

TORONTO, ONTARIO--(Marketwired - Apr 21, 2016) - [Denison Mines Corp.](#) ("Denison" or the "Company") (TSX:DML)(NYSE MKT:DNN) is pleased to report the completion of the winter 2016 drilling programs on its high-priority exploration pipeline projects, highlighted by the intersection of uranium mineralization and favourable geological settings on several properties.

Apart from Denison's flagship Wheeler River project, the Company has an extensive portfolio of uranium exploration projects located in the infrastructure rich eastern Athabasca Basin, covering over 340,000 hectares of ground (see Figure 1). The projects are at various stages of exploration and provide a long term pipeline of potential resource growth opportunities. During the winter 2016 programs, approximately 9,300 metres of diamond drilling was completed in 23 holes on Denison operated properties - including Murphy Lake (3,695 metres, 10 holes), Crawford Lake (1,104 metres, 2 holes), Bell Lake (2,382 metres, 4 holes), Torwalt Lake (612 metres, 2 holes), Marten Lake (1,021 metres, 4 holes) and Moon Lake South (516 metres, 1 hole). Geophysical surveys are still underway on several properties as planning continues for the development of the summer drilling programs.

Denison's Vice President, Exploration, Dale Verran, commented, *"While much attention has been given to the results at Wheeler River this winter, we are highly encouraged by the winter results from our high-priority pipeline projects in the eastern Athabasca. Further intersections of mineralization and alteration at Murphy Lake continue to suggest we are dealing with a sizeable mineralizing system with deposit potential along strike. At Crawford Lake and Moon Lake South, reconnaissance drilling on the largely untested CR-3 trend yielded exciting mineralized results suggesting potential for future discovery in both the basement rocks and at the unconformity. These results, in addition to those from Marten and Bell Lake, reiterate the potential of Denison's pipeline projects and the team's sound exploration approach."*

An additional 8,100 metres of diamond drilling was completed in 31 holes on two non-Denison operated properties. At Mann Lake, operated by [Cameco Corp.](#), a total of 2,800 metres of diamond drilling was completed in 4 holes. At Wolly, operated by AREVA Resources Canada Inc., a total of 5,300 metres of diamond drilling was completed in 27 holes.

Murphy Lake: Mineralized Trend Extended

Murphy Lake continues to be one of Denison's highest priority exploration projects. The project is located approximately 30 kilometres from the McClean Lake mill and adjacent to the Company's Waterbury Lake project in the northern portion of the eastern Athabasca Basin. During the winter 2016 season, Denison completed a diamond drilling program as well as ground gravity and DC-IP resistivity surveys on the Murphy Lake Project (68.8% Denison, 31.2% Eros Resources Corp.). Approximately 3,700 metres were drilled over 10 drill holes during the program. The majority of the drilling was designed to test targets identified along strike and on section of MP-15-03 (a 2015 drill hole which intersected 0.25% U₃O₈ over 6.0 metres in strongly altered sandstones, immediately above the unconformity). Drilling confirmed the continuity of the intense hydrothermal sandstone alteration system, identified in 2015, over a strike length of 850 metres. Weak uranium mineralization was intersected in the sandstone associated with intense hematite and clay alteration in three drill holes; MP-16-08, MP-16-11 and MP-16-17. Drill hole MP-16-08, drilled on section with MP-15-03, identified uranium mineralization associated with a parallel graphitic fault zone approximately 70 metres to the south. Drill holes MP-16-11 and MP-16-17 were both drilled along strike to the west of drill hole MP-15-03 at 200 metres and 100 metres, respectively. Table 1 provides the highlights from drilling on the property to date and Figure 2 provides a summary map.

