Denison Mines Corp.
1100 – 40 University Ave
Toronto, ON M5J 1T1
www.denisonmines.com

PRESS RELEASE

DENISON ANNOUNCES INITIATION OF ISR FIELD TESTING AS THE SUMMER FIELD PROGRAM COMMENCES AT WHEELER RIVER

Toronto, ON – June 26, 2019. Denison Mines Corp. ("Denison" or the "Company") (DML: TSX, DNN: NYSE American) is pleased to announce the commencement of In-Situ Recovery ("ISR") field testing, as part of an active summer 2019 field program planned for the Company's 90% owned Wheeler River Uranium Project ("Wheeler River") in northern Saskatchewan, Canada. Key components of the field program include:

- **ISR Field Testing:** Initiation of an ISR field test program at the Phoenix deposit, designed to collect an extensive database of hydrogeological data. The data will be used to evaluate the ISR mining conditions present at the deposit, and is expected to be incorporated into a detailed ISR mine plan, as part of the completion of a Feasibility Study ("FS") for the project;
- **Environmental Baseline Data Collection:** Continuation and expansion of the collection of certain environmental baseline data to support the Wheeler River Environmental Impact Assessment ("EIA"); and
- **Exploration Drilling:** Approximately 5,000 metres of diamond drilling in 10 holes expected to focus on the follow-up and expansion of unconformity-hosted uranium mineralization intersected along the K-West trend during the summer 2018 and winter 2019 programs.

David Cates, President and CEO of Denison, commented, "*We are pleased to have our summer field program at Wheeler River underway. A significant amount of work has gone into preparing and planning for the ISR field test, which will be the first of its kind in the Athabasca Basin. Denison has assembled a team of seasoned ISR and drilling experts to complement our extensive geological knowledge of the Phoenix deposit – working together to facilitate the planning and implementation of the program. These tests represent an important step in increasing the confidence in the ISR application at Phoenix and de-risking the project as we advance toward a Feasibility Study.*

On the exploration front, there remains significant potential on the Wheeler River property. The prospect of discovering additional high-grade deposits, with the potential to form satellite ISR operations, is compelling from both an exploration and economic perspective. Our exploration team has designed a focused program to test for the initial indications of such deposits along the K West trend, which will follow-up on previous encouraging results".

ISR Field Testing

As outlined within the Company's Pre-Feasibility Study ("PFS") completed in late 2018, additional field work is required to increase confidence and reduce risk associated with the application of the ISR mining method at Phoenix. Previous field and laboratory testing, completed as part of the PFS, indicated that flow of mining solution through the ore zone is expected to be viable at rates envisaged for the planned rate of production. The field work planned for 2019 is focused on in-situ testing in the orebody, using water to evaluate hydraulic conditions that can be used to assess mining solution flow between a series of test wells. The information collected through this process is expected to increase the overall confidence of the application of ISR and facilitate detailed mine planning as part of a FS.

Denison has engaged Petrotek Corporation ("Petrotek") to facilitate the design and implementation of ISR field testing at Phoenix. Petrotek specializes in technical evaluation and field operations regarding subsurface fluid flow and injection projects, with experience ranging from feasibility studies to facility

operation. The firm has more than 20 years of experience in the ISR uranium mining industry and currently provides consulting services to each of the ISR uranium miners in the United States.

Petrotek and Denison have designed an ISR field testing program specific to the unique geological characteristics of the Phoenix deposit. The testing program aims to provide hydrogeological testing across four areas ("Test Areas") of Phoenix Zone A, covering approximately 65% of the Indicated Mineral Resource estimated for the deposit. The Test Areas have been selected with the objective of covering each of the various fluid flow domains, and combinations thereof, expected to exist within the deposit. The domains have been defined from detailed geological databases and associated models, such that the Test Areas are collectively representative of the deposit as a whole. Data acquired from the ISR field testing program will be utilized to create an integrated hydrogeological model, which will form the basis for ISR wellfield and freeze dome design necessary for the FS and to support the EIA process.

