



**Denison Mines Corp.**

**2023 Annual Information Form**

March 28, 2024

## About this Annual Information Form

This annual information form (“AIF”) is dated March 28, 2024. Information in this AIF is stated as at December 31, 2023 unless specified otherwise.

In this AIF, references to the “Company” or “Denison” refer to Denison Mines Corp., its subsidiaries and affiliates, or any one of them, as applicable.

This AIF has been prepared in accordance with Canadian securities laws and contains information regarding Denison’s history, business, mineral reserves and resources, the regulatory environment in which Denison does business, the risks that Denison faces and other important information for Denison’s shareholders.

### Financial Information

Unless otherwise specified, all dollar amounts referred to in this AIF are stated in Canadian dollars (“CAD”). References to “US\$” or “USD” mean United States dollars.

Financial information is generally derived from consolidated financial statements that have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

### Caution about Forward-Looking Information

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

Generally, the use of words and phrases like “plans”, “expects”, “is expected”, “budget”, “scheduled”, “estimates”, “forecasts”, “intends”, “anticipates”, or “believes”, or the negatives and/or variations of such words and phrases, or statements that certain actions, events or results “may”, “could”, “would”, “might” or “will” “be taken”, “occur”, “be achieved” or “has the potential to” and similar expressions are intended to identify forward-looking information.

Forward-looking information involves known and unknown risks, uncertainties, material assumptions and other factors that may cause actual results or events to differ materially from those expressed or implied by such forward-looking statements. Denison believes that the expectations and assumptions reflected in this forward-looking information are reasonable, but no assurance can be given that these expectations will prove to be correct. Forward-looking information should not be unduly relied upon. This information speaks only as of the date of this AIF, and Denison will not necessarily update this information, unless required by securities laws.

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## Examples of Forward-Looking Information

This AIF contains forward-looking information in a number of places, including statements pertaining to Denison's:

- expectations regarding capital and uses of capital
- operational and business outlook, including exploration, evaluation and development plans and objectives
- plans for capital expenditure programs, exploration and development expenditures and reclamation costs and timing
- results of its exploration programs
- results of the Phoenix FS and Gryphon PFS Update and plans with respect to the EA, regulatory and development process (as terms are defined below)
- results of its Waterbury PEA (as defined below) and related plans and objectives
- estimates of its mineral reserves and mineral resources
- expectations regarding future uranium prices and/or applicable foreign exchange rates
- expectations regarding the process for and receipt of regulatory approvals, permits and licences under governmental and other applicable regulatory regimes
- expectations about 2024 and future market prices, production costs, nuclear energy and global uranium supply and demand
- expectations regarding ongoing joint arrangements and Denison's share of same
- expectations regarding additions to its mineral reserves and resources through acquisitions and exploration
- expectations regarding toll milling revenues generated by McClean Lake mill, and the relationships with its contractual partners with respect thereto
- future royalty and tax payments and rates
- expectations regarding possible impacts of litigation and regulatory actions

Statements relating to "mineral resources" are deemed to be forward-looking information, as they involve the implied assessment, based on certain estimates and assumptions that the mineral resources described can be profitably produced in the future.

## Material Risks

Denison's actual results could differ materially from those anticipated. Management has identified the following risk factors which could have a material impact on the Company or the trading price of its common shares ("**Shares**"):

- the capital intensive nature of the mining industry and the uncertainty of funding
- history and periods of negative cash flow
- global financial conditions, including market volatility and global inflation, and related operational risks
- the speculative nature of exploration and development projects
- the risks of, and market impacts on, developing mineral properties
- risks associated with the selection of novel mining methods
- dependence on obtaining licenses, and other regulatory and policy risks
- uncertainty regarding engagement with Canada's First Nations and Métis
- pandemic or other health related disruptions
- environment, health, safety and other regulatory compliance risks

- health and safety risks
- the imprecision of mineral reserve and resource estimates
- impacts of fluctuations in global demand and changes in international trade restrictions
- the impact of uranium price volatility on the valuation of Denison's assets, including mineral reserves and resources, and the market price of its Shares
- uncertainty regarding public acceptance of nuclear energy and competition from other energy sources
- volatility in the market price of the Company's Shares
- the risk of dilution from future equity financings
- dependence on other operators of the Company's projects
- reliance on contractors, experts and other third parties
- devaluation of any physical uranium held by the Company, and risk of losses, due to fluctuations in the price of uranium and/or foreign exchange rates
- reliance on uranium storage facilities
- the risk of failure to realize benefits from transactions
- the risk of Denison's inability to exploit, expand or replace mineral reserves and mineral resources
- competition for properties
- risk of challenges to property title and/or contractual interests in Denison's properties
- the risk of failure by Denison to meet its obligations to its creditors
- change of control restrictions
- uncertainty as to reclamation and decommissioning liabilities and timing
- potential for technological innovation rendering Denison's products and services obsolete
- liabilities inherent in mining operations and the adequacy of insurance coverage
- containment management of waste materials
- the ability of Denison to ensure compliance with anti-bribery and anti-corruption laws
- the uncertainty regarding risks posed by climate change
- the reliance of the Company on its information systems and the risk of cyber-attacks on those systems
- maintenance of key infrastructure and equipment
- dependence on key personnel
- potential conflicts of interest for the Company's directors who are engaged in similar businesses
- limitations of disclosure and internal controls
- the potential influence of Denison's largest Shareholder, Korea Electric Power Corporation ("KEPCO") and its subsidiary, Korea Hydro & Nuclear Power ("KHNP")
- Risks for United States investors

The risk factors listed above are discussed in more detail later in this AIF (see "Risk Factors"). The risk factors discussed in this AIF are not, and should not be construed as being, exhaustive.

### **Material assumptions**

The forward-looking statements in this AIF and the documents incorporated by reference are based on material assumptions made by management of the Company, including the following, which may prove to be incorrect:

- the budget for 2024, including plans for exploration and evaluation activities and estimated costs, as well as the assumptions regarding market conditions and other factors upon which Denison's expenditure expectations have been based
- Denison's ability to execute its business plans for 2024 and beyond
- the ability of the Company to, and the means by which it can, raise additional capital to advance other exploration, evaluation, and project development objectives
- Denison's ability to obtain all necessary regulatory approvals, permits and licences for its planned activities under governmental and other applicable regulatory regimes
- expectations regarding the demand for, and supply of, uranium, the outlook for long-term contracting, changes in regulations, public perception of nuclear power, and the construction of new and relicensing of existing nuclear power plants
- expectations regarding spot and long-term prices and realized prices for uranium
- expectations regarding Denison's holdings of physical uranium, including that the physical uranium holdings will be advantageous for project financing efforts and/or in securing future long-term uranium supply agreements
- expectations regarding tax rates, currency exchange rates and interest rates
- Denison's decommissioning and reclamation obligations and the status and ongoing maintenance of agreements with third parties with respect thereto
- mineral reserve and resource estimates, and the assumptions upon which they are based
- Denison's, and its contractors', ability to comply with current and future environmental, safety and other regulatory requirements and to obtain and maintain required regulatory approvals
- Denison's operations are not significantly disrupted as a result of social or political activism, natural disasters, public health emergencies, governmental or political actions, litigation or arbitration proceedings, equipment or infrastructure failure, labour shortages, transportation disruptions or accidents, or other development or exploration risks

### **Cautionary Notes to U.S. Investors Concerning Resource and Reserve Estimates**

As a foreign private issuer reporting under the multijurisdictional disclosure system adopted by the United States, the Company has prepared this AIF in accordance with Canadian securities laws and standards for reporting of mineral resource estimates, which differ in some respects from United States standards. In particular, and without limiting the generality of the foregoing, the terms "measured mineral resources," "indicated mineral resources," "inferred mineral resources," and "mineral resources" used or referenced in this AIF are Canadian mineral disclosure terms as defined in accordance with National Instrument 43-101 — Standards of Disclosure for Mineral Projects ("**NI 43-101**") under the guidelines set out in the Canadian Institute of Mining, Metallurgy and Petroleum Standards for Mineral Resources and Mineral Reserves, Definitions and Guidelines, May 2014 (the "**CIM Standards**"). The Securities and Exchange Commission (the "**SEC**") recognizes estimates of "measured mineral resources", "indicated mineral resources" and "inferred mineral resources". In addition, the SEC's definitions of "proven mineral reserves" and "probable mineral reserves" are "substantially similar" to the corresponding definitions under the CIM Standards definition that are required under NI 43-101. Investors are cautioned that while the above terms are "substantially similar" to the corresponding CIM Standards definition, there are differences between the definitions under the United States

Securities Exchange Act of 1934, as amended (the “**U.S. Exchange Act**”) and the CIM Standards definition. Accordingly, there is no assurance any mineral reserves or mineral resources that the Company may report as “proven mineral reserves”, “probable mineral reserves”, “measured mineral resources”, “indicated mineral resources” and “inferred mineral resources” under NI 43-101 would be the same had the Company prepared the mineral reserve or mineral resource estimates under the standards adopted under the U.S. Exchange Act. For the above reasons, information contained in the AIF and other documents incorporated by reference herein containing descriptions of mineral deposits may not be comparable to similar information made public by U.S. companies subject to the reporting and disclosure requirements under the United States federal securities laws and the rules and regulations thereunder. Additionally, investors are cautioned that “inferred mineral resources” have a great amount of uncertainty as to their existence, and great uncertainty as to their economic feasibility. Under Canadian rules, estimates of inferred mineral resources may not form the basis of feasibility or other economic studies, except in limited circumstances. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. The term “resource” does not equate to the term “reserves”. Investors should not assume that all or any part of measured or indicated mineral resources will ever be converted into mineral reserves. Investors are also cautioned not to assume that all or any part of an inferred mineral resource exists or is economically mineable.

## About Denison

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Denison Mines Corp. is engaged in uranium exploration, development and mining. The registered and head office of Denison is located at 1100 – 40 University Avenue, Toronto, Ontario, M5J 1T1, Canada. Denison’s website address is [www.denisonmines.com](http://www.denisonmines.com).

