

PRESS RELEASE

Denison Announces Additional High-Grade Uranium Mineralization Discovered at McClean South

Toronto, On – July 21, 2025. Denison Mines Corp. (“Denison” or the “Company”) (DML:TSX, DNN: NYSE American) is pleased to announce that several significant new intercepts of shallow high-grade uranium mineralization have been discovered at the McClean South zone (“McClean South”), which is part of the Company’s 22.5%-owned McClean Lake Joint Venture (“McClean Lake” or “MLJV”) in northern Saskatchewan (see Figure 1).

Orano Canada Inc. (“Orano Canada”), the 77.5% owner and operator of the MLJV, completed a 6,400-metre exploration drilling program at McClean South during the first half of 2025. The drill program was highlighted by multiple notable high-grade intersections at the 8C mineralized pod:

- **MCS-77** intersected **7.51% eU₃O₈ over 5.4 metres** from 165.7 to 171.1 metres (including 10.88% eU₃O₈ over 3.7 metres),
- **MCS-80** intersected **3.5% eU₃O₈ over 11.2 metres** from 156.7 to 167.9 metres (including 5.81% eU₃O₈ over 6.5 metres), and
- **MCS-84** intersected **1.72% eU₃O₈ over 20.6 metres** from 150.6 to 170.7 metres (including 4.43% eU₃O₈ over 4.0 metres)

In total, fourteen of twenty-four completed drill holes from the program encountered significant intercepts of uranium mineralization and the results are interpreted to have confirmed and expanded the mineralized footprint of the 8C and 8W pods (see Figure 2 and 3).

McClean South is located approximately 600 metres to the south of the McClean North deposit, where the MLJV recently commenced commercial mining using the joint venture’s patented SABRE mining method.

Chad Sorba, P.Geo., Denison’s Vice President of Technical Services and Project Evaluation, commented **“Earlier this year, in its effort to follow up on the discovery of the 8C pod at McClean South since the last drill program in 2022, Orano Canada carried out a successful exploration program that returned several meaningful additional high-grade intercepts, which are interpreted to have expanded the mineralized footprint of the 8C and 8W pods.”**

David Cates, Denison’s President & CEO, added **“We congratulate and thank Orano Canada for its efforts to successfully advance the delineation and expansion of the high-grade mineralization at McClean South. With the nearby McClean North deposit recently entering production using the joint venture’s SABRE mining method and Denison having made significant advancements in the de-risking of the In-Situ Recovery (‘ISR’) mining method in recent years, there is great potential for the MLJV to advance McClean South to potentially emerge as an economic new source of future feed to the McClean Lake mill.”**

2025 McClean South Exploration Highlights

The objective of the exploration program at McClean South was to expand the existing footprint of high-grade mineralization with a focus on further assessing the 8C and 8W Pods.

With uranium mineralization measuring greater than 0.05% eU (0.06% eU₃O₈) intersected in 14 of 24 drill holes completed during the program, the results successfully expanded the footprint of the 8W and 8C pods and confirmed the continuity of mineralization.

Results from the 8W pod were highlighted by the following:

- **MCS-61 and MCS-64** confirmed mineralization in the sandstone **near surface** along the western edge of the 8W pod. MCS-61 intersected 0.15% eU₃O₈ over 2.2 metres from 40.3 to 42.5 metres and MCS-64 intersected 0.21% eU₃O₈ over 1.2 metres from 57.6 to 58.8 metres.

The results of the holes discussed above and the balance of the mineralized intersections from the 2025 drill program are summarized in Table 1 below.