Denison has initiated testing within Test Area 1 and plans to advance to Test Area 2 during the summer 2019 program, with the remaining Test Areas (Test Area 3 and 4) to be completed during 2020. Figure 2 illustrates the Test Areas planned for ISR field testing within Phoenix Zone A. The objective within each Test Area will be to efficiently establish the fundamental hydraulic characteristics of the orebody, the overlying sandstone and overburden formations, and the underlying basement rocks. This will be achieved through the installation of several near-vertical HQ and PQ sized wells between 7 and 15 metres apart and the subsequent pumping, injection and monitoring of ground water to establish the hydraulic connectivity between wells. The program will utilize existing exploration drill holes for well installation, where possible. Certain large-diameter wells, commencing with one well per Test Area, are also planned to determine optimal drilling and installation methodologies for the "commercial-scale wells" expected to be used for production. At this stage, the large-diameter wells are designed to allow for the insertion of larger pumps and additional downhole equipment that will facilitate commercial scale pump and injection tests and the evaluation of certain permeability enhancement techniques.

Additional supportive permeability and porosity tests are planned through the ore zone, and are expected to include hydraulic conductivity tests (packer testing) and downhole geophysics (nuclear magnetic resonance and neutron), where borehole conditions allow. Mineralized core samples from the orebody, obtained in new holes or by wedging from existing boreholes, will be subject to detailed onsite geological and geotechnical logging and permeability (permeameter) testing, and will be preserved to facilitate future planned laboratory-based metallurgical test work.

Environmental Baseline Data Collection

Denison recently announced the initiation of the EIA process for Wheeler River, following acceptance of the Provincial Technical Proposal and Federal Project Description by the relevant regulatory agencies (see Denison's press release dated June 3, 2019). The summer program at Wheeler River will include the continuation and expansion of the collection of certain baseline environmental data to support the EIA. Baseline data collection is expected to include:

- Regional hydrogeological testing outside of the Phoenix deposit to establish baseline conditions within the local and regional groundwater system. The data collected, including groundwater levels, flow and quality, will form key inputs to groundwater models for the EIA;
- Continuation of the collection of aquatic, terrestrial, groundwater and atmospheric data;
- Continuation of the collection of waste rock geochemical data; and
- A heritage survey designed to cover certain areas of the project footprint outlined in the PFS (e.g. the airstrip), which were not completed during the previous program in 2017.

Exploration Drilling

Reconnaissance drill testing of the sub-Athabasca unconformity along the 4.5 kilometre-long K-West conductive trend has returned encouraging uranium and base metal sulphide intercepts together with other geological features commonly associated with unconformity-related uranium deposits (see Denison's press releases dated November 12, 2018 and May 1, 2019). Figure 3 illustrates the location of the K-West exploration target area.

Systematic follow-up drilling is warranted in this area, as many of the drill holes completed to date have not intersected the interpreted optimal target horizon, and the current drill hole spacing along strike ranges from 300 to 600 metres.

The summer 2019 exploration program is scheduled to commence in July 2019 and is expected to consist of approximately 5,000 metres of diamond drilling in 10 holes. The drilling is expected to be focused on testing targets along section and along strike of the previous drill holes at K West.

About Wheeler River

Wheeler River is the largest undeveloped uranium project in the infrastructure rich eastern portion of the Athabasca Basin region, in northern Saskatchewan – including combined Indicated Mineral Resources of 132.1 million pounds U_3O_8 at an average grade of 3.3% U_3O_8, plus combined Inferred Mineral Resources of 3.0 million pounds U_3O_8 at an average grade of 1.7% U_3O_8. The project is host to the high-grade Phoenix and Gryphon uranium deposits, discovered by Denison in 2008 and 2014, respectively, and is a joint venture between Denison (90% and operator) and JCU (Canada) Exploration Company Limited (10%).

