** U.S. Production of Uranium Concentrate

<table>
<thead>
<tr>
<th>Year - Quarter</th>
<th>Million Pounds Uranium Oxide</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003 Q3</td>
<td>0.40</td>
</tr>
<tr>
<td>2018 Q2</td>
<td>0.37</td>
</tr>
<tr>
<td>2018 Q4</td>
<td>0.35</td>
</tr>
<tr>
<td>2018 Q1</td>
<td>0.23</td>
</tr>
<tr>
<td>2019 Q1</td>
<td>0.06</td>
</tr>
</tbody>
</table>

Lowest **ANNUAL** U.S. Production of Uranium Concentrate

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Million Pounds Uranium Oxide</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951</td>
<td>1.54</td>
</tr>
<tr>
<td>1950</td>
<td>0.92</td>
</tr>
<tr>
<td>1949</td>
<td>0.36</td>
</tr>
<tr>
<td>2019</td>
<td>0.23</td>
</tr>
</tbody>
</table>

(¹) Source: U.S. Energy Information Administration (EIA)

(²) 2019 Projection calculated by multiplying by four (4) the 1Q2019 production (58,481 lbs)
Ablation Mining Technology (AMT)

- Applicable to sandstone-hosted deposits
- Uranium and vanadium minerals exist within the matrix of sandstones and as a patina around individual sand grains
- Uses kinetic energy to force particles against each other, without any chemicals, to remove the mineralized patina from barren sandstone grains
- The resulting fine material is a high-grade and high-value ore
- Produces an ore comprised of 85-95% of the uranium/vanadium in only approximately 10-20% of the mass of pre-ablation material
Ablation Mining Technology

**Benefits**

**At the Mine**
- Observed >90% of mineralization separated into <10-20% of the mass
- Barren material (cleaned sands) can be used for backfill

**Transportation**
- Up to ~90% reduction in transport costs

**Processing**
- Up to ~90% less material to process
- Smaller tanks and equipment for comparable output
- Lower power consumption
- Higher grade input and increased output

**Overall**
- Economically recoverable resources are increased, as lower cut-off grades can be applied
- Opportunity to use as a cleanup technology such as legacy uranium mining sites
Ablation Mining Technology

Best Practice

Conventional Mining

Without Ablation

- Run of Mine Haul
  - Nearby Mill
  - Large Volume
- Large Mill
- Large Impoundment
- Tailings

Mining:
- Open Pit
- Underground

Ablation Mining

- Ablation
- Waste Rock Returned to Mine
- Ore Transport Offsite
- Long Distance Possible
- Small Mill
- Small Impoundment

Same Amount of Product Production

An alternative to remediation or reclamation approach of existing waste-rock piles suggested in the 2014 report is the application of AMT on the waste-rock, protore, & low grade stockpiles in existence today. 69% of the mines identified are located in Colorado and Utah.

Western Milestones

August 2014
• Sunday Mine uranium /vanadium assets acquired Energy Fuels (NYSE: UUUU)

January 2015
• Western Uranium bids on Black Range Minerals (ASX: BLR)

2014
• OTCQX listing in United States (May)
• Submitted technical report and held public AMT meetings for CDPHE
• NRC issues AMT advisory opinion
• CDPHE issues decision on regulating AMT at Sunday Mine

2016
• Top 3 US utility signs multi-year uranium offtake agreement with Western

2017
• Consolidated administrative operations due to market conditions
• Made AMT advancements
• Increased focus on vanadium including evaluating a vanadium mine acquisition

2018
• Paid-off resource property debt
• Changed company name to Western Uranium & Vanadium Corp.
• Sunday Mine stockpile sampling

2019 Execute Production Strategy
• June 17, 2019 Sunday Mine Complex Opening
• Deliver SMC ore samples to potential customers
• Define and develop high-grade vanadium resource at SMC
• Baseload SMC production with vanadium ore concentrate agreement
• Position SMC for outcome of U.S. Section 232 Uranium Investigation
Portfolio of Projects

**Historic Uranium Resources and Vanadium Mineralization and Mine Locations**

<table>
<thead>
<tr>
<th>Projects</th>
<th>HISTORIC* (Formerly Measured and Indicated)</th>
<th>HISTORIC* (Formerly Inferred)</th>
<th>VANADIUM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Uranium (lbs)</td>
<td>Grade (%)</td>
<td>Uranium (lbs)</td>
</tr>
<tr>
<td>1 Sunday Complex**</td>
<td>1,007,833</td>
<td>0.25</td>
<td>1,906,081</td>
</tr>
<tr>
<td>2 San Rafael***</td>
<td>2,415,400</td>
<td>0.25</td>
<td>587,800</td>
</tr>
<tr>
<td>3 Sage****</td>
<td>459,640</td>
<td>0.23</td>
<td>122,265</td>
</tr>
<tr>
<td>6 Hansen/Taylor Ranch*****</td>
<td>21,328,000</td>
<td>0.062</td>
<td>44,055,000</td>
</tr>
</tbody>
</table>

- Existing, permitted, and developed mines denoted in Red

**Five Mines in Sunday Complex**
- Sunday Mine
- Carnation Mine
- St. Jude Mine
- West Sunday Mine
- Topaz Mine

- Additional Uranium and Vanadium Mines: (4) Dunn (5) Van 4
TOTAL HISTORIC URANIUM RESOURCES ~ 70,000,000 Lbs

*Important Caution Regarding Historic Mineral Resources:
Historic Mineral resources are not mineral reserves and do not have a demonstrated economic viability. All referenced historic mineral resources are historic estimates under NI 43-101. In order to disclose the historic resources as current, Western would need to complete and file an NI 43-101 technical report on www.sedar.com. The mineral resource estimates set out above may be affected by subsequent assessments of mining, environmental, processing, permitting, taxation, socio-economic, legal, political and other factors. There is insufficient information available to assess the extent to which the potential development of the mineral resources described herein may be affected by these risks and the other risk factors discussed in the Company’s most recent Management Discussion and Analysis.