Table 1 – 2025 McClean Lake Exploration Drilling – Mineralized Intersections

Drill Hole	Target area	Orientation (azi/dip)	From (m)	To (m)	Length (m) ⁽¹⁾	% eU ₃ O ₈ ⁽²⁾
MCS-61	8W	345°/-75°	40.3	42.5	2.2	0.15
MCS-62	8C	345°/-77°	173.9	176.9	3.0	0.52
including	-	-	175.6	176.0	0.4	1.71
MCS-63	8W	330°/-75°	174.3	175.6	1.3	0.31
MCS-64	8W	330°/-75°	57.6	58.8	1.2	0.21
MCS-67A	8C	340°/-70°	172.0	174.9	2.9	0.28
MCS-67A	-	-	175.9	183.2	7.3	0.29
MCS-67A	-	-	183.7	187.3	3.6	0.62
including	-	-	185.6	186.8	1.2	1.58
MCS-71	8C	348°/-80°	168.5	169.7	1.2	0.18
MCS-74	8C	345°/-80°	153.8	156.3	2.5	0.14
MCS-74	8C	-	157.2	164.7	7.5	0.24
MCS-74	8C	-	165.7	168.5	2.8	0.31
MCS-76	8C	349°/-80°	173.8	175.2	1.4	0.15
MCS-77	8C	345°/-80°	165.7	171.1	5.4	7.51
including	-	-	166.5	170.2	3.7	10.88
MCS-78	8C	345°/-83°	164.4	166.4	2.0	0.41
including	-	-	165.5	166.0	0.5	1.08
MCS-79	8C	345°/-78°	164.2	170.1	5.9	0.75
including	-	-	167.2	168.8	1.6	1.51
MCS-80	8C	346°/-80°	156.7	167.9	11.2	3.50
including	-	-	158.6	165.1	6.5	5.81
MCS-81	8C	345°/-77°	168.2	169.8	1.6	0.32
MCS-84	8C	345°/-90°	150.1	170.7	20.6	1.72
including	-	-	153.9	157.9	4.0	2.70
including	-	-	166.0	170.0	4.0	4.43

Notes:

(1) Lengths indicated represent the down-hole length of mineralized intersections;

(2) Interval is composited above a cut-off grade of 0.05% eU, which corresponds to 0.06% eU₃O₈

Radiometric Equivalent Grades, Sampling, Analysis and Data Verification

Following the completion of a drill hole, the hole is radiometrically logged using a downhole slimline gamma probe, which collects continuous readings of radioactivity along the length of the drill hole. Probe results are then calibrated using an algorithm calculated from the comparison of probe results against geochemical analyses in the area. The gamma-log results provide an immediate radiometric equivalent uranium value (eU%, then converted to eU₃O₈%) for the hole, which, except in very high-grade zones, is reasonably accurate. The Company typically reports eU₃O₈, as a preliminary result and subsequently reports definitive assay grades following sampling and chemical analysis of the mineralized drill core. Assay sample intervals are generally 50 centimetres long, except where higher or lower grade mineralization boundaries fall within the interval. In that case, two 25-centimetre samples are collected. Flank samples of 1.0 metre are collected where mineralization is located. Systematic geochemistry samples are collected every 10 metres down the hole. All assayed core is split in half, with one half retained and the other sent to the SRC Geoanalytical Laboratory in Saskatoon for analysis. Control samples are routinely assayed with each batch of core samples analyzed.

About McClean South 8C, 8E and 8W Pods

The McClean South trend is located parallel to and approximately 600 metres south of the McClean North trend in the southwestern portion of the property (see Figure 1). The McClean South zone has been the subject of historic exploration drilling, resulting in the discovery and subsequent delineation of the 8W, 8C, and 8E pods, which are situated along a N70° to 80° trend near the McClean Lake granitic dome to the south (see Figure 2 and 3).

Mineralization within the 8W, 8C and 8E pods is currently understood to be primarily hosted within the sandstone; however, it has been locally encountered within the basement of the 8W and 8C pods. The mineralization within the sandstone can extend upwards of 50 meters above the unconformity and has been identified near surface at the western edge of the 8W pod.

No current resource estimate, prepared in accordance with NI 43-101, exists for the mineralization identified to date at the McClean South pods.

About McClean Lake

The McClean Lake property is located on the eastern edge of the Athabasca Basin in northern Saskatchewan, approximately 750 kilometres north of Saskatoon. Denison holds a 22.5% ownership interest in the MLJV and the McClean Lake uranium mill, one of the world's largest uranium processing facilities. The mill has licensed annual production capacity of 24.0 million pounds U₃O₈ and is currently operating under a 10-year license expiring in 2027. The mill is contracted to process the ore from the Cigar Lake mine under a toll milling agreement (up to 18.0 million pounds U₃O₈ per year). The MLJV is an unincorporated contractual arrangement between Orano Canada with a 77.5% interest and Denison with a 22.5% interest. Orano Canada is the operator of the project.