A PFS was completed, considering the potential economic merit of developing the Phoenix deposit as an ISR operation and the Gryphon deposit as a conventional underground mining operation. Taken together, the project is estimated to have mine production of 109.4 million pounds U_3O_8 over a 14-year mine life, with a base case pre-tax NPV of $1.31 billion (8% discount rate), Internal Rate of Return ("IRR") of 38.7%, and initial pre-production capital expenditures of $322.5 million. The Phoenix ISR operation is estimated to have a stand-alone base case pre-tax NPV of $930.4 million (8% discount rate), IRR of 43.3%, initial pre-production capital expenditures of $322.5 million, and industry leading average operating costs of US$3.33/lb U_3O_8. The PFS is prepared on a project (100% ownership) and pre-tax basis, as each of the partners to the Wheeler River Joint Venture are subject to different tax and other obligations.

Further details regarding the PFS, including additional scientific and technical information, as well as after-tax results attributable to Denison's ownership interest, are described in greater detail in the NI 43-101 Technical Report titled "Pre-feasibility Study for the Wheeler River Uranium Project, Saskatchewan, Canada" dated October 30, 2018 with an effective date of September 24, 2018. A copy of this report is available on Denison's website and under its profile on SEDAR at www.sedar.com and on EDGAR at www.sec.gov/edgar.shtml.

About Denison

Denison is a uranium exploration and development company with interests focused in the Athabasca Basin region of northern Saskatchewan, Canada. In addition to the Wheeler River project, Denison's Athabasca Basin exploration portfolio consists of numerous projects covering approximately 310,000 hectares. Denison's interests in the Athabasca Basin also include a 22.5% ownership interest in the McClean Lake joint venture ("MLJV"), 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 and Midwest A deposits, and a 66.51% interest in the J Zone and Huskie deposits on the Waterbury Lake property. Each of Midwest, Midwest A, J Zone and Huskie 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.

For more information, please contact

David Cates (416) 979-1991 ext 362
President and Chief Executive Officer

Sophia Shane (604) 689-7842
Investor Relations

Follow Denison on Twitter @DenisonMinesCo

Qualified Persons

The disclosure of scientific and technical information regarding the Wheeler River Project in this news release was reviewed and approved by Dale Verran, MSc, P.Geo., Pr.Sci.Nat., the Company's Vice President, Exploration, 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: exploration (including drilling) and evaluation interpretations, activities, plans and objectives; the results of the PFS and expectations with respect thereto; development and expansion plans and objectives, including plans for the EA and other regulatory and feasibility study processes for Wheeler River; expectations regarding Denison's community engagement and MOUs with local communities; and expectations regarding its joint venture ownership interests and the continuity of its agreements with its partners.

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 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 12, 2019 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.

Cautionary Note to United States Investors Concerning Estimates of Measured, Indicated and Inferred Mineral Resources and Probable Mineral Reserves: *This news release may use the terms 'measured', 'indicated' and 'inferred' mineral resources. United States investors are advised that while such terms have been prepared in accordance with the definition standards on mineral reserves of the Canadian Institute of Mining, Metallurgy and Petroleum referred to in Canadian National Instrument 43-101 Mineral Disclosure Standards ("NI 43-101") and are recognized and required by Canadian regulations, the United States Securities and Exchange Commission ("SEC") 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.*** *The estimates of mineral reserves in this news release have been prepared in accordance with NI 43-101. The definition of probable mineral reserves used in NI 43-101 differs from the definition used by the SEC in the SEC's Industry Guide 7. Under the requirements of the SEC, mineralization may not be classified as a "reserve" unless the determination has been made, pursuant to a "final" feasibility study that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. Denison has not prepared a feasibility study for the purposes of NI 43-101 or the requirements of the SEC. Accordingly, Denison's probable mineral reserves disclosure may not be comparable to information from U.S. companies subject to the reporting and disclosure requirements of the SEC.*