The Shares are listed on the Toronto Stock Exchange (“TSX”) under the symbol “DML” and on the NYSE American under the symbol “DNN.”

Computershare Investor Services Inc. acts as the registrar and transfer agent for the Shares. The address for Computershare Investor Services Inc. is 100 University Avenue, 8th Floor, Toronto, ON, M5J 2Y1, Canada, and the telephone number is 1-800-564-6253.

Denison is a reporting issuer in each of the Canadian provinces and territories. The Shares are also registered under the U.S. Exchange Act, and Denison files periodic reports with the SEC.

### Acknowledgement

Denison respectfully acknowledges that its business operates in Canada on lands that are in the traditional territory of Indigenous peoples. Denison’s activities encompass the entire mining life cycle, from early-stage exploration to advanced project evaluation, construction, operation, closure and restoration – with the potential for activities to span many decades. As such, Denison is committed to collaborating with Indigenous peoples and communities to build long-term, respectful, trusting, and mutually beneficial relationships and aspires to avoid any adverse impacts of Denison’s activities and operations.

Denison has adopted an Indigenous Peoples Policy, which reflects the Company’s recognition of the important role of Canadian business in the process of reconciliation with Indigenous peoples in Canada and outlines the Company’s commitment to take action towards advancing reconciliation. A copy of the Indigenous Peoples Policy is available on Denison’s website, in Déne, Cree, English and French languages.

Denison’s Head Office is located in the traditional territory of many nations, including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee and the Wendat peoples, and is now home to many diverse First Nations, Inuit and Métis peoples. Denison also acknowledges that Toronto is covered by Treaty 13 with the Mississaugas of the Credit.

Denison’s mining and mineral exploration operations in Saskatchewan, including its office in Saskatoon and various project interests in northern Saskatchewan, are located in regions covered by Treaty 6, Treaty 8 and Treaty 10, which encompass the traditional lands of the Cree, Dakota, Déne, Lakota, Nakota, Saulteaux, within the homeland of the Métis and within Nuhenéné.

Denison’s flagship Wheeler River Uranium Project, in particular, is located in northern Saskatchewan within the boundaries of Treaty 10, in the traditional territory of English River First Nation, in the homeland of the Métis and within Nuhenéné.

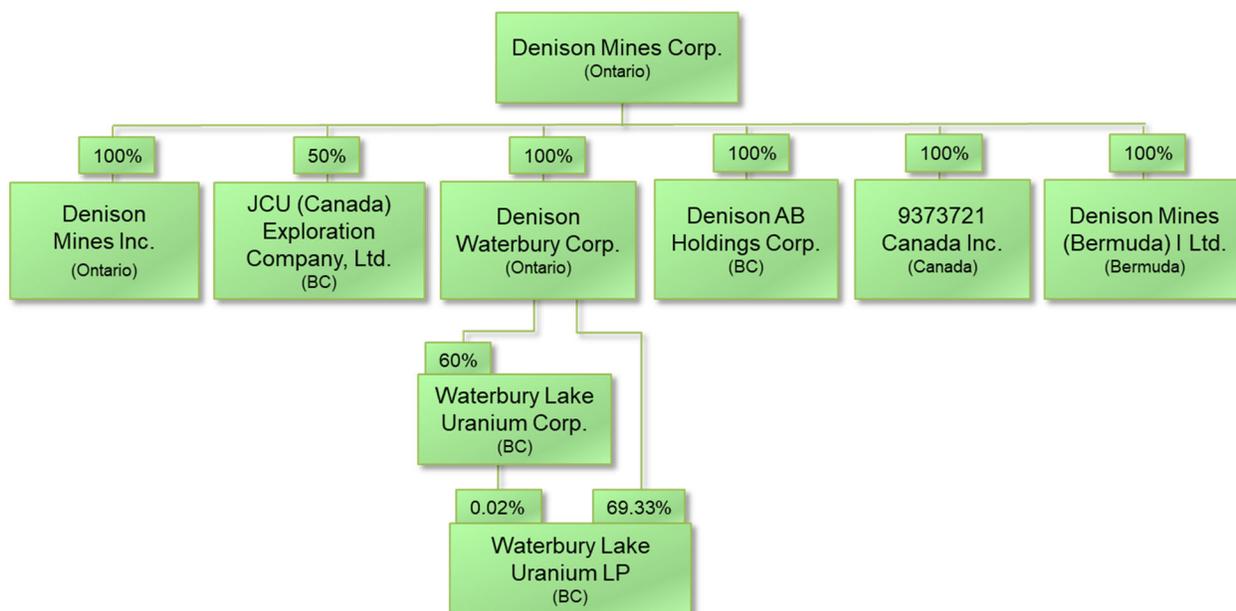
Denison’s legacy mines operations in the Elliot Lake region of northern Ontario are located within the boundaries of the Robinson Huron Treaty of 1850, signatories to which include the Serpent River First Nation.

## Denison’s Team

At the end of 2023, Denison had a total of 64 active employees, all of whom were employed in Canada. None of the Company’s employees are unionized.

## Denison’s Structure

Denison conducts its business through a number of subsidiaries and joint arrangements. The following is a diagram depicting the corporate structure of Denison, its active subsidiaries and corporate and partnership joint arrangements as at December 31, 2023, including the name, jurisdiction of incorporation and proportion of ownership interest in each.



JCU (Canada) Exploration Company, Ltd. (“**JCU**”) is owned by Denison (50%) and UEX Corporation (“**UEX**”, 50%). Denison and UEX are parties to a shareholders agreement governing the management of JCU and UEX, a wholly-owned subsidiary of Uranium Energy Corp., was appointed manager for JCU pursuant to the terms of such shareholders agreement.

The Waterbury Lake Uranium Limited Partnership (“**WLULP**”) is held by Denison (69.33%) and Korea Waterbury Uranium Limited Partnership (“**KWULP**”) (30.65%) as limited partners and Waterbury Lake Uranium Corporation (“**WLUC**”) (0.02%), as general partner, with Denison’s aggregate interest in the partnership being 69.35%.

## The Formation of Denison Mines Corp.

The Denison name has a long history in the Canadian uranium mining industry. Based on company archives, the Company’s involvement in the uranium mining industry dates back to 1954, when a predecessor to modern Denison acquired uranium claims in the Elliot Lake region of Ontario, Canada.

Denison Mines Corp. was established by articles of amalgamation as International Uranium Corporation (“**IUC**”) effective May 9, 1997 pursuant to the *Business Corporations Act* (Ontario) (the “**OBCA**”). On December 1, 2006, IUC combined its business and operations with Denison

Mines Inc. (“**DMI**”), by plan of arrangement under the OBCA (the “**IUC Arrangement**”). Pursuant to the IUC Arrangement, all of the issued and outstanding shares of DMI were acquired in exchange for IUC’s shares. Effective December 1, 2006, IUC’s articles were amended to change its name to “Denison Mines Corp.”

Denison subsequently completed a plan of arrangement with Energy Fuels Inc. in 2012 and filed articles of amalgamation on January 1, 2014, July 1, 2014 and July 3, 2014 in connection with Denison’s acquisitions of JNR Resources Inc. and Fission Energy Corp. (“**Fission**”).

## **Denison Overview**

### Uranium Exploration and Development

Denison’s uranium property interests are held directly by the Company and/or indirectly through DMI, Denison Waterbury Corp. and Denison AB Holdings Corp.

#### **Denison’s Key Assets – Focused in the Athabasca Basin Region of Saskatchewan:**

- An effective 95% interest in, and operator of, the Wheeler River Uranium project (“**Wheeler**” or “**Wheeler River**”), which is host to the high-grade Phoenix and Gryphon uranium deposits – together representing the largest undeveloped uranium project in the infrastructure rich eastern Athabasca Basin.
- A 69.35% interest in, and operator of, the Waterbury Lake project, which includes the Tthe Heldeth Túé (“**THT**”, formerly J Zone) and Huskie deposits.
- A 22.50% interest in the McClean Lake uranium processing facility and uranium deposits, through its interest in the McClean Lake Joint Venture (“**MLJV**”) operated by Orano Canada Inc. (“**Orano Canada**”).
- A 25.17% interest in the Midwest uranium project, which is host to the Midwest Main and Midwest A deposits, through its interest in the Midwest Joint Venture (“**MWJV**”) operated by Orano Canada.
- Through its 50% ownership of JCU, 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%).
- An extensive portfolio of exploration properties located in the Athabasca Basin.

### Toll Milling

Denison is a party to a toll-milling arrangement through its 22.5% interest in the MLJV, whereby ore is processed for the Cigar Lake Joint Venture (“**CLJV**”) at the McClean Lake processing facility (the “**Cigar Toll Milling**”). In February 2017, Denison completed a transaction (the “**Ecora Transaction**”) with Ecora Resources PLC (“**Ecora**”), formerly known as Anglo Pacific Group PLC, and its wholly owned subsidiary Centaurus Royalties Ltd. to raise gross proceeds to Denison of \$43,500,000. The Ecora Transaction monetized Denison’s future share of the Cigar Toll Milling,

providing Denison with the financial flexibility to advance its interests in the Athabasca Basin, including the Wheeler River project.

While the Ecora Transaction monetized certain future toll milling receipts from the Cigar Toll Milling, Denison retains a 22.50% strategic ownership stake in the MLJV and McClean Lake processing facility. See “Denison’s Operations – Cigar Lake Toll Milling – Ecora Transaction”.

## Developments Over the Last Three Years

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### 2021...

#### Project Developments – Proposed Phoenix ISR Operation

In February, Denison announced completion of its 2021 assessments and de-risking plans for the in-situ recovery (“**ISR**”) mining method planned for Wheeler River’s Phoenix deposit (“**Phoenix**”). The Wheeler River Joint Venture (“**WRJV**”) approved a \$24.0 million budget for 2021 (100% basis, Denison’s share \$19.4 million), to fund activities including the advancement of engineering studies, metallurgical testing, and a 2021 ISR field program. The budget also supported the resumption of activities related to the Environmental Assessment process (the “**EA**”) for Wheeler River being undertaken in accordance with the requirements of the *Canadian Environmental Assessment Act, 2012* and the *Saskatchewan Environmental Assessment Act*, which had been temporarily suspended in 2020 amidst the significant social and economic disruption resulting from the COVID-19 pandemic and the Company’s commitment to ensure employee safety, support public health efforts to limit transmission of COVID-19, and exercise prudent financial discipline. The results of the 2021 ISR field program supported the permitting and preparation of the FFT (defined below) and the EA and FS processes.

