TORONTO, ONTARIO--(Marketwired - Nov. 2, 2016) - Denison Mines Corp. ("Denison" or the "Company") (TSX:DML)(NYSE MKT:DNN) is pleased to provide an update on its initial Pre-Feasibility Study ("PFS") related activities at its 60% owned Wheeler River Project ("Wheeler River" or "the Project"), located in the infrastructure rich eastern portion of the Athabasca Basin region in northern Saskatchewan. Denison announced the initiation of a PFS for the Wheeler River project in July 2016, following the completion of a successful Preliminary Economic Assessment ("PEA") studying the economic merits of co-developing the high grade Phoenix and Gryphon uranium deposits. The PEA highlighted the potential to achieve a base case 20.4% pre-tax internal Rate of Return ("IRR") and an indicative post-tax IRR to Denison of 17.8%, using a long term contract price for uranium of US$44 per pound $U_3O_8$.

Project development related field activities commenced at Wheeler River in June 2016, running in parallel to the Company's highly successful summer exploration program. In addition to initial infill drilling completed at Gryphon during the summer, project development field work completed during 2016 has been focused on initiating the environmental and engineering data collection programs required for the PFS and Environmental Assessment process.

David Cates, President and CEO of Denison commented, *"Our Saskatoon based project development team has spent the summer working alongside our exploration team to begin the process of assessing the feasibility of the development of Wheeler River. This work is a critical first step and clearly signals our commitment to advancing the Wheeler River Project in a responsible and sustainable manner that respects the environment and northern communities. The activities we've started in the field this year will help to build a solid foundation for both our project engineering as well as our environmental impact assessment. Through this process, we've had the opportunity to introduce the Project to some of the northern communities in the region, and moving forward we will continue to maintain and build positive relationships as we position Wheeler River, for the benefit of all of our stakeholders, to take advantage of the next uranium bull cycle."*

*Engineering Activities*

In June 2016, the Company commenced engineering data collection programs on site at Wheeler River, including geotechnical and hydrogeological field studies. Geotechnical data collection programs were initiated to assess ground conditions in the mineralized zones as well as the surrounding host rock. This information will be used to guide the location of underground development and the design of ground support systems for both the shafts and the mine. This information is also used in the production planning process, including the determination of optimum stope sizes and mine production sequencing. By the end of October, a substantial database of geotechnical information was obtained including:

- 1,650 metres of geotechnical logging at the Phoenix deposit;
- 33,000 metres of geotechnical logging from exploration drilling at Gryphon; and
- 3,800 metres of geotechnical logging of historic drill cores from both Phoenix and Gryphon.

Hydrogeological data collection was also initiated during the summer to gather information on sub-surface water movement in the mineralized zones, host rock and across major geological structures. Understanding these conditions at Wheeler River will help to avoid some of the challenges that have been experienced at other underground operations in the Athabasca Basin. The information collected will be used to: evaluate routine and potential non-routine water inflows to an underground operation; develop design criteria for mine dewatering and water treatment plant systems; and understand potential interactions of the Project with the environment.

Similar to the geotechnical program, by the end of October 2016 a substantial database of hydrogeological information was obtained including:

- 92 hydrogeological tests at both Gryphon and Phoenix, completed to better understand groundwater movement and flow paths, including tests in the sandstone, at the unconformity and in basement zones across geological structures;
- Surface water elevation surveys completed in over 180 boreholes;
- The collection of 20 sub-surface water samples for laboratory analysis; and
- The installation of two vibrating wire piezometers to facilitate sub-surface hydrogeological data collection during drilling and pumping programs.

In addition to the engineering field work described above, the Company also initiated engineering investigations into alternate mining methods at Phoenix, options for shaft and vent raise excavation at both Gryphon and Phoenix, and possible routes for a site access road from provincial highway 914.