McClean Lake consists of nine known uranium deposits: JEB; Sue A, B, C, D, E and F; McClean North; and McClean South. In 1995, the development of the McClean Lake project began. Mill construction commenced in 1995, and ore processing activities reached commercial production in November 1999. Mining operations commenced in 1996, and the following deposits have been mined out to date: JEB (1996 to 1997), Sue C (1997 to 2002), Sue A (2005 to 2006), Sue E (2005 to 2008) and Sue B (2007 to 2008). Production from the McClean North deposit, using the MLJV's patented SABRE mining method, commenced in 2025.

About Denison

Denison is a leading uranium mining, development, and exploration company with interests focused in the Athabasca Basin region of northern Saskatchewan, Canada. Denison has an effective 95% interest in its flagship Wheeler River Uranium Project, which is the largest undeveloped uranium project in the infrastructure rich eastern portion of the Athabasca Basin region of northern Saskatchewan. In mid-2023, the Phoenix feasibility study was completed for the Phoenix deposit as an ISR mining operation, and an update to the previously prepared 2018 Pre-Feasibility Study ('PFS') was completed for Wheeler River's Gryphon deposit as a conventional underground mining operation. Based on the respective studies, both deposits have the potential to be competitive with the lowest cost uranium mining operations in the world. Permitting efforts for the planned Phoenix ISR operation commenced in 2019 and several notable milestones were achieved in 2024 with the submission of federal licensing documents and the acceptance of the final form of the project's Environmental Impact Statement by the Province of Saskatchewan and the Canadian Nuclear Safety Commission.

Denison's interests in Saskatchewan also include a 22.5% ownership interest in the MLJV, which includes unmined uranium deposits (with mining at the McClean North deposit via the MLJV's SABRE mining method having commenced in 2025) and the McClean Lake uranium mill (currently utilizing a portion of its licensed capacity to process the ore from the Cigar Lake mine under a toll milling agreement), plus a 25.17% interest in the Midwest Joint Venture Midwest Main and Midwest A deposits, and a 70.55% interest in the Tthe Heldeth T   (THT) and Huskie deposits on the Waterbury Lake Property. The Midwest Main, Midwest A, THT and Huskie deposits are located within 20 kilometres of the McClean Lake mill. Taken together, Denison has direct ownership interests in properties covering ~384,000 hectares in the Athabasca Basin region.

Additionally, through its 50% ownership of JCU (Canada) Exploration Company, Limited ('JCU'), Denison holds interests in various uranium project joint ventures in Canada, including the Millennium project (JCU, 30.099%), the Kiggavik project (JCU, 33.8118) and Christie Lake (JCU, 34.4508%).

In 2024, Denison celebrated its 70th year in uranium mining, exploration, and development, which began in 1954 with Denison's first acquisition of mining claims in the Elliot Lake region of northern Ontario.

For more information, please contact

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Qualified Persons

The technical information contained in this press release has been reviewed and approved by Chad Sorba, P.Geo., Denison's Vice President Technical Services & Project Evaluation, who is a Qualified Person in accordance with the requirements of NI 43-101.

Cautionary Statement Regarding Forward-Looking Statements

Certain information contained in this news release constitutes 'forward-looking information', within the meaning of the applicable United States and 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 news release contains forward-looking information pertaining to the following: the interpretation of exploration results and expectations with respect thereto, including the interpretation of the results from the McClean Lake JV exploration program undertaken by Orano Canada, underlying assumptions and the McClean Lake JV's intentions with respect thereto; exploration plans and objectives; plans and objectives for ISR and SABRE mining by Denison and/or Orano Canada; and expectations regarding its joint venture ownership interests and the continuity of its agreements with its partners and third parties. 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. For example, the modelling and assumptions upon which the interpretation of results are based may not be maintained after further testing or be representative of actual conditions. 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 results 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 28, 2025 or subsequent quarterly financial reports 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 news 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 news release. Denison does not undertake any obligation to publicly update or revise any forward-looking information after the date of this news release to conform such information to actual results or to changes in Denison's expectations except as otherwise required by applicable legislation.