Table 1: Summary of highlight intersections from the Murphy Lake 2016 Drilling Program

Drill Hole	From (m)	To (m)	Length (m) ⁴	U ₃ O ₈ (%)
MP-15-03 ^{2,5}	270.0	276.0	6.0	0.25
MP-16-08 ¹	275.65	278.55	2.9	0.19 ¹
MP-16-11 ²	267.5	282.0	14.5	0.13
(includes) ²	271.0	272.0	1.0	0.46
(and) ²	277.5	278.0	0.5	0.49
MP-16-17 ³	259.0	275.0	16.0	0.04
(includes) ³	262.5	263.0	0.5	0.12
(and) ³	268.0	268.5	0.5	0.13

Notes:

1. Significant core loss. Result reported as radiometric equivalent uranium ("eU₃O₈") from a calibrated total gamma down-hole probe and composited above a cut-off grade of 0.05% eU₃O₈
2. Intersection interval is composited above a cut-off grade of 0.05% U₃O₈
3. A cut-off grade has not been applied
4. As the drill holes dip steeply to the south and the unconformity mineralization is expected to be flat-lying, the true thickness of the mineralization is expected to be approximately 90% of the intersection lengths
5. Results reported previously in Company press release dated October 22, 2015

An additional 2.2 kilometres of interpreted strike length remains entirely untested both to the east and west of the mineralized zone noted above. Within the current DC-IP resistivity coverage, which extends 0.8 kilometres east and 1.4 kilometres west of

the mineralized zone, several priority targets have been identified for drill testing. The ground gravity survey has produced gravity-low targets, in some cases coincident with DC-IP resistivity targets, and has delineated potential areas of unconformity offset to the north of the mineralized zone, which constitutes a further target area.

Crawford Lake and Moon Lake South: Mineralization Discovered on CR-3 Conductive Trend

At the Crawford Lake property (100% Denison owned), a two hole program was designed to test targets on the CR-5 and CR-3 conductive trends respectively. Previous drilling on the CR-3 conductive trend included one historic hole, and one hole drilled by Denison in 2015 (CR-15-24), which intersected strong basement alteration and structure associated with graphite-bearing pelitic gneisses. During the winter 2016 drilling program, drill hole CR-16-26, located approximately 800 metres to the northeast of CR-15-24, extended the strike of the graphite-bearing pelitic gneisses and confirmed further strong basement alteration and structure with associated elevated uranium pathfinder elements.

In January 2016, Denison entered into an earn-in option agreement with [CanAlaska Uranium Ltd.](#) (TSX VENTURE:CVV) on the Moon Lake property ("Moon Lake South"), which is contiguous with Crawford Lake and covers the northeasterly extent of the CR-3 conductive trend. A single drill hole was completed during the winter 2016 program which was designed to test the CR-3 conductive trend on Moon Lake South, immediately north of the southern property boundary with Crawford Lake. The drill hole, MS-16-01, intersected 0.102% U_3O_8 over 0.5 metres at the unconformity and anomalous uranium in the overlying sandstone. This hole is located approximately 1.5 kilometres northeast from CR-16-26. The Moon Lake South option agreement allows for Denison to acquire an initial 51% interest in claim S-107558 by completing exploration expenditures of CAD\$200,000, and allows for Denison to increase its interest to 75% for a further CAD\$500,000. The option agreement includes provisions for the formation of a joint venture and a 2% NSR Royalty which will be automatically granted if either party's interest is diluted to below 10%. The NSR Royalty may be purchased by the non-diluting party for CAD\$500,000.

The drilling results obtained during the winter 2016 drilling program, including extensive basement alteration and structure on Crawford Lake and uranium mineralization at the unconformity on Moon Lake South, have confirmed the CR-3 conductive trend to be highly prospective. Further drilling is warranted to evaluate this trend for unconformity and basement hosted uranium mineralization. A map showing the location of the CR-3 conductive trend and the respective drill holes is provided in Figure 3.