In July, Denison announced, as part of its 2021 ISR field program, it had completed the installation of a five-spot large-diameter commercial scale well (“**CSW**”) test pattern in the Phase 1 area of Phoenix Zone A (“**Phase 1**”), to facilitate further hydrogeologic testing and assessment of down-hole permeability enhancement tools. In addition, nine of eleven planned monitoring wells (“**MWs**”) were installed within the Phase 1 area, to facilitate ongoing observation of the current and future hydrogeological test work – allowing for detailed hydrogeological assessment and water quality sampling.

In August, Denison reported positive interim results from the ongoing ISR metallurgical test program. Test work consistently supported an ISR mining uranium head-grade for Phoenix in excess of the 10 g/L assumed in the Pre-Feasibility Study for the Wheeler River project completed in 2018 (“**2018 PFS**”). Accordingly, the Company adapted its plans for the remaining metallurgical test work to reflect a 50% increase in the head-grade of uranium bearing solution (“**UBS**”) to be recovered from the ISR mining wellfield, of 15 grams per litre (“**g/L**”).

In October, the Company announced the initial results of the highly successful ISR field test program. The program results were highlighted by: (a) achieving commercial-scale production flow rates consistent with those assumed in the 2018 PFS; (b) demonstrating hydraulic control of injected solution during the ion tracer test; (c) establishing breakthrough times between injection and recovery wells consistent with previously prepared estimates; and (d) demonstrating the ability to remediate the five-spot CSW test pattern.

Given consistently positive results from field and laboratory testing, Denison and the WRJV approved the initiation of the formal FS report process for the Phoenix ISR project, and appointed Wood Canada Limited (“**Wood**”) as independent lead author of the FS.

For further information, see “*Mineral Properties - Wheeler River - Evaluation Activities*” below.

### Project Developments – Wheeler River Regional Exploration

In January, the Company reported the results from its 2020 regional exploration program at Wheeler River, which included the discovery of new high-grade unconformity-hosted uranium mineralization along the K West conductive trend on the western side of the Wheeler River property, approximately four kilometers north-northwest of Phoenix. The uranium mineralization discovered is interpreted to straddle the unconformity contact of the underlying basement rocks and the overlying Athabasca sandstone. In addition to high-grade uranium, the assay results were highlighted by the presence of high-grade nickel.

In February, the Company reported the results from the 2020 exploration and expansion drilling program focused on the area proximal to Phoenix. As part of this program, 19 drill holes were completed for a total of approximately 7,400 metres – all of which were located at, but outside of the extents of the mineral resources currently defined for, Phoenix. The results from the program were highlighted by the intersection of high-grade uranium mineralization in Zone C, where no mineral resource is currently estimated, including: 5.69%  $U_3O_8$  over 5.0 metres in WR-328D1, located approximately 22 metres northeast of historical mineralized hole WR-368 (1.59%  $U_3O_8$  over 2.0 metres); and 8.84%  $U_3O_8$  over 2.5 metres in WR-767D1, located approximately 35 metres to the northeast of WR-328D1.

In July, drill hole GWR-045 was completed as part of the ISR field test program as a MW to the northwest of the CSW test pattern. Based on the mineral resources currently estimated for Phoenix, GWR-045 was expected to intersect low-grade uranium mineralization on the northwest margin of the deposit, approximately 5 metres outside of the boundary of the Phoenix Zone A high-grade resource domain. However, the drill hole intersected a thick interval of high-grade unconformity-associated uranium mineralization grading of 22.0%  $eU_3O_8$  over 8.6 metres. See “Developments Over the Last Three Years – 2022...” for detail of follow-up drilling results.

### Other Project Developments

In April, Denison announced that new high-grade unconformity-hosted uranium mineralization was discovered during the winter 2021 exploration program completed at McClean Lake. The exploration program was operated by Orano Canada, 77.5% owner and operator of the MLJV. Three of the final four drill holes completed during the winter 2021 program returned uranium mineralization at the McClean South target area. Based on subsequently received assay results, the results were highlighted by drill hole MCS-34, which returned 8.67%  $U_3O_8$  over 13.5 metres (including 78.43%  $U_3O_8$  over 1.1 metres).

In November, Denison and Orano Canada announced the successful completion of a five-year test mining program deploying the patented Surface Access Borehole Resource Extraction (“**SABRE**”) mining method on the McClean Lake property. The program was highlighted by the completion of the final stage of the program from May to September 2021 with four mining cavities successfully excavated to produce approximately 1,500 tonnes of high-value ore ranging in grade from 4%  $U_3O_8$  to 11%  $U_3O_8$ . The program was concluded with no safety, environmental or radiological incidents and confirmed the ability to achieve key operating objectives associated

with the test program – including targets for cavity diameter, rates of recovery, and mine production rates. The majority of the ore recovered from the test mining program was transferred to the McClean Lake mill, resulting in the production of approximately 176,000 pounds of U<sub>3</sub>O<sub>8</sub> (Denison's share: approximately 40,000 pounds of U<sub>3</sub>O<sub>8</sub>) in the fourth quarter of 2021.

### Financing Developments

In February, the Company completed a public offering (the “**February 2021 Offering**”) by way of a prospectus supplement to the June 2020 short form base shelf prospectus filed with the securities regulatory authorities in each of the provinces and territories of Canada and a registration statement on Form F-10, as amended (SEC File No. 333-238108) filed with the United States Securities and Exchange Commission (the “**2020 Prospectus**”). The February 2021 Offering was of 31,593,950 units of the Company at US\$0.91 per unit for gross proceeds of approximately US\$28.8 million, including the full exercise of the underwriters' over-allotment option, accounting for 4,120,950 units. Each unit consisted of one Share and one-half of one transferable common share purchase warrant of the Company. Each full warrant was exercisable to acquire one Share of the Company at an exercise price of US\$2.00 for 24 months after issuance. Proceeds of the February 2021 Offering were used to fund evaluation and environmental assessment activities in support of the advancement of the proposed Phoenix ISR uranium mining operation at Wheeler River, as well as for general working capital purposes.

In March, the Company completed a private placement of 5,926,000 Shares that qualify as “flow-through shares” for purposes of the *Income Tax Act* (Canada) at a price of \$1.35 per share for gross proceeds of approximately \$8 million, the proceeds of which were used on the Company's exploration activities in 2021 and 2022. The income tax benefits of this issue were renounced to subscribers with an effective date of December 31, 2021.

And in March, the Company announced the completion of a public offering by way of a prospectus supplement to the 2020 Prospectus of 78,430,000 units of the Company at US\$1.10 per unit for gross proceeds of approximately US\$86.3 million, including the full exercise of the underwriters' over-allotment option, accounting for 10,230,000 units (the “**March 2021 Offering**”). Each unit consisted of one common share and one-half of one transferable common share purchase warrant of the Company. Each full warrant was exercisable to acquire one Share of the Company at an exercise price of US\$2.25 for 24 months after issuance. Net proceeds of the March 2021 Offering were used to fund the strategic purchase of physical uranium as an investment to support the potential future financing of the advancement and/or construction of Wheeler River and for general, corporate and administrative purposes. Denison ultimately acquired 2.5 million pounds U<sub>3</sub>O<sub>8</sub>, at a weighted average price of \$36.67 (US\$29.66) per pound U<sub>3</sub>O<sub>8</sub> (including purchase commissions of \$0.05 (US\$0.04) per pound U<sub>3</sub>O<sub>8</sub>) and a total cost of approximately \$91.675 million. The uranium spot price appreciated to \$53.25 (US\$42.00) per pound U<sub>3</sub>O<sub>8</sub> by December 31, 2021, resulting in a fair value gain on the Company's physical uranium holdings of approximately \$41.4 million for the year ended December 31, 2021.

In connection with the March 2021 Offering, the aggregate issuances pursuant to prospectus supplements under the 2020 Prospectus neared the 2020 Prospectus limit for aggregate issuance price of securities qualified for issuance by the 2020 Prospectus. Accordingly, Denison terminated its November 2020 equity distribution agreement with Cantor Fitzgerald Canada Corporation, Scotia Capital Inc., Cantor Fitzgerald & Co. and Scotia Capital (USA) Inc., providing for an at-the-market (“**ATM**”) equity offering program (the “**2020 ATM Program**”). In 2021, the Company issued 4,230,186 Shares under the 2020 ATM Program at an average price of \$0.93

for aggregate gross proceeds of \$3,914,000. The Company incurred issue expenses of \$466,000, including commissions of \$78,000, resulting in net proceeds after commissions of \$3,836,000.

In September, the Company filed a short form base shelf prospectus (“**2021 Prospectus**”) with the securities regulatory authorities in each of the provinces and territories of Canada and a registration statement on Form F-10, as amended (SEC File No. 333-258939) was filed with the SEC. The 2021 Prospectus qualified the public offering for sale of certain securities and combinations of securities, for an aggregate offering amount of up to \$250 million during the 25-month period beginning September 16, 2021.

And in September, the Company announced it had entered into an equity distribution agreement with Cantor Fitzgerald Canada Corporation, Scotia Capital Inc., Cantor Fitzgerald & Co. and Scotia Capital (USA) Inc. (“**EDA**”) providing for a new ATM equity offering program (the “**2021 ATM Program**”). The intention of the 2021 ATM Program was to allow Denison to, through the agents and from time to time, offer and sell, in Canada and the United States by means of ordinary brokers’ transactions through the facilities of the TSX and/or NYSE American, such number of Shares as would have an aggregate offering price of up to US\$50 million. The sale of Shares through the 2021 ATM Program were made pursuant to and qualified by a prospectus supplement to the 2021 Prospectus. In 2021, the Company issued 3,840,000 Shares under the 2021 ATM Program at an average price of \$2.08 per Share for aggregate gross proceeds of \$7,975,000. The Company incurred issue costs of \$748,000, including \$160,000 of commissions and \$588,000 associated with the set-up of the 2021 Prospectus and 2021 ATM Program, resulting in net proceeds after commissions of \$7,815,000.