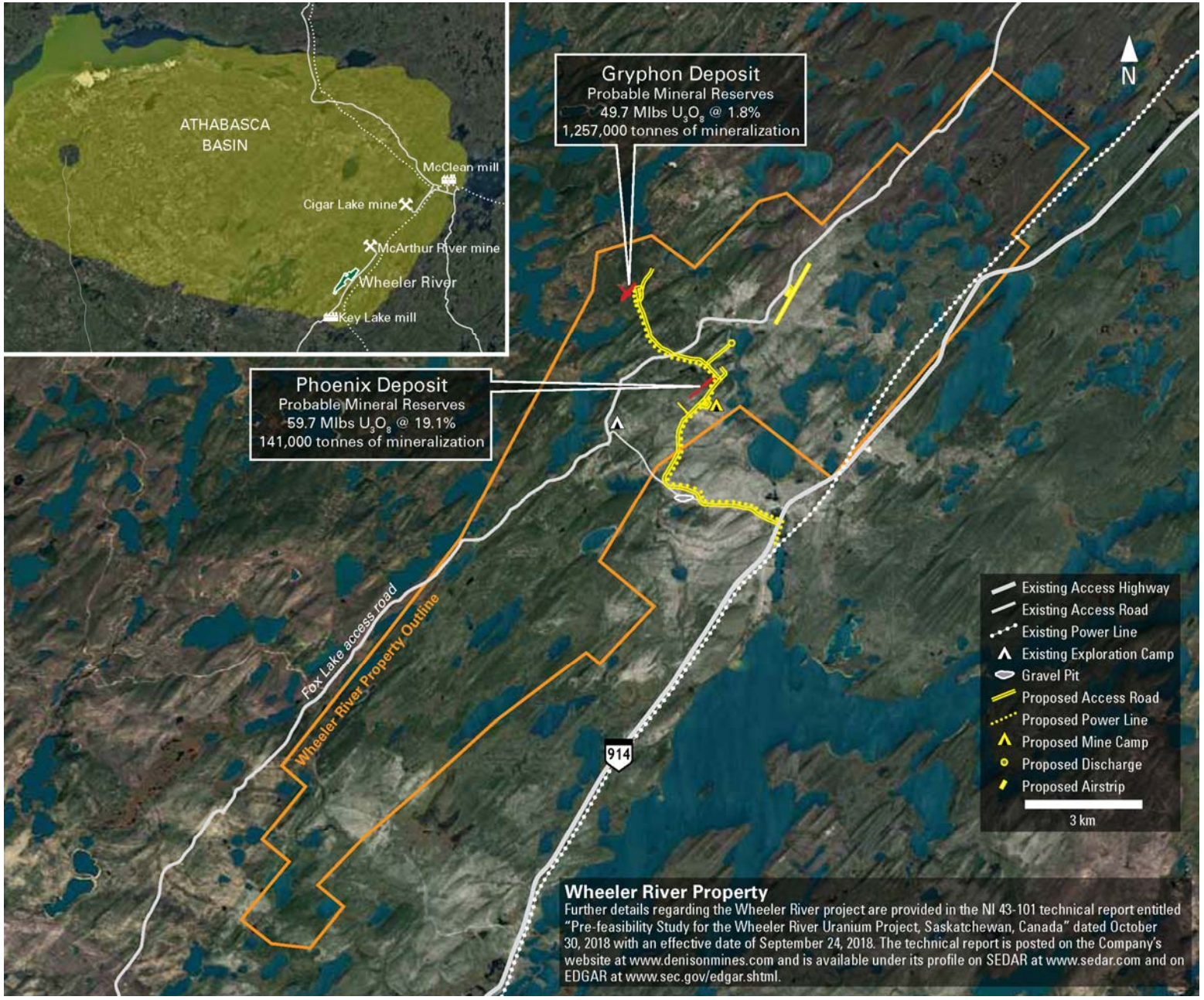

Figure 1. Location map of Wheeler River showing existing and proposed infrastructure.