Other Property Highlights

Marten Lake (50% Denison, 50% JOGMEC)

Three of the four holes completed during the winter program, testing DC-IP resistivity targets along a northeast-southwest trend, intersected significant structure and alteration. The westernmost hole encountered a significant reverse fault zone at the sub-Athabasca unconformity with 96 metres of a vertical offset and associated brecciation and alteration. These features attest to a favorable geological setting for unconformity-related uranium mineralization and suggest follow-up exploration is warranted along this fault zone. Follow-up plans will be finalized upon receipt and interpretation of the geochemical assay and clay alteration data.

Bell Lake - North (100% Denison)

Of the four drill holes completed during the winter program, two intersected favourable sandstone structure and alteration, and one intersected significant structure in the basement. Elevated radioactivity was intersected at or immediately above the sub-Athabasca unconformity in all four drill holes. Drilling was reconnaissance in nature and focused on testing ground electromagnetic targets on widely-spaced survey lines. These results, obtained in a new target area with no previous drilling, meet several of the important exploration criteria for unconformity-related uranium mineralization. Interpretation of the results is ongoing and follow-up work will be assessed once geochemical assay and clay alteration data have been received and interpreted.

Mann Lake (30% Denison, 52.5% Cameco and operator, 17.5% AREVA): During 2014 and 2015 a significant zone of unconformity mineralization was discovered by Cameco along the Granite Contact "GC" fault over a 600 metre strike length, highlighted by 6.7% U_3O_8 over 3.9 metres in drill hole MN-066-01 (see Company press release dated February 4, 2015). The winter 2016 drilling program was focused on testing the underexplored southern extent of the GC fault, which is interpreted to extend approximately 2.4 kilometres to the southern property boundary away from the mineralized zone. Two holes were completed at 1.2 kilometres and 2.1 kilometres, respectively, to the south of the existing zone of mineralization and aimed at the extension of the GC fault. The southernmost hole intersected a significant zone of structural disruption and alteration in the sandstone, and indicated an 80 metre vertical offset of the sub-Athabasca unconformity. A follow-up hole, collared approximately 100 metres to the east on section, intersected encouraging sandstone and up-thrown basement rocks including quartzite and structured, graphite-rich pelitic gneisses. The results suggest the optimal unconformity target may be located further to the west, between the two holes completed on the section.

Assay Methods and Lab

Denison reports its initial exploration results as radiometric equivalent uranium ("e U_3O_8 ") from a calibrated, total gamma,

down-hole probe. Where core recovery permits, all mineralized intersections are sampled and submitted for chemical U₃O₈ assay at the Saskatchewan Research Council ("SRC") Geoanalytical Laboratories using an ISO/IEC 17025:2005 accredited method for the determination of U₃O₈ weight %. Sample preparation involves crushing and pulverising of split-core samples to 90% passing -106 microns. The resultant pulp is digested using aqua-regia and the solution analyzed for U₃O₈ weight % using ICP-OES.

Qualified Person

The disclosure of a scientific or technical nature contained in this news release was prepared by Dale Verran, MSc, Pr.Sci.Nat., Denison's Vice President, Exploration, who is a Qualified Person in accordance with the requirements of NI 43-101. For a more detailed description of the 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 filed under the Company's profile on SEDAR at www.sedar.com.

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 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. Internationally, Denison owns 100% of the Mutanga project in Zambia, 100% of the uranium/copper/silver Falea project in Mali, and a 90% interest in the Dome project in Namibia. Denison has recently entered into an agreement with [GoviEx Uranium Inc.](#) (CSE:GXU) to sell its African interests, with an expected closing date in May, 2016.

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: exploration (including drilling) and evaluation activities, plans and objectives; potential mineralization of drill targets; and the estimates of Denison's mineral resources.

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 there can be no assurance that such statements 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 "Risk Factors" in Denison's Annual Information Form dated March 24, 2016 available under its profile at www.sedar.com and in its Form 40-F available at www.sec.gov/edgar.shtml. 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. 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 its 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.

Figures 1 to 3 are available at the following address: http://media3.marketwire.com/docs/1051527_Maps.pdf

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