In October, the Company sold, by private agreement, 32,500,000 common shares of GoviEx Uranium Limited (“**GoviEx**”), previously held by Denison for investment purposes, and 32,500,000 common share purchase warrants, entitling the holder to acquire one additional common share of GoviEx owned by Denison at an exercise price of \$0.80 for a term that expired on April 26, 2023. Denison received gross proceeds of \$15.6 million on the sale of the shares and warrants.

### Corporate Developments

In January, the Company amended and extended its credit facility with the Bank of Nova Scotia (the “**Credit Facility**”) to January 31, 2022.

In March, the Company entered into a Participation and Funding Agreement and Letter of Intent with the English River First Nation (“**ERFN**”) in connection with the advancement of the proposed ISR mining operation at Wheeler River, as well as an Exploration Agreement in respect of Denison’s exploration and evaluation activities within the ERFN traditional territories (the “**ERFN Exploration Agreement**”). These agreements reflect Denison’s desire to operate its business in a progressive and sustainable manner that respects ERFN rights and advances reconciliation with Indigenous peoples. The agreements provide ERFN with economic opportunities and other benefits, and establish a foundation for future collaboration between Denison and ERFN in an authentic, cooperative, and respectful way.

And in March, the Company announced its inclusion in the S&P/TSX Composite Index – the headline index for the Canadian equity market – effective prior to the open of trading on Monday March 22, 2021.

In May, in connection with the Annual General Meeting of Shareholders, changes were made to the composition of the Company’s Board of Directors, with Mr. Jack Lundin and Ms. Catherine

Stefan not standing for re-election at the meeting, and shareholders approving the appointment to the Board of Mr. David Neuburger and Ms. Jennifer Traub. In addition, Mr. Ron Hochstein was appointed Chair of the Board.

In July, Uranium Participation Corporation (“**UPC**”) completed an arrangement with Sprott Asset Management LP (“**Sprott**”) and certain affiliates, pursuant to which UPC was acquired by the Sprott Physical Uranium Trust. On completion of that transaction, Sprott became the manager of the Sprott Physical Uranium Trust, and the management services agreement (“**MSA**”) between Denison and UPC was terminated. In accordance with the terms of the MSA, Denison received a cash payment of approximately \$5.8 million in connection with the termination.

In August, Denison completed the acquisition of 50% of JCU from UEX for cash consideration of \$20.5 million (the “**JCU Acquisition**”) following UEX’s acquisition of 100% of JCU from Overseas Uranium Resources Development Co., Ltd. (“**OURD**”) for \$41 million. JCU currently holds a portfolio of 12 uranium project joint venture interests in Canada, including a 10% interest in Wheeler River, a 30.099% interest in the Millennium project (Cameco Corporation (“**Cameco**”) 69.901%), a 33.8118% interest in the Kiggavik project (Orano Canada 66.1882%), and a 34.4508% interest in the Christie Lake project (UEX 65.5492%).

In December, Denison formally adopted an Indigenous Peoples Policy (“**IPP**”), which reflects the Company’s recognition of the important role of Canadian business in the process of reconciliation with Indigenous peoples in Canada and outlines the Company’s commitment to take action towards advancing reconciliation. See “Environmental, Health, Safety and Sustainability Matters – Indigenous Peoples Policy and Reconciliation Action Plan” for more details.

## **2022...**

### Project Developments – Wheeler River

In February, Denison announced that it completed three drill holes during the fall of 2021 to follow up on the discovery of high-grade uranium mineralization in drill hole GWR-045 at Phoenix, which was located outside of the previously defined extent of the high-grade domain of Phoenix Zone A. All three follow-up holes returned intervals of high-grade uranium mineralization. The results were highlighted by drill hole GWR-049, which was expected to intersect a narrow high-grade interval according to then-current modeling, but instead returned 24.9% eU<sub>3</sub>O<sub>8</sub> over 4.2 metres.

In July, Denison announced that it received approval from the Province of Saskatchewan to prepare, construct, and operate the facilities required to carry out the ISR Feasibility Field Test (“**FFT**”) planned for the Phoenix deposit. The FFT was designed to use the existing commercial-scale ISR test pattern to perform a combined assessment of the Phoenix deposit’s hydraulic flow properties along with the leaching characteristics that had been assessed through the metallurgical core-leach testing program. The approval was granted by the Saskatchewan Minister of Environment and authorizes Denison to operate “pollutant control facilities”, which is typical for mining operations and allows for the management of material recovered from mineral extraction through to wastewater treatment, discharge, and storage (as applicable). The approval followed the completion of a process involving the review of and consultation on the Company’s permit application and supporting materials related to the FFT.

In August, the Company announced that it had received a Licence to Possess, Use, Store and Transfer a Nuclear Substance from the Canadian Nuclear Safety Commission (“**CNSC**”). With the

receipt of this approval, the Company was fully permitted to operate the FFT facility and carry out the process of recovering a uranium bearing solution from the Phoenix ore body.

Also in August, Denison announced the substantial completion of extensive metallurgical test work to define the mechanical components for the planned Phoenix processing plant as part of the FS underway for Wheeler River. The test work confirmed the ability to produce a yellowcake product that meets industry standard ASTM C967-13 specifications.

In September, the Company reported the completion of the construction and wet commissioning of the lixiviant injection system for the FFT and commencement of the leaching phase of the FFT.

In October, the Company announced that it had successfully recovered uranium bearing solution from the ISR FFT at targeted rates and grades, indicating that the hydrogeological system at Phoenix was responding as expected with pH trends, flow characteristics, and uranium recovery meeting expectations. The preliminary results demonstrated the successful acidification of the test pattern and recovery of uranium using the ISR mining method. Given the highly successful results of the FFT, lixiviant injection ceased, and operations at the Phoenix FFT site transitioned from the leaching phase of the FFT to the neutralization phase.

Also in October, Denison announced a significant regulatory milestone for Wheeler River with the submission of the draft Environmental Impact Statement (“EIS”) to the Saskatchewan Ministry of Environment and the CNSC. The EIS submission outlines the Company’s assessment of the potential effects, including applicable mitigation measures, of the proposed ISR uranium mine and processing plant planned for Wheeler River, and reflects several years of baseline environmental data collection, technical assessments, plus extensive engagement and consultation with Indigenous and non-Indigenous interested parties.

In November, Denison announced the CNSC had completed its conformity review of the draft EIS submitted for the proposed ISR uranium mine and processing plant. The CNSC determined the draft EIS met the requirements for the advancement of the EA process, and the federal technical review of the EIS commenced.

In December, Denison announced highly successful results from long-term core leach metallurgical testing completed to further support the establishment of ISR production and recovery curves to be used in the Phoenix FS. The Company completed a long-term test of a representative intact core sample using specialized equipment to replicate in-situ leaching conditions of the Phoenix deposit. The results were highlighted by: (a) overall recovery of uranium in excess of 97%, demonstrating excellent recovery of uranium from intact high-grade core without the use of permeability enhancement; (b) average recovered solution uranium head grade of 18.3 g/L, exceeding the assumed 15 g/L uranium head grade being used in plant designs; (c) continuous intact core leach testing over a period of 377 days, with uranium recovery head grades consistently maintained above 5 g/L during the final stages of the production curve and then declining during the ramp-down stage; and (d) maximum recovered solution uranium head grade of 49.8 g/L achieved using similar lixiviant concentrations as to those used during the FFT.

And in December, Denison reported that the neutralization phase of the FFT had been successfully completed, advising that sampling of MWs around the FFT site confirmed the successful restoration of the leaching zone to environmentally acceptable pH conditions, as outlined in the applicable regulatory approvals for the FFT. The neutralization phase was initiated in mid-October, following the highly successful completion of the leaching phase of the FFT, and was designed to confirm certain environmental assessment assumptions and verify the efficiency

and effectiveness of the neutralization process planned for ISR mining at Phoenix. The FFT was highlighted by the recovery of 14,400 pounds of  $U_3O_8$  dissolved in solutions generated during the leaching and neutralization phases of the test. The final phase of the FFT, involving the management of the recovered solution, was undertaken in 2023.

### Other Project Developments

In January, the Company announced that the CNSC approved an amendment to the operating licence for the MLJV and MWJV operations, which allows for the expansion of the McClean Lake Tailings Management Facility (“**TMF**”) and accepts the associated revised Preliminary Decommissioning Plan (“**PDP**”) and cost estimate. See “Denison’s Operations – McClean Lake Mill & Cigar Lake Toll Milling – Mill Licence” for more information.

In March, Denison reported that multiple new high-grade intercepts of unconformity-hosted uranium mineralization were discovered in the final three drill holes completed during the winter 2022 exploration program at the Waterfound property, operated by Orano Canada. Denison holds an effective 24.68% ownership interest in Waterfound through its direct interest in the joint venture and its 50% ownership of JCU. The results were highlighted by drill hole WF-68, which returned a broad zone of uranium mineralization, including a peak interval of 5.91%  $eU_3O_8$  over 3.9 metres (0.05%  $eU_3O_8$  cut-off) with a sub-interval grading 25.30%  $eU_3O_8$  over 0.7 metres, located approximately 800 metres west, along the La Rocque Conductive Corridor, of the previously discovered high-grade mineralization (including 4.49%  $U_3O_8$  over 10.53 metres) at the Alligator Zone.

In April, Denison completed the sale of 40,000 pounds of  $U_3O_8$ , representing the Company’s share of production from the SABRE test mining program completed at the MLJV in 2021. The uranium was sold at a price of \$74.65 (US\$59.25) per pound  $U_3O_8$ .