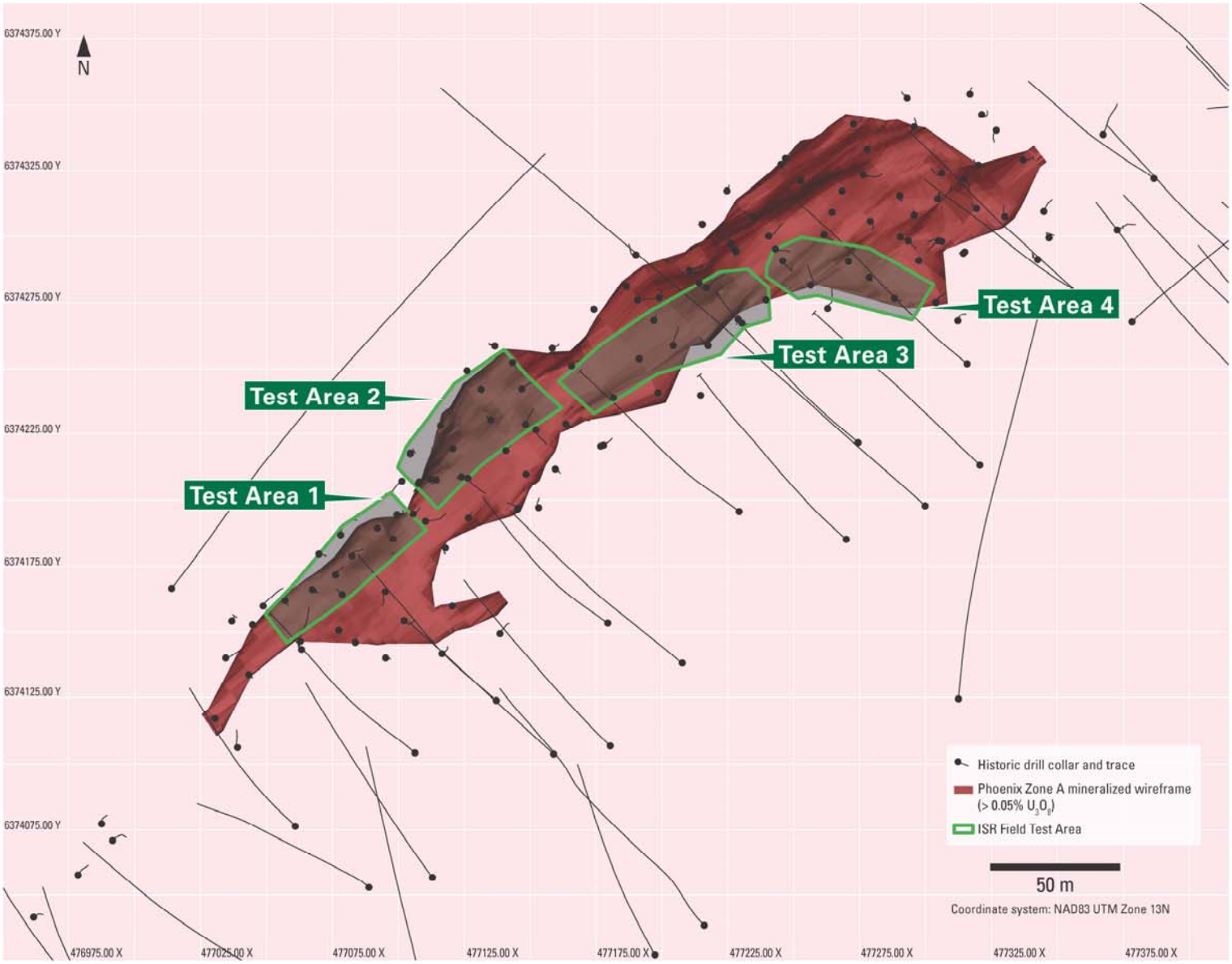

Figure 2. Phoenix Zone A plan view showing Test Areas delineated for ISR field testing.

