

Western Uranium & Vanadium Recaps 2024 Milestones and Highlights

FOR IMMEDIATE RELEASE.

Toronto, Ontario and Nucla, Colorado - Western Uranium & Vanadium Corp. (CSE: WUC) (OTCQX: WSTRF) (“**Western**” or the “**Company**”) is pleased to provide a summary of its 2024 accomplishments as it ramps up uranium and vanadium production capacity and throughput.

Enhanced Mining Capability

Western has significantly enhanced its mining capabilities through various strategic initiatives. These include expanding its workforce by recruiting senior technical and mining staff, upgrading its fleet with additional mining equipment and vehicles, and addressing other staffing and supply chain challenges. Downtime has been reduced by expanding the maintenance shop, hiring more mechanics, and improving supply chain management. Infrastructure upgrades, such as extending utilities deeper into the mine and completing underground rehabilitation, have greatly increased accessible future development areas. Efficiency improvements, including installing push plates on loaders, increasing water truck capacity, and deploying a jumbo drill, have positioned Western for greater productivity.

Property Portfolio Acquisitions

The Company strengthened its property portfolio through strategic acquisitions and development. This includes the addition of two permitted mines through the Rimrock Joint Venture. Western has further expanded its holdings by staking additional mining claims and acquiring a previously permitted mineral processing site, enhancing its future capacity to process mineral resources close to the Sunday Mine Complex (“SMC”).

Mining Update

In 2024, Western made significant progress in advancing SMC mining operations. Western advanced toward the Leonard and Clark Deposit, drifting a total of 635 feet, passing through newly discovered zones of mineralization. This provided valuable data, leading to geophysical mapping of the face walls. Three significant seams were encountered in the drift walls, the first was drilled to affirm further mineralization at distance and above and below the drift level. In the GMG Deposit (“GMG”), 112 feet of drifting was completed, however most of the 2024 work on this deposit was drilling. Overall, total drifting at the SMC reached 747 feet for 2024. To support the primary drifting projects, substantial underground infrastructure development was undertaken. The Company strategically drifted around newly defined mineralized zones, preserving those for quick turnaround future development and extraction.

Drilling Update

Western achieved 20,336 feet of drilling in 2024, most at the GMG. Horizontal underground drilling was paused in October to allow our new geologist/qualified person to analyze the accumulated data. To ensure accurate and reliable drill data reporting, a rigorous and scientific approach is being taken including twinning holes, conducting assays, and drilling core samples. Preliminary results have identified five high-value mineralization zones in the GMG drift for inclusion in Western’s mine development plan. The geologist will focus his analysis on the data collected from these drill stations first. Preliminary results indicate the overall trend and shape of the deposit, with new mineralization identified above and below current depths. Additionally, surface/vertical drill data has been confirmed, further supporting our understanding of the GMG's structure.

Processing Plants Update

Advancing mining operations is critical to ensuring reliable processing plant feedstock. At the Maverick Minerals Processing Plant in Utah, baseline data collection is well underway. At the recently acquired Mustang Mineral Processing Facility (formerly the Pinon Ridge Mill site) in Colorado, data collection will commence this month to confirm the baseline data from the previous radioactive material application, leveraging existing monitoring wells. Site upgrades include graded roads, a weather tower, and monitoring equipment scheduled for delivery and deployment. A mobile on-site office has been established. Preliminary engineering for a base-case mill was completed in 2024, sufficient for permitting but requiring additional information to optimize for a reduced tonnage modular design. The final input is an optimization study incorporating the kinetic separation process. We expect this study will be completed in the first quarter of 2025, upon conclusion of the study the final iteration of the preliminary engineering and processing plant design can be finalized. These developments mark significant strides toward in-house production of yellowcake.

Ore Purchase Agreement

Discussions regarding Energy Fuels' previously announced ore buying program have progressed. During the first quarter of 2025, Western expects to begin delivery of mined material from the SMC for uranium milling at the White Mesa Mill, the only operational conventional uranium/vanadium mill in the United States. An Ore Purchase Agreement is currently being finalized with Energy Fuels. Mill feedstock delivered under the Ore Purchase Agreement during 2025 will come exclusively from mined material available from stockpiled production.

Uranium Market Opportunity

The uranium spot market began 2024 on a strong note, rallying to a peak price of \$106 in January, before declining by -20% for the year and -31% from the peak; reported term uranium prices increased by +18%. While price trends in 2024 were volatile, the medium and long term fundamentals remain solid, driven by significant growth on the demand side and geopolitics on the supply side. Notably, the U.S. ban on Russian uranium, set to take full effect by 2028, has already prompted swift retaliatory measures from Russia which have impacted 2025 deliveries. Western believes that this catalyst will further exacerbate existing supply/demand imbalances due to the displacement of nuclear fuel purchases.

Western's Uranium Strategy

The operational accomplishments achieved in 2024 have positioned the Company to address critical uranium supply needs to support the growing global energy appetite, climate change mandates, and grid stabilization through baseload power generation. To meet these challenges, the Company is committed to advancing its operations and expanding production capacity in 2025. While 2024 marked a transitional period, the Company is now poised to begin delivering mined material while simultaneously scaling capacity. Our mining investments are guided by a target of a minimum 5:1 return, generating \$5 million of value for every \$1 million invested.

Given current market dynamics, we anticipate a substantial price increase for uranium in the coming years, creating a strategic opportunity for miners with both available production capabilities and uncommitted output. This projection underpins our strategy: to capitalize on price surges by producing at maximum capacity and delivering into favorable long-term contracts in a higher-priced market.

About Western Uranium & Vanadium Corp.

Western Uranium & Vanadium Corp. is ramping-up high-grade uranium and vanadium production at its Sunday Mine Complex. In addition to the flagship property located in the prolific Uravan Mineral Belt, the production pipeline also includes conventional projects in Colorado and Utah. The Mustang Mineral Processing Facility and Maverick Minerals Processing Plant are being licensed and developed for mined material recovery and will incorporate kinetic separation to optimize economics.

Cautionary Note Regarding Forward-Looking Information: Certain information contained in this news release constitutes “forward-looking information” or “forward-looking statements” within the meaning of applicable securities laws (collectively, “forward-looking statements”). Statements of that nature include statements relating to, or that are dependent upon: the Company’s expectations, estimates and projections regarding the Offering and exploration and production plans and results; the timing of planned activities; whether the Company can raise any additional funds required to implement its plans; whether regulatory or analogous requirements can be satisfied to permit planned activities; and more generally to the Company’s business, and the economic and political environment applicable to its operations, assets and plans. All such forward-looking statements are subject to important risk factors and uncertainties, many of which are beyond the Company’s ability to control or predict. Please refer to the Company’s most recent Management’s Discussion and Analysis, as well as its other filings at www.sec.gov and/or www.sedarplus.com, for a more detailed review of those risk factors. Readers are cautioned not to place undue reliance on the Company’s forward-looking statements, and that these statements are made as of the date hereof. While the Company may do so, it does not undertake any obligation to update these forward-looking statements at any particular time, except as and to the extent required under applicable laws and regulations.

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