Figure 1 – McClean Lake Project Claims

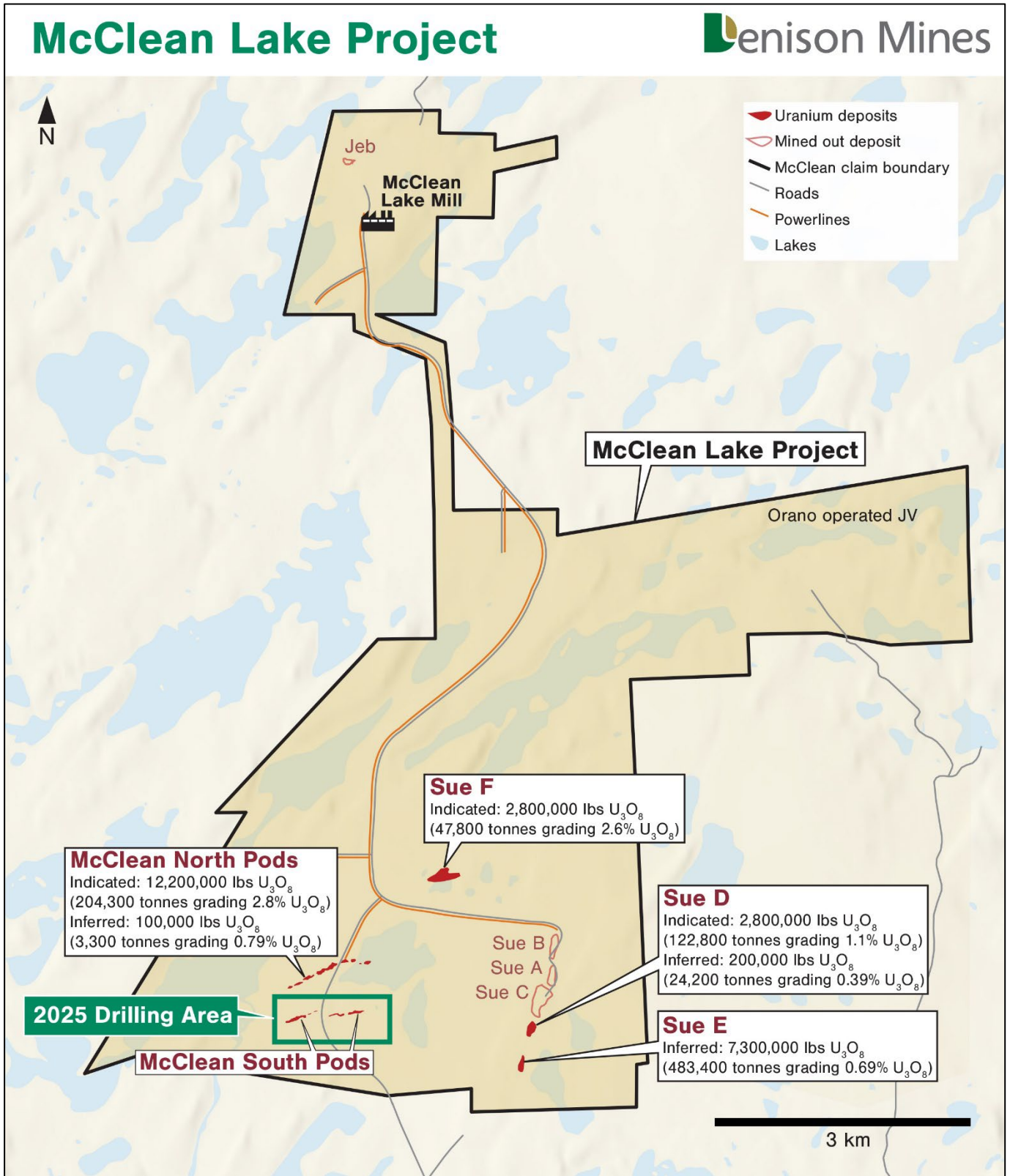


Figure 2 – McClean Lake South 8C and 