In September, Denison announced that assays received from exploration drilling completed at McClean Lake during the winter of 2022 resulted in a significant expansion of the high-grade unconformity-hosted zone of uranium mineralization discovered in 2021 between the McClean South 8W and 8E pods. Ten drill holes completed during 2022 by Orano Canada returned notable uranium mineralization, including drill hole MCS-58, which returned 2.96%  $U_3O_8$  over 15.5 metres, including 24.49%  $U_3O_8$  over 1.5 metres, located approximately 54 metres to the southeast of drill hole MCS-34, which was completed in 2021 and returned a mineralized interval of 8.67%  $U_3O_8$  over 13.5 metres. Overall, the results from 2022 have successfully expanded the footprint of the mineralized zone to approximately 180 metres in strike length.

Also in September, Denison announced that uranium mineralization was encountered in three of the seven drill holes completed during the summer exploration program at Waterfound, highlighted by drill hole WF-74A, which intersected 4.75%  $eU_3O_8$  over 13.3 metres, including a sub-interval grading 25.23%  $eU_3O_8$  over 0.5 metres. The mineralized intersection from WF-74A represents the best mineralized hole drilled on the Waterfound property to date and highlights the potential for the discovery of additional high-grade uranium mineralization further along strike to the west of the Alligator Zone.

### Financing Developments

During 2022, the Company issued 11,042,862 Shares under the 2021 ATM Program. The Shares were issued at an average price of \$1.83 per share for aggregate gross proceeds of \$20,200,000. Denison also recognized issue costs of \$599,000 related to the 2021 ATM Program Share

issuances which includes \$404,000 of commissions and \$195,000 other costs associated with the maintenance of the 2021 ATM Program. See “Denison’s Securities – ATM Program Activity”.

### Corporate Developments

In January, the Company amended and extended its Credit Facility to January 31, 2023.

Also in January, the Company executed a Repayment Schedule Agreement (the “**Repayment Agreement**”) with Uranium Industry a.s. (“**UI**”) pursuant to which the parties negotiated the repayment of the debt owing from UI to Denison with respect to the contingent proceeds of Denison’s sale to UI of its interest in the Gurvan Saihan Joint Venture in Mongolia in 2015 (the “**Mongolia Transaction**”). In accordance with the Repayment Agreement, the Company received aggregate installment payments in 2022 of US\$4,800,000.

And in January, Denison announced the appointment of Ms. Laurie Sterritt to the Board of Directors and the appointment of Mr. Kevin Himbeault as the Company’s Vice President Plant Operations & Regulatory Affairs.

In February, Mr. Jun Gon Kim resigned from the Board. Mr. Yun Chang Jeong joined the Board in early March, filling the vacancy created by Mr. Kim’s resignation.

In April, Denison released its inaugural ESG Report regarding the Company’s environmental, social and governance initiatives and demonstrating its ongoing commitment to sustainability and transparency. Denison’s ESG Reports focus on key ESG topics including the Company’s objective to maintain excellence in corporate governance practices, “best in class” engagement with communities potentially impacted by its activities, diversity in the Company’s workforce, and robust assessments of the environment and biodiversity in the regions within which it operates.

And in April, in connection with the updated PDP and related decrease in the financial assurances required for the MLJV and MWJV reclamation obligation, the Company entered into a further amendment with respect to the Credit Facility pursuant to which the pledged amount of cash required under the Credit Facility was decreased and the additional cash collateral was released.

In May, at Denison’s Annual General Meeting of Shareholders, Mr. Bob Dengler did not stand for re-election to the Board.

In June, Denison and Kineepik Métis Local #9 (“**KML**”) entered into a Participation and Funding Agreement (the “**KML PFA**”), which expresses Denison’s and KML’s mutual commitment to the co-development of an agreement supporting the advancement of the Phoenix ISR project. The KML PFA builds on an existing letter agreement between Denison and KML with respect to the support of KML’s contributions to, and participation in, the Federal and Provincial EA process. The parties also entered into an Exploration Agreement (the “**KML Exploration Agreement**”) in respect of Denison’s exploration and evaluation activities within KML’s land and occupancy area. These agreements reflect Denison’s commitment to the principles set out in the Company’s IPP and advancing reconciliation through taking action.

In October, Denison announced that it entered into an exploration agreement (the “**YNLRO Exploration Agreement**”) with the Ya’thi Néné Lands and Resources Office (“**YNLRO**”), Hatchet Lake Denesuliné First Nation, Black Lake Denesuliné First Nation, Fond du Lac Denesuliné First Nation (collectively, the “**Athabasca Nations**”) and the Northern Hamlet of Stony Rapids, the Northern Settlement of Uranium City, the Northern Settlement of Wollaston Lake and the Northern

Settlement of Camsell Portage (collectively, the “**Athabasca Communities**”) in respect of Denison’s exploration and evaluation activities within the traditional territory of the Athabasca Nations (the “**Nuhenéné**”). The YNLRO Exploration Agreement expresses the parties’ intention to build a long-term relationship between Denison and the YNLRO, Athabasca Nations, and Athabasca Communities. Denison wishes to conduct and advance its exploration activities in a sustainable manner that respects the Athabasca Nations’ Indigenous rights, advances reconciliation with Indigenous peoples, and provides economic opportunities and other benefits to the Athabasca Communities in an authentic, cooperative and respectful way.

In December, the Company amended the terms of the Credit Facility to extend the maturity date to January 31, 2024, and to increase the credit available under the facility to cover additional standby letters of credit with respect to environmental obligations associated with the FFT activities at Wheeler River.

And in December, Mr. David Bronkhorst retired from his position as Vice President Operations of Denison, remaining with the Company in a technical advisory role. Concurrently therewith, Mr. Himbeault became Vice President Operations & Regulatory Affairs.

## **2023...**

### Project Developments – Wheeler River

In August, Denison filed a technical report summarizing the results of (i) the feasibility study completed for ISR mining of the high-grade Phoenix uranium deposit (the “**Phoenix FS**”); and (ii) a cost update to the 2018 PFS for conventional underground mining of the basement-hosted Gryphon uranium deposit (“**Gryphon PFS Update**”). The results of the respective studies illustrated that both deposits have the potential to be competitive with the lowest cost uranium mining operations in the world. See “Mineral Properties – Wheeler River” for more details.

In August, reflective of the extensive efforts undertaken by and for the Company, the CNSC deemed complete the Company’s responses to approximately 250 EIS information requests from the Federal Indigenous Review Team (“**FIRT**”). In November 2023, a subsequent round of information requests was received from the CNSC, seeking additional details for responses not fully accepted by the FIRT. Following the successful resolution of the outstanding information requests, the Company expects to be in position to submit a final version of EIS for consideration at a future hearing of the CNSC. See “Government Regulation – Environmental Assessments – Wheeler River” for more details.

In September, Denison announced the signing of a Shared Prosperity Agreement (“**SPA**”) with ERFN supporting the development and operation of the Wheeler River project. The SPA received support from a substantial majority of ERFN members who participated in a ratification vote on its key terms. The signing of the SPA follows years of active engagement, including a four-month-long ERFN-led community consultation process ahead of the ratification vote, and represents a significant milestone in the history of both Denison’s relationship with ERFN and the Wheeler River project. See “Environmental, Health, Safety and Sustainability Matters – Indigenous Peoples Policy and Reconciliation Action Plan” for more details.

In October, the Saskatchewan Ministry of Environment confirmed its satisfaction with Denison’s comment responses and proposed EIS updates. The confirmation indicates that Denison is able to finalize the EIS for the purpose of obtaining a Provincial EA approval, however this would delink the currently coordinated Provincial – Federal EA process, which is not expected to provide a

meaningful schedule advantage for the Phoenix project. Denison plans to submit one version of the final EIS to both authorities once the FIRT information requests have been resolved.

In November, the Company announced the successful completion of the recovered solution management phase of the ISR FFT. The solution recovered during the FFT was stored on site and this final phase of the FFT involved the treatment of the recovered solution via an on-site purpose-built treatment system. Following treatment, a uranium precipitate product and a treated effluent were produced. The mineralized precipitates were recovered from the process with over 99.99% efficiency. The treated effluent was tested to ensure compliance with permit conditions before being injected into a designated subsurface area.

### Other Project Developments

In April, Denison announced the completion of an internal conceptual mining study examining the potential application of the ISR mining method at the Midwest project. The concept study was prepared by Denison during 2022 and formally issued to the MWJV in early 2023. Based on the positive results of the concept study, the MWJV approved the completion of additional ISR-related work for Midwest in 2023 and 2024.

And in April, Denison reported the discovery of high-grade sandstone hosted uranium mineralization approximately 30 metres above the unconformity in drill hole MS 23-10A, which was completed as part of the 2023 winter exploration program at the Moon Lake South property. The intersection in MS 23-10A returned 2.46%  $U_3O_8$  over 8.0 metres, including a sub-interval grading 3.71%  $U_3O_8$  over 4.5 metres. This result represents the best drill hole completed on the Moon Lake South property to date.

In November, the Company announced the completion of an inaugural ISR field test program at THT on the Waterbury Lake property. The program included (i) the installation of an eight well ISR test pattern designed to collect an initial database of hydrogeological data, (ii) testing of a permeability enhancement technique, (iii) the completion of hydrogeologic test work, highlighted by the achievement of hydraulic conductivity values consistent with those from the Waterbury PEA, and (iv) the execution of an ion tracer test which established a 10 hour breakthrough time between the injection and extraction wells, while also demonstrating hydraulic control of the injected solution. Overall, the program successfully achieved each of its planned objectives.

### Financing Developments

In October, Denison completed a bought deal equity financing resulting in the issuance of 37,000,000 shares at a price of \$2.03 (US\$1.49) per share for total gross proceeds of \$75.1 million (US\$55.1 million). The Company intends to use the net proceeds from the offering to fund (1) the advancement of the proposed Phoenix ISR uranium mining operation through the procurement of long lead items (including associated engineering, testing and design) identified during the ongoing Front End Engineering Design (“**FEED**”) process and the Phoenix FS; (2) exploration and evaluation expenditures; and (3) general corporate and administrative expenses, including those in support of corporate development activities, and working capital requirements.

