

Western Uranium & Vanadium Provides Company Updates

FOR IMMEDIATE RELEASE

Toronto, Ontario and Nucla, Colorado - Western Uranium & Vanadium Corp. (CSE: WUC) (OTCQX: WSTRF) (“Western” or the “Company”) is pleased to provide the following updates.

Sunday Mine Complex Project Update

Active mining operations have resumed at the Sunday Mine Complex, and the project is already producing strong results. Ore was anticipated to be encountered after 150 feet of underground development; however drilling of the GMG ore body resulted in the location of ore-grade material within thirty feet of the existing mine workings. The ore body is projected to be significantly larger than indicated by the previous limited surface drilling. Development ore is being stockpiled underground. Full production of the GMG ore body can begin with the improvement of market conditions and after development operations are completed within six months.

Weld County DJ-Basis Oil and Gas Lease

During 2021, the operator has made significant progress advancing the Blue Teal Fed wells through the oil well production stages: drilling was completed in the first quarter, wellfield completion/fracking was completed during the second quarter, drill out was completed in July, and flowback was completed in August. By mid-August 2021, each of the eight Blue Teal Fed wells had commenced production. The month of September represented the first full month of oil and gas production for the wellfield. Based upon the first production sales date and Colorado’s monthly reporting framework, it will likely be the first quarter 2022 when well production levels will be disclosed and Western will begin receiving its proportion of monthly royalty payments. The Blue Teal Fed wells have benefitted from the fortunate timing of being permitted in August 2020 when WTI crude was less than \$43 per barrel and coming online in an elevated price environment; as of the last closing price WTI had increased to \$80.52 per barrel.

Global Energy Crisis Positioning

The Company is well positioned to benefit as the global energy crisis expands during the coming peak winter season from its uranium and oil and gas commodity resources. In our view, to address climate change the world has underinvested in baseload power sources in favor of renewable sources that provide intermittent power generation. The clean energy transition has destabilized the energy mix and is exposing power systems in multiple developed countries to shortages, supply shocks, and supply chain risks. In the short-term, this will benefit Western’s oil and gas royalties and over the medium / longer term this will benefit uranium/nuclear energy markets and Western’s core uranium mining business. Global commitments to nuclear energy are increasing in response to baseload electricity generation requirements and climate change carbon emissions targets.

George Glasier, CEO Exercises Stock Options

George Glasier, President, CEO and a director of the Company, announces that on October 4, 2021 he acquired 27,536 common shares of the Issuer. The shares were acquired through a cashless exercise of 100,000 stock options granted in 2016 with an exercise price of CAD\$2.50 per share. As a result of this exercise, 27,536 options were treated by the Issuer as exercised and 72,464 options were treated as surrendered in payment of the exercise premium (the “Transaction”).

The fair market value of the surrendered options was calculated using the value weighted average price (VWAP) for the 20 prior trading days. Immediately prior to the Transaction, Mr. Glasier controlled a total of 4,783,333 common shares of the Company, corresponding to approximately 12.5% of the issued and outstanding common shares of the Company. Immediately after the Transaction, Mr. Glasier increased his shareholdings to 4,810,869 common shares, corresponding to approximately 12.5% of the issued and outstanding shares of the Company. Mr. Glasier also holds stock options for an additional 375,000 common shares, all currently exercisable. If such stock options were exercised, Mr. Glasier would hold and/or control approximately 13.4% of Western's then issued and outstanding common shares. Additional recipients of the 2016 stock option awards also exercised prior to October 2021 stock option expiration dates.

This is a joint news release of Western and George Glasier, President, CEO and a director of the Company. Mr. Glasier will file an Early Warning Report under the Company's profile on SEDAR. The Early Warning Report will include additional information as required under National Instrument 62-103 – The Early Warning System and Related Takeover Bid and Insider Reporting Issues.

About Western Uranium & Vanadium Corp.

Western Uranium & Vanadium Corp. is a Colorado based uranium and vanadium conventional mining company focused on low cost near-term production of uranium and vanadium in the western United States, and development and application of kinetic separation.

Cautionary Note Regarding Forward-Looking Information: Certain information contained in this news release constitutes "forward-looking information" or a "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 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.sedar.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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