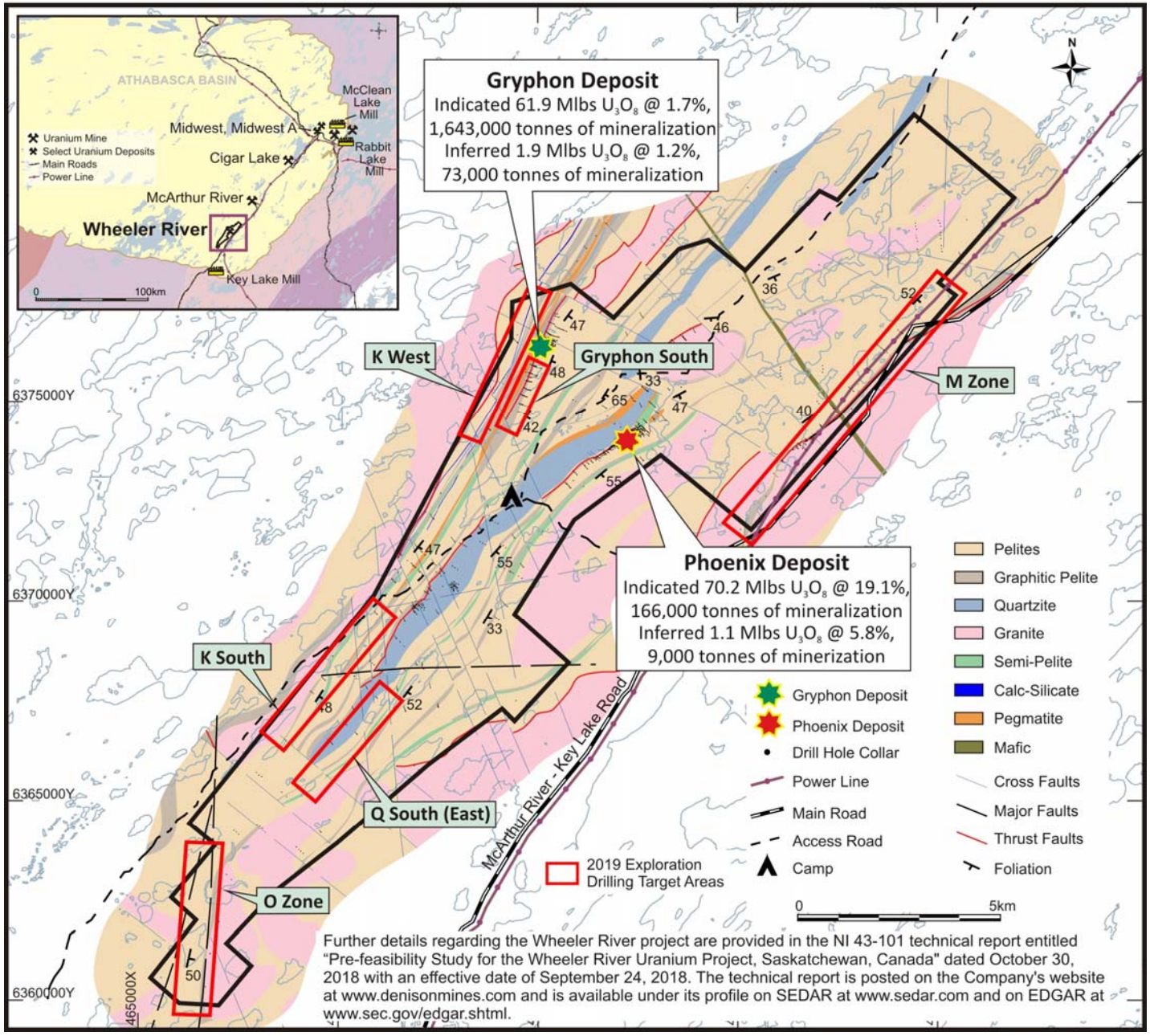

Figure 3. Basement geology map for Wheeler River showing the 2019 exploration targets areas, including K West.