And in October, the Company completed a \$15 million strategic investment in F3 Uranium Corp. (“**F3**”) with the acquisition of unsecured convertible debentures (the “**Debentures**”), which carry a 9% coupon and will be convertible at Denison’s option into common shares of F3 at a conversion price of \$0.56 per share. F3 has the right to pay up to one third of the quarterly interest payable

by issuing common shares. F3 will also have certain redemption rights on or after the third anniversary of issuance of the Debentures and/or in the event of an F3 change of control.

In 2023, the Company sold 200,000 pounds U<sub>3</sub>O<sub>8</sub> at an average selling price of \$99.50 per pound U<sub>3</sub>O<sub>8</sub> (US\$73.38 per pound U<sub>3</sub>O<sub>8</sub>), representing a realized gain on sale of \$12.6 million (US\$8.8 million), based on Denison's average acquisition cost of \$36.67 per pound U<sub>3</sub>O<sub>8</sub> (US\$29.66 per pound U<sub>3</sub>O<sub>8</sub>). As at December 31, 2023, the Company's remaining uranium portfolio had increased in value by 228% since acquisition, to \$120.35 per pound U<sub>3</sub>O<sub>8</sub> (US\$91.00 per pound U<sub>3</sub>O<sub>8</sub>), for an aggregate value of approximately \$276.8 million (US\$209.3 million).

During 2023, the Company issued 19,786,160 shares under the 2021 ATM Program. The Shares were issued at an average price of \$1.91 per share for aggregate gross proceeds of \$37,877,000. The Company also recognized costs of \$845,000 related to the maintenance of the 2021 ATM Program and Share issuances, which includes \$757,000 of commissions, for net proceeds after commissions of \$37,130,000. See "Denison's Securities – ATM Program Activity".

### Corporate Developments

In February, Mr. Yun Chang Jeong resigned from the Board. Mr. Byeong Min An joined the Board in early March, filling the vacancy created by Mr. Jeong's resignation.

In September, Ms. Elizabeth Sidle was appointed Interim Chief Financial Officer of the Company, in addition to her current role as Vice President Finance, in connection with the leave of absence and subsequent departure from the Company of Mr. McDonald, former Executive Vice President & Chief Financial Officer. Ms. Sidle was appointed Chief Financial Officer in December.

In December, Mr. Geoff Smith joined Denison in the position of Vice President Corporate Development & Commercial, focused on supporting Denison's investor and customer engagement, the evaluation and execution of growth opportunities and financing arrangements, and the development and oversight of the Company's uranium sales and contracting strategies.

And in December, the Company amended and extended its Credit Facility to January 31, 2025.

### **2024 Recent Developments...**

In January, Denison and Orano Canada announced that the MLJV has approved a restart of uranium mining operations using the joint venture's patented SABRE mining method. Mining is planned to commence at the McClean North deposit in 2025, with 2024 activities expected to focus on preparations necessary to ready the existing SABRE mining site and equipment for continuous commercial operations, as well as the installation of pilot holes for the first mining cavities planned for excavation.

And in January, Denison entered into an agreement with Grounded Lithium Corp. ("**Grounded Lithium**") with respect to the Kindersley Lithium Project ("**KLP**") in Saskatchewan. The agreement includes a series of earn-in options, with each earn-in option being comprised of a cash payment to Grounded Lithium as well as project expenditures to advance KLP. Should Denison complete all three earn-in options, it will have made cumulative cash payments to Grounded Lithium of \$3.2 million and have funded \$12 million in project expenditures to earn a 75% working interest in the KLP. Upon funding the total amounts of each earn-in option phase, Denison has the right to either exercise the earn-in option and acquire the working interest associated with that phase or move on to the ensuing option phase. The agreement terminates on the earliest of: (i) Denison electing

to acquire its working interest and convert to a formal joint venture or to terminate, (ii) June 30, 2028, or (iii) a date as otherwise agreed between the parties.

Also in January, Denison finalized an agreement to sell 100,000 pounds of U<sub>3</sub>O<sub>8</sub> at a price of US\$100.00 per pound for delivery in April 2024.

In February, the Company announced its acquisition of fixed and mobile MaxPERF Tool Systems from Penetrators Canada Inc. (“**Penetrators**”). The MaxPERF Tool Systems have been successfully deployed several times as a method of permeability enhancement in ISR field studies conducted on the Company’s potential ISR mining projects, including at the Phoenix deposit. Penetrators has also agreed to work exclusively with Denison for a 10-year period with respect to the use of the MaxPERF Tool Systems for uranium mining applications, and related services, in Saskatchewan.

In March, Mr. Byeong Min An resigned from the Board. Mr. Jong Ho Hong joined the Board in March, filling the vacancy created by Mr. An’s resignation.

And in March, Denison signed a Sustainable Communities Investment Agreement (the “SCIA”) with the municipalities of the Northern Village of Beauval, the Northern Village of Île-à-la-Crosse, the Northern Hamlet of Jans Bay, and the Northern Hamlet of Cole Bay (the “Communities”). The SCIA reflects a common goal of facilitating qualified businesses and workers in benefitting from opportunities associated with the development of the Wheeler River project. The SCIA establishes commitments for funding to support community development initiatives, focused on with consideration towards contributing to the current and future economic prosperity and sustainability of the Communities by promoting economic development and investments in capital projects, job creation and training, housing, education, and other initiatives. In consideration for such contributions to the Communities’ initiatives, the Communities have provided their consent and support for the Wheeler River project and have committed, amongst other things, to support all regulatory approvals issued for the Wheeler River project related to exploration, evaluation, development, operation, reclamation, and closure activities.

## The Uranium Industry 2023

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In 2023, both the uranium spot price and long-term price continued their upward trend. In the spot market, the price of uranium started the year at US\$48.00 per pound U<sub>3</sub>O<sub>8</sub> and closed the year at the annual high of US\$91.00 per pound U<sub>3</sub>O<sub>8</sub> – a ~90% increase year over year. A material price increase was also observed in the long-term market, with the long-term price steadily increasing throughout the year from US\$51.00 per pound U<sub>3</sub>O<sub>8</sub> at December 31, 2022 to US\$68.00 per pound U<sub>3</sub>O<sub>8</sub> at December 31, 2023. This US\$17.00 per pound U<sub>3</sub>O<sub>8</sub> increase in the long-term price is the largest annual gain since 2007.

Positive momentum in uranium markets has continued in early 2024. In January 2024, the spot price for uranium surpassed US\$100 per pound U<sub>3</sub>O<sub>8</sub>, a level viewed by market commentators as an important threshold. Prior to 2024, the spot uranium price had not been above US\$100 per pound U<sub>3</sub>O<sub>8</sub> since 2008. The Company believes the current uranium market environment demonstrates notable similarities to the last time prices reached these levels. In the early 2000s, highly enriched uranium (“**HEU**”) and other former Soviet Union supplies remained a market hangover from the Cold War with elevated inventory levels weighing on prices for years with limited new supply coming online. Ultimately, this period of low prices, compounded by supply shocks, created a favourable environment for uranium prices in future years when paired with significant expected demand growth driven by ambitious plans for nuclear power in China.

Meaningful new sources of supply were scarce, due to years of under investment, at a time of rapid demand growth. The Japanese tsunami and associated Fukushima nuclear incident in 2011 disrupted the market and set in motion a similar period of low prices and excess inventories. Given the sudden shut-down of the Japanese nuclear fleet and other reductions in demand, excess uranium inventories and excess enrichment capacity, which provided the ability to create additional uranium supply, catalyzed a downward shock to price. During this extended period, prices were below the cost of production for many producers, leading to the shutdown of multiple mines and a sharp reduction in investment in new exploration and development activities across the sector. After years of supply discipline, and the accumulation of physical uranium positions amongst financial investors, the market reached an inflection point followed by four consecutive years of price increases between 2020 and 2023, reflective of a market transitioning to be driven by the cost of future production rather than by the availability of surplus inventories. Looking ahead, the Company believes the increasing demand for nuclear energy, coupled with a prolonged period of limited investment in new supply creates supply-demand dynamics that are supportive of strong uranium prices for the foreseeable future.

## Uranium Demand

There is global focus on the importance of nuclear power in enabling the achievement of carbon emission goals. At COP28 in Dubai in December 2023, this recognition was further enshrined as over 20 nations pledged to triple nuclear energy generation capacity by 2050 in an effort to avert the adverse consequences of climate change. The Company believes this wide-spread government support for nuclear energy represents a paradigm shift that is expected to favourably impact nuclear demand fundamentals and ultimately supports the Company's expectations for robust uranium markets.

In addition to the renewed commitment to nuclear from powerhouse nations like Japan, Korea, France, and the United States in recent years, multiple governments in 2023 adopted stances increasingly supportive of nuclear power generation, including Belgium, Italy, and Sweden.

Positive nuclear demand developments occurred in many nations in 2023. Three notable nuclear reactor projects that had been in construction for a decade reached commercial operations in 2023 including Vogtle 3 in the United States, Olkiluoto in Finland, and Kakrapar in India. In China, additional reactors reached commercial operations and construction began on a further five reactors. China continues to be a major source of growth for nuclear energy, with UxC LLC ("UxC") expecting that over half of the 76 reactors it is currently projecting to be completed by 2030 will be in China. In Canada, Ontario Power Generation announced refurbishment plans for its Darlington nuclear plant and ongoing refurbishment continued at the Bruce Power nuclear facility in Ontario. Additionally, small modular reactors are being advanced in both Ontario and Saskatchewan. In Japan, two reactors were restarted in 2023, breaking a streak of two years without a restart. Taken together, forecasts from UxC for global reactor units and nuclear capacity in 2035 is 532 units and 504 gigawatts electrical ("GWe") installed capacity (estimated as of Q4'2023) – representing a 29% increase in global nuclear power generation from 433 units producing 392 GWe in 2023. With expected growth accelerating, UxC's base case estimate of global uranium demand in 2035 increased 6%, from 240 million pounds  $U_3O_8$  estimated as of Q4'2022, to 254 million pounds  $U_3O_8$  estimated as of Q4'2023.