*Environmental Activities*

Denison is continuing to collect environmental baseline data to help characterize the existing environment in the Project area. Thoroughly understanding and documenting the local environment is essential to assessing current and future project impacts. This data will form the foundation of the Environmental Assessment for the Project. The information will also be used in the design of various aspects of the Project, including the location and layout of site infrastructure, the location for treated effluent discharge and fresh water intake, and the designs of water treatment plants, waste storage facilities, and other infrastructure interacting with the environment. Programs conducted in 2016 and continuing into 2017 include:

- Aquatic environment: Lakes and streams near the Project area are in the process of being characterized with key aspects including: water quality, water flow and water levels, lake sediment quality, benthic invertebrate communities, and fish communities;
- Terrestrial environment: Data regarding wildlife, vegetation and soils surrounding the Project area is being characterized;
- Waste rock geochemistry: Targeted core samples are being analyzed to determine potential acid and metal leaching potential from waste rock, which will be used in design of potential waste rock storage facilities;
- Atmospheric environment: Collection of air quality measurements was initiated to gather information on pre-development atmospheric conditions; and
- Heritage resources: Investigations are underway to determine presence of heritage resources in the Project area.

In addition to the environmental baseline programs, Denison is pleased to have started initial consultations with local communities.

*Infill drilling at Gryphon*

An important step in completing the PFS involves increasing the level of confidence of the previously released inferred resources estimated for the Gryphon deposit to an indicated level. An infill drilling program was designed to achieve this objective by increasing the previous 50 x 50 metre drill spacing to an approximate 25 x 25 metre spacing across the A, B and C series lenses of the Gryphon deposit. The program, which is expected to require approximately 40 drill holes, includes delineation holes designed to potentially close-off areas where mineralization is still open.

An initial set of infill and delineation holes on the Gryphon deposit was completed during the summer 2016 exploration drilling program (as reported previously, see Denison's Press Release dated October 6, 2016), which reinforce the high-grade nature of the deposit and included highlight results of:

- 1.5% $eU_3O_8$ over 14.4 metres (including 2.3% $eU_3O_8$ over 7.9 metres and 1.5% $eU_3O_8$ over 1.0 metre) in drill hole WR-668D2, and

- 0.93% $eU_3O_8$ over 14.1 metres (including 2.1% $eU_3O_8$ over 3.7 metres and 1.4% $eU_3O_8$ over 1.3 metres) and 2.4% $eU_3O_8$ over 7.3 meters (including 3.7% $eU_3O_8$ over 4.5 metres) in drill hole WR-668.

Qualified Persons

The disclosure of scientific or technical information regarding infill drilling at the Gryphon deposit included in this press release was prepared by, or reviewed and approved by, Dale Verran, MSc, Pr.Sci.Nat., the Company's Vice President, Exploration, a Qualified Person in accordance with the requirements of NI 43-101. The remainder of the disclosure of a scientific or technical nature contained in this news release was prepared by, or reviewed and approved by, Peter Longo, P. Eng, MBA, PMP, Denison's Vice-President, Project Development, who is a Qualified Person in accordance with the requirements of NI 43-101.

Grade results reported herein as "$eU_3O_8$" refer to radiometric equivalent $U_3O_8$ derived from a calibrated total gamma down-hole probe. Radiometric equivalent $U_3O_8$ results are preliminary in nature and all mineralized intervals have been sampled and submitted for chemical $U_3O_8$ assay in accordance with Denison's technical procedures. All Gryphon drill holes reported herein were drilled at a high angle to mineralization to allow for better evaluation of true thicknesses which are expected to be approximately 75% of the intersection lengths. For further details regarding the description of the data verification, assay procedures and the quality assurance program and quality control measures applied by Denison, please see Denison's Annual Information Form dated March 24, 2016 available under Denison's profile on SEDAR at www.sedar.com, and its Form 40-F available on EDGAR at www.sec.gov/edgar.shtml.

About Wheeler River

*The Wheeler River property is a joint venture between Denison (60% and operator), Cameco Corp. (30%), and JCU (Canada) Exploration Company Limited (10%), and is host to the high-grade Gryphon and Phoenix uranium deposits discovered by Denison in 2014 and 2008, respectively. The Gryphon deposit is hosted in basement rock and is currently estimated to contain inferred resources of 43.0 million pounds U3O8 (above a cut-off grade of 0.2% U3O8) based on 834,000 tonnes of mineralization at an average grade of 2.3% U3O8. The Phoenix unconformity deposit is located approximately 3 kilometres to the southeast of Gryphon and is estimated to include indicated resources of 70.2 million pounds U3O8 (above a cut-off grade of 0.8% U3O8) based on 166,000 tonnes of mineralization at an average grade of 19.1% U3O8, and is the highest grade undeveloped uranium deposit in the world.*