**Anthony R. Adkins, CPG, is responsible for validating the database as adequate for resource estimation and for estimating the mineral resources pertaining to the Sunday Complex described herein. Mr. Adkins is a Qualified Person and is independent of Western within meaning of NI 43-101.

***O. Jay Gatten, P. Geol., LLC was commissioned by Western to prepare an Independent Technical Report compliant with the Canadian National Instrument, 43-101 on the San Rafael Uranium Project, an advanced-stage uranium property. The report was finalized on November 19, 2014 and filed on sedar.com on November 20, 2015.


*****The information in this presentation that relates to Mineral Resources at the Hansen/Taylor Ranch Uranium Project has been prepared in accordance with JORC standards and is based on information compiled by Mr. Rex Bryan who is a Registered Member of the Society for Mining, Metallurgy and Exploration (SME), which is a Recognized Professional Organization. Mr. Rex Bryan compiled this information in his capacity as a Principal Geologist of Tetra Tech.
Management & Board

George Glasier, President, CEO and Director
- Founder and leader of Western Uranium & Vanadium Corporation / 30+ years in uranium and vanadium
- Extensive experience in sales and marketing, project development and permitting uranium processing facilities
- Founder of Energy Fuels Inc. which is currently the largest uranium and vanadium resource holder in the U.S.
- Senior Executive and minority owner of Energy Fuels Nuclear, Inc., formerly the largest uranium producer in the United States led by the Bob Adams, uranium pioneer and a founder of the U.S. uranium industry

Robert Klein, Chief Financial Officer
- As CFO, oversees accounting and finance, and is closely involved in capital markets activities, corporate transactions, investor relations, public relations, and legal and compliance
- Previously, Vice President- Finance for Western and Chief Operating Officer at the Cross River Group
- Formerly, Managing Director at Analytical Research, and CFO of Five Points Capital, a Soros hedge fund spin-out
- Holds CFA designation, MBA from the University of Maryland, and began his career in public accounting

Michael Rutter, Vice President Operations
- Oversees resource properties and the advancement of Ablation Mining Technology for Western
- Former Maintenance and Operations Superintendent for Energy Fuels in uranium / vanadium resource production
- Previously oversaw maintenance, planning and development for Lisbon Valley Mining’s copper resources
- Initially gained mining, smelting, and refining experience as an electrician supporting Asarco’s solvent extraction / electro-winning (SX/EW) process and electrical mining equipment

Dr. Kaiwen Wu, Chief Geologist
- Oversees the Sunday Mine Complex Vanadium Project
- Previously, Senior Exploration Geologist for Energy Fuels overseeing uranium and vanadium exploration
- Expertise conventional sandstone hosted vanadium/uranium deposits; extensive experience in CO/UT Mineral Belt
- Holds Ph.D. In Geological Science from the University of Texas at El Paso
Management & Board

Bryan Murphy, Non-Executive Director, Chairman
- Founder of Magellan Limited, a firm focused on providing advisory services to public and private companies
- CFO and Head of Finance for Biome Renewables Inc., an early stage renewable energy and design company
- Previously, Co-Founder and Managing Partner of Quest Partners, a boutique advisory firm serving private companies with corporate finance, M&A, and strategy advice
- Seasoned restructuring and turn-around professional with extensive international experience and relationships advising high-growth businesses across North America, Europe, and the Middle East
- Holds HBA and MBA from University of Western Ontario from the Richard Ivey School of Business

Andrew Wilder, Non-Executive Director
- Founder and CEO of Cross River Group, a business development and finance firm focused on clean energy and environmental infrastructure
- Co-Founder and Advisor for Inventiv Capital Management, an infrastructure asset management firm
- Co-Founder and COO of North Sound Capital, a $3B AUM long/short equity hedge fund
- Co-Founder Columbus Avenue Consulting, an independent fund administration business
- Extensive operations background & holds Chartered Accountant (Canada) and CFA designations

Denis Frawley, Corporate Secretary
- Senior Partner at Ormston List Frawley LLP, a Toronto based law firm
- Practices law in the areas of corporate, commercial and securities law, with an emphasis on advising businesses who require securities advice under both Canadian and U.S. law
- Member of the Law Society of Ontario and the New York State Bar Association

www.western-uranium.com
### Capital Structure & Ownership (6/14/2019)

<table>
<thead>
<tr>
<th>Western Uranium &amp; Vanadium (CSE:WUC &amp; OTCQX:WSTRF)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Share price</td>
<td>C$1.35</td>
</tr>
<tr>
<td>Market capitalization</td>
<td>C$40,000,000</td>
</tr>
<tr>
<td>Total shares outstanding</td>
<td>29,891,469</td>
</tr>
<tr>
<td>Warrants</td>
<td>8,755,717</td>
</tr>
<tr>
<td>Stock Options</td>
<td>2,416,664</td>
</tr>
<tr>
<td>Totally fully diluted shares</td>
<td>41,063,850</td>
</tr>
<tr>
<td>52 week closing price range</td>
<td>CAD$0.75 - $3.27</td>
</tr>
</tbody>
</table>

#### Major Shareholders (10%+)

<table>
<thead>
<tr>
<th>Shareholder</th>
<th>Shares</th>
<th>Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>George Glasier (CEO)</td>
<td>4,783,333</td>
<td>16%</td>
</tr>
</tbody>
</table>

www.western-uranium.com
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