While spot uranium prices increased significantly during 2023, the impact on price from physical uranium funds appears to be significantly less than in 2022. UxC estimates that physical uranium funds net additions to inventory levels were 5 million pounds  $U_3O_8$  in 2023 compared to secondary

sources of demand, including physical uranium funds, acquiring at least 20 million pounds  $U_3O_8$  in 2022, and an estimated 53 million pounds  $U_3O_8$  in 2021.

UxC estimates total utility demand for 2023 at 198 million pounds  $U_3O_8$  representing a 3% increase over 2022 demand levels.

### **Primary Uranium Supply**

On the supply side, UxC estimates uranium production for 2023 at 141 million pounds  $U_3O_8$ , which represents a 9% increase over 2022 production levels, largely due to the ramp-up of the McArthur River mine and a modest production increase at Olympic Dam. On balance, 2023 is expected to result in a significant primary supply shortfall of approximately 29% of total demand, or 57 million pounds  $U_3O_8$ .

In Q4'2023 UxC estimated 2024 primary production to increase to 162 million pounds  $U_3O_8$ , with the production increase being supported by increasing production from Kazatomprom in Kazakhstan offset by lower production from Orano's Arlit mine in Niger. However, in early 2024, Kazatomprom announced 2024 production is expected to be lower than previous guidance due to scarce availability of sulphuric acid in the region as well as delays in completing construction for newly developed production areas. Additionally, UxC estimates secondary supplies for 2024 are projected at 34 million pounds of  $U_3O_8$  equivalent (" **$U_3O_8e$** "), which is a significant reduction from 56 million pounds  $U_3O_8e$  of secondary supplies estimated in 2023, 65 million pounds  $U_3O_8e$  in 2022, and 98 million pounds  $U_3O_8e$  in 2021. Strong secondary demand in past years has accelerated the process of drawing down these secondary sources of supply. With this rapid decline in secondary supplies, the market is expected to continue its shift from an inventory-driven market to a production-driven market in the coming years.

Nuclear sentiment also continues to be supported by an increased focus on energy security in the aftermath of Russia's invasion of Ukraine. While the Russian invasion continues to be the most impactful geopolitical event, the importance of security of supply was further magnified in July of 2023, as a military coup was waged in Niger which led to the withdrawal of foreign embassy personnel, and a temporary shutdown of Orano's uranium mining operations. In 2022, Niger ranked as the seventh largest uranium producing country. The Russian invasion of Ukraine in February 2022 continues to cause significant turmoil in the global nuclear fuel market. Russia is a significant supplier of enriched uranium to the rest of the world, operating 46% of the world's uranium enrichment capacity. In 2021, Russian enrichment comprised 31% of European Union enrichment purchases and 28% of US utility enrichment purchases. While deliveries of material from Russia to Western utilities continue, increased demand for non-Russian supply has led to significantly increased prices for uranium processing services. From December 2021 to December 2023, the long-term price of conversion and enrichment services increased by 94% and 148%, respectively. In the short- to medium-term, in order to increase enriched uranium production in the supply-constrained Western enrichment market, Western enrichers are expected to input more  $UF_6$  (overfeed) into their centrifuges in order to maximize production capacity. As a consequence, Western utilities in aggregate will require more natural uranium feedstock to produce the same quantity of enriched uranium (i.e., new enrichment contracts require higher tails assay levels). In 2023, US and European utilities demonstrated a path towards reduced reliance on Russian nuclear fuel supply and are understood to be increasingly favouring Western supply chains. In December 2023, a US bill to curb imports of Russian uranium was approved by US Congress. While the bill awaits approval by the US Senate, the bill is indicative of an ongoing shift of uranium supply chains away from Russia, which increasingly favours North American uranium supply.

Russia is also a major player in uranium logistics, with significant quantities of uranium from Central Asia typically transported through Russia to Russian ports for delivery to Western uranium conversion facilities. UxC estimates Kazakhstan and Uzbekistan combined for 45% of global primary uranium production in 2023. As a result, logistics of uranium shipped through Russia remains an item of concern to uranium end users. Some uranium has been successfully shipped from Kazakhstan to Canada via the Trans-Caspian International Transport Route, which does not include transit through Russia; however, reports indicate that this route is subject to operational limitations.

## **Outlook**

Overall, nuclear demand growth appears poised for acceleration led by a shifting energy mix towards reliable decarbonized energy at a time when limited investment over the past decade has supported bringing new uranium mine supply online. While some idled or curtailed production from existing uranium mining operations has returned to the market, it is expected that (i) production costs associated with further potential restart projects will be higher than previous levels due to inflation and labour shortages, and (ii) lag times to bring on much of the potential new or greenfield mine supply remains several years away.

The accelerated decline in secondary sources of uranium supply in recent years, the depletion of existing mines, the expectation of rising tails assay at Western enrichment plants, and growing future reactor demand, point to larger supply deficits during the second half of this decade that will be difficult to balance without considerable and rapid investment in new large-scale uranium mining projects. Given that uncovered utility uranium requirements for the period from 2024 to 2040, not including typical inventory building or restriction on existing supply agreements with Russia, are estimated at 2.2 billion pounds  $U_3O_8$ , it is evident that the necessary new future sources of supply required by the market have not yet been secured by utilities, and that the response from incumbent suppliers that have signed significant long-term supply contracts in recent years has not satisfied the needs of utility customers, meaning that there is good reason to expect further phases of utility procurement directed at incentivizing new projects to meet long-term demand needs.

## **Competition**

The uranium industry is small compared to other commodity or energy industries. Uranium demand is international in scope, but supply is characterized by a relatively small number of companies operating in only a few countries. Primary uranium production is concentrated amongst a limited number of producers and is also geographically concentrated with 83% of the world's production in 2024 projected to be coming from only four countries: Kazakhstan, Canada, Namibia and Australia. Producers compete for market share and commercial terms necessary to support project economics. This is complicated by the influence of state-owned-enterprises that operate within the uranium mining industry, often producing uranium supply as part of a vertical integration strategy that may be less sensitive to uranium pricing than those operating uranium mines as a commercial business.

Competition is somewhat different amongst exploration & development companies focused on the discovery or development of a uranium deposit. Exploration for uranium is being carried out on various continents, but in recent years development activities by public companies have been generally concentrated in Canada, Africa and Australia. In Canada, exploration has focused on the Athabasca Basin region in northern Saskatchewan. Explorers have been drawn to this area by the high-grade uranium deposits that have produced some of the most successful uranium

mining operations in recent history. Within the Athabasca Basin region, exploration is generally divided between activity that is occurring in the eastern portion of the Basin and the western portion of the Basin. The eastern portion of the Basin is a district that is defined by rich infrastructure associated with existing uranium mines and uranium processing facilities. Infrastructure includes access to the provincial power grid and a network of provincial all-weather highways. By comparison, in the western portion of the Basin, there are no operating uranium mines or processing facilities and access to the provincial power grid is not currently available. Several uranium discoveries have been made in the Athabasca Basin region in recent years, and competition for capital, high-quality properties, and professional staff can be intense.

## Mineral Reserves and Mineral Resources

NI 43-101 requires mining companies to disclose mineral reserve and resource estimates using the subcategories of proven mineral reserves, probable mineral reserves, measured mineral resources, indicated mineral resources and inferred mineral resources.

Each of Chad Sorba, P.Geol., Denison's Vice President Technical Services and Project Evaluation, and Andy Yackulic, P.Geol., Denison's Vice President Exploration, is a "Qualified Person" in accordance with the requirements of NI 43-101, and has reviewed and approved all disclosure of scientific or technical information in this AIF.

### Denison Mineral Reserves and Mineral Resources

The following tables show the Company's current estimates of mineral reserves and mineral resources as at December 31, 2023. For more information about the Company's material properties, see "Mineral Properties".

#### Proven Mineral Reserve Estimates <sup>(1,15)</sup>

Project/Deposit	Tonnes	100% Basis		Company Share <sup>(9)</sup> Pounds of U <sub>3</sub> O <sub>8</sub> (,000)
		Grade % U <sub>3</sub> O <sub>8</sub>	Pounds of U <sub>3</sub> O <sub>8</sub> (,000)	
McClellan - Ore Stockpile <sup>(14)</sup>	90,000	0.37	700	200
Wheeler River - Phoenix <sup>(2)</sup>	6,300	24.5	3,400	3,200
<b>Total Proven Mineral Reserves</b>	<b>96,300</b>		<b>4,100</b>	<b>3,400</b>

#### Probable Mineral Reserve Estimates <sup>(1,2,3,4,15)</sup>

Project/Deposit	Tonnes	100% Basis		Company Share <sup>(9)</sup> Pounds of U <sub>3</sub> O <sub>8</sub> (,000)
		Grade % U <sub>3</sub> O <sub>8</sub>	Pounds of U <sub>3</sub> O <sub>8</sub> (,000)	
Wheeler River - Phoenix	212,700	11.4	53,300	50,600
Wheeler River - Gryphon	1,257,000	1.8	49,700	47,200
<b>Total Probable Mineral Reserves</b>	<b>1,469,700</b>		<b>103,000</b>	<b>97,800</b>

#### Measured Mineral Resource Estimates <sup>(1,5,7,15)</sup>

Project/Deposit	Tonnes	100% Basis		Company Share <sup>(9)</sup> Pounds of U <sub>3</sub> O <sub>8</sub> (,000)
		Grade % U <sub>3</sub> O <sub>8</sub>	Pounds of U <sub>3</sub> O <sub>8</sub> (,000)	
Wheeler River - Phoenix	64,200	21.8	30,900	29,400
<b>Total Measured Mineral Resources</b>	<b>64,200</b>		<b>30,900</b>	<b>29,400</b>