*On April 4th, 2016 Denison announced the results of a PEA for the Wheeler River Project, which considers the potential economic merit of co-developing the high-grade Gryphon and Phoenix deposits as a single underground mining operation. The PEA returned a base case pre-tax Internal Rate of Return ("IRR") of 20.4% and an indicative post-tax IRR to Denison of 17.8%, based on the current long term contract price of uranium (US$44.00 per pound $U_3O_8$), and Denison's share of estimated initial capital expenditures ("CAPEX") of CAD$336M (CAD$560M on 100% ownership basis). The results of the PEA, and the*

*estimated resources for the Gryphon and Phoenix deposits, are detailed in the Company's NI 43-101 technical report entitled "Preliminary Economic Assessment for the Wheeler River Uranium Project, Saskatchewan, Canada" with an effective date of March 31, 2016. A copy of the report is available on the Company's website and on both SEDAR and EDGAR.*

*Exploration results from the winter and summer 2016 drilling program have not been incorporated into the resource estimate or the PEA. The PEA is preliminary in nature and includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them to be categorized as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized. Mineral resources are not mineral reserves and do not have demonstrated economic viability. On July 19th, 2016 Denison announced the initiation of the PFS for the Wheeler River property*

*and the complimentary commencement of an infill drilling program at the Gryphon deposit to bring the inferred resources up to an indicated level of confidence.*

About Denison

*Denison is a uranium exploration and development company with interests focused in the Athabasca Basin region of northern Saskatchewan. Including its 60% owned Wheeler River project, which hosts the high grade Phoenix and Gryphon uranium deposits, Denison's exploration portfolio consists of numerous projects covering over 350,000 hectares in the infrastructure rich eastern Athabasca Basin. Denison's interests in Saskatchewan also include a 22.5% ownership interest in the McClean Lake joint venture, which includes several uranium deposits and the McClean Lake uranium mill, which is currently processing ore from the Cigar Lake mine under a toll milling agreement, plus a 25.17% interest in the Midwest deposit and a 61.55% interest in the J Zone deposit on the Waterbury Lake property. Both the Midwest and J Zone deposits are located within 20 kilometres of the McClean Lake mill.*

*Denison is also engaged in mine decommissioning and environmental services through its Denison Environmental Services division and is the manager of Uranium Participation Corp., a publicly traded company which invests in uranium oxide and uranium hexafluoride.*

Cautionary Statement Regarding Forward-Looking Statements

*Certain information contained in this press release constitutes "forward-looking information", within the meaning of the United States Private Securities Litigation Reform Act of 1995 and similar Canadian legislation concerning the business, operations and financial performance and condition of Denison.*

*Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as "plans", "expects", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes", or the negatives and/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". In particular, this press release contains forward-looking information pertaining to the following: the results of the PEA and expectations regarding further studies, including the PFS and related environmental studies and community consultations; exploration, development and expansion plans and objectives; and management's expectations regarding the uranium market and prices. Statements relating to "mineral reserves" or "mineral resources" are deemed to be forward-looking information, as they involve the implied assessment, based on certain estimates and assumptions that the mineral reserves and mineral resources described can be profitably produced in the future.*

*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 Denison to be materially different from those expressed or implied by such forward-looking statements. Denison 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 accurate and may differ materially from those anticipated in this forward looking information. For a discussion in respect of risks and other factors that could influence forward-looking events, please refer to the factors discussed in Denison's Annual Information Form dated March 24, 2016 under the heading "Risk Factors". These factors are not, and should not be construed as being exhaustive. Accordingly, readers should not place undue reliance on forward-looking statements.*

*The forward-looking information contained in this press release is expressly qualified by this cautionary statement. Any forward-looking information and the assumptions made with respect thereto speaks only as of the date of this press release. Denison does not undertake any obligation to publicly update or revise any forward-looking information after the date of this press release to conform such information to actual results or to changes in Denison's expectations except as otherwise required by applicable legislation.*

*Cautionary Note to United States Investors Concerning Estimates of Measured, Indicated and Inferred Mineral Resources: This press release 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 resources 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 resources 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.*

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