8E Pod – 2025 Drilling

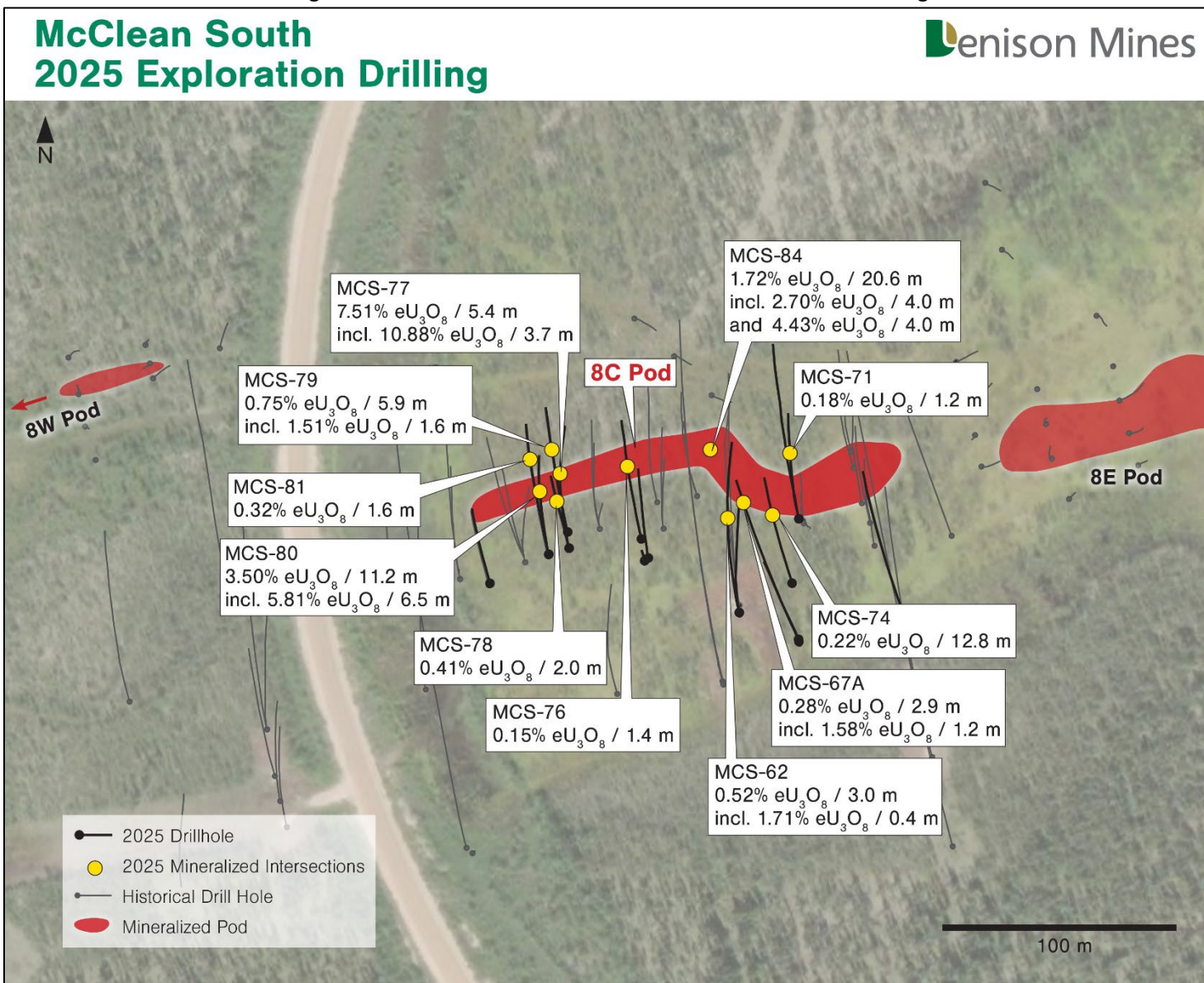


Figure 3 – McClean Lake South 8W Pod – 2025 Drilling