**Indicated Mineral Resource Estimates** <sup>(1,5,7,15)</sup>

Project/Deposit	Tonnes	100% Basis		Company Share <sup>(9)</sup> Pounds of U <sub>3</sub> O <sub>8</sub> ( <i>,000</i> )
		Grade % U <sub>3</sub> O <sub>8</sub>	Pounds of U <sub>3</sub> O <sub>8</sub> ( <i>,000</i> )	
Wheeler River - Phoenix <sup>(7)</sup>	216,000	8.3	39,700	37,700
Wheeler River - Gryphon <sup>(7)</sup>	1,643,000	1.7	61,900	58,800
<i>Wheeler River Subtotal</i>	<i>1,859,000</i>		<i>101,600</i>	<i>96,500</i>
McClellan - Caribou	47,800	2.6	2,800	600
McClellan - Sue D	122,800	1.1	2,800	600
McClellan - McClellan North	204,300	2.8	12,200	2,700
<i>McClellan Subtotal</i>	<i>374,900</i>		<i>17,800</i>	<i>3,900</i>
Midwest - Midwest Main	453,000	4.0	39,900	10,100
Midwest - Midwest A	566,000	0.87	10,800	2,700
<i>Midwest Subtotal</i>	<i>1,019,000</i>		<i>50,700</i>	<i>12,800</i>
Waterbury - THT (formerly J Zone)	291,000	2.0	12,800	8,900
<b>Total Indicated Mineral Resources</b>	<b>3,543,900</b>		<b>182,900</b>	<b>122,100</b>

**Inferred Mineral Resource Estimates** <sup>(1,6,15)</sup>

Project/Deposit	Tonnes	100% Basis		Company Share <sup>(9)</sup> Pounds of U <sub>3</sub> O <sub>8</sub> ( <i>,000</i> )
		Grade % U <sub>3</sub> O <sub>8</sub>	Pounds of U <sub>3</sub> O <sub>8</sub> ( <i>,000</i> )	
Wheeler River - Phoenix	5,600	2.6	300	300
Wheeler River - Gryphon	73,000	1.2	1,900	1,800
<i>Wheeler River Subtotal</i>	<i>78,600</i>		<i>2,200</i>	<i>2,100</i>
McClellan - Sue D	24,200	0.39	200	0
McClellan - Sue E <sup>(8)</sup>	483,400	0.69	7,300	1,600
McClellan - McClellan North	3,300	0.79	100	0
<i>McClellan Subtotal</i>	<i>510,900</i>		<i>7,600</i>	<i>1,600</i>
Midwest - Midwest Main	793,000	0.66	11,500	2,900
Midwest - Midwest A	53,000	5.8	6,700	1,700
<i>Midwest Subtotal</i>	<i>846,000</i>		<i>18,200</i>	<i>4,600</i>
Waterbury - Huskie	268,000	0.96	5,700	4,000
<i>Waterbury Subtotal</i>	<i>268,000</i>		<i>5,700</i>	<i>4,000</i>
Christie Lake <sup>(13)</sup>	588,000	1.57	20,400	3,500
<i>Christie Lake Subtotal</i>	<i>588,000</i>		<i>20,400</i>	<i>3,500</i>
<b>Total Inferred Mineral Resources</b>	<b>2,291,500</b>		<b>54,100</b>	<b>15,800</b>

## Historical Estimates

A qualified person has not done sufficient work to verify and classify these historical estimates as current mineral resources for the Company or confirm their reporting of resources is in accordance with NI 43-101 categories, though the Company has no reason to believe the information is not relevant or reliable. The Company is not treating this information as current mineral resources. As these do not represent material properties for the Company at this time, the Company does not currently have any plans to conduct work to verify the historical estimates.

### JCU Estimates

Historical Indicated Mineral Resource Estimates <sup>(15)</sup>

Project/Deposit	100% Basis			Company Share <sup>(10)</sup>
	Tonnes	Grade % U <sub>3</sub> O <sub>8</sub>	Pounds of U <sub>3</sub> O <sub>8</sub> (,000)	Pounds of U <sub>3</sub> O <sub>8</sub> (,000)
Millennium <sup>(11)</sup>	1,442,600	2.39	75,900	11,400
Kiggavik <sup>(12)</sup>	10,418,000	0.55	127,300	21,500
<b>Total Indicated Mineral Resources</b>	<b>11,860,600</b>		<b>203,200</b>	<b>32,900</b>

Historical Inferred Mineral Resource Estimates <sup>(15)</sup>

Project/Deposit	100% Basis			Company Share <sup>(10)</sup>
	Tonnes	Grade % U <sub>3</sub> O <sub>8</sub>	Pounds of U <sub>3</sub> O <sub>8</sub> (,000)	Pounds of U <sub>3</sub> O <sub>8</sub> (,000)
Millennium <sup>(11)</sup>	412,400	3.19	29,000	4,400
Kiggavik <sup>(12)</sup>	733,000	0.33	5,400	900
<b>Total Inferred Mineral Resources</b>	<b>1,145,400</b>		<b>34,400</b>	<b>5,300</b>

### McClellan South

McClellan South Historical Estimates <sup>(16)</sup>

Deposit	100% Basis			Company's Share
	Tons	Grade (% U <sub>3</sub> O <sub>8</sub> )	Pounds of U <sub>3</sub> O <sub>8</sub> (,000)	Pounds of U <sub>3</sub> O <sub>8</sub> (,000)
Southwest Pod	47,600	2.10	2,000	500
Southeast Pod	126,700	0.73	1,900	400

### Notes to Mineral Resource and Mineral Reserve & Historical Estimates Tables:

- (1) CIM definitions were followed for classification of mineral reserves and mineral resources. Mineral resources are not mineral reserves and do not have demonstrated economic viability.
- (2) Mineral reserves are estimated at a cut-off grade of 0.5% U<sub>3</sub>O<sub>8</sub> based on the ISR mining method, using a long-term uranium price of US\$50/lb U<sub>3</sub>O<sub>8</sub> and a CA\$/US\$ exchange rate of 1.33. The mineral reserves are based on a mine operating cost of \$0.78/lb U<sub>3</sub>O<sub>8</sub>, process operating cost of \$5.20/lb U<sub>3</sub>O<sub>8</sub>, and process recovery of 99%. The effective date of the mineral reserve estimate is June 23, 2023. A mine recovery of 80.6% has been applied to convert the mineral resources to mineral reserves. Recoverable U<sub>3</sub>O<sub>8</sub> refers to ISR recoverable and does not account for process losses.
- (3) The effective date of the mineral reserves is September 1, 2018. Mineral reserves for the Gryphon deposit are estimated at a cut-off grade of 0.58% U<sub>3</sub>O<sub>8</sub> based on longhole mining using a long-term uranium price of US\$50/lb and a US\$/CA\$ exchange rate of 0.8. The mineral reserves are based on a mine operating cost of \$150/t, mill operating cost of \$275/t, G&A cost of \$99/t, transportation cost of \$50/t, milling recovery of 97%, and 7.25% fee for Saskatchewan royalties. Mineral reserves include for diluting material and mining losses.
- (4) Mineral reserves are stated at a processing plant feed reference point and include diluting material and mining losses.
- (5) The measured and indicated mineral resources were estimated at various cut-off grades. They are:

- Phoenix: 0.10% U<sub>3</sub>O<sub>8</sub>
  - Gryphon: 0.20% U<sub>3</sub>O<sub>8</sub>
  - Caribou: 0.10% U<sub>3</sub>O<sub>8</sub>
  - Sue D: 0.10% U<sub>3</sub>O<sub>8</sub>
- McClean North: 0.10% U<sub>3</sub>O<sub>8</sub>
  - Midwest Main: 0.10% U<sub>3</sub>O<sub>8</sub> (0.085% U)
  - Midwest A: 0.10% U<sub>3</sub>O<sub>8</sub> (0.085% U)
  - THT (J Zone): 0.10% U<sub>3</sub>O<sub>8</sub>
- (6) The inferred mineral resources were estimated at various cut-off grades. They are:
- Phoenix: 0.10% U<sub>3</sub>O<sub>8</sub>
  - Gryphon: 0.20% U<sub>3</sub>O<sub>8</sub>
  - Sue D: 0.10% U<sub>3</sub>O<sub>8</sub>
  - Sue E: 0.10% U<sub>3</sub>O<sub>8</sub>
  - McClean North: 0.10% U<sub>3</sub>O<sub>8</sub>
  - Midwest Main: 0.10% U<sub>3</sub>O<sub>8</sub> (0.085% U)
  - Midwest A: 0.10% U<sub>3</sub>O<sub>8</sub> (0.085% U)
  - Huskie: 0.10% U<sub>3</sub>O<sub>8</sub>
- (7) Measured and indicated mineral resources for Phoenix and indicated mineral resources for Gryphon are inclusive of mineral reserves.
- (8) The operator conducted confirmatory drilling on a portion of the Sue E mineral resources outside the designated pit and late in 2006 submitted a preliminary analysis detailing an inferred mineral resource of approximately 2 million pounds on a 100% basis in this area, as compared to the 7.3 million pounds that Scott Wilson Roscoe Postle Associates Inc. (“**Scott Wilson RPA**”, succeeded by Roscoe Postle Associates Inc. (“**RPA**”) and then acquired by SLR Consulting Limited, “**SLR**”), estimated in its February 2006 technical report. The mineral resource has not been re-estimated using the new drill information.
- (9) As at December 31, 2023, pursuant to the terms of the agreements with its applicable joint venture partners and subsequent to its acquisition of JCU in August 2021, the Company had an effective 95.00% interest in the Wheeler River project, a 22.50% interest in the McClean Lake property; a 25.17% interest in the Midwest project; and a 69.35% interest in the Waterbury Lake property.
- (10) Denison’s share has been calculated as 50% of the product of JCU’s percentage interest in the applicable project multiplied by the estimated mineral resources on a 100% basis.
- (11) Millennium mineral resources as reported by Cameco as of December 31, 2023 on their website at <https://www.cameco.com/businesses/uranium-projects/millennium/reserves-resources>. Cut-off grades and other assumptions, parameters and methods used to estimate resources are unknown.
- (12) Kiggavik mineral resources as reported by Orano in their 2022 Activities Report available on their website at [https://cdn.orano.group/orano/docs/default-source/orano-doc/finance/publications-financieres-et-reglementees/2022/orano-annual-activity-report-2022-online.pdf?sfvrsn=7a73aadd\\_6](https://cdn.orano.group/orano/docs/default-source/orano-doc/finance/publications-financieres-et-reglementees/2022/orano-annual-activity-report-2022-online.pdf?sfvrsn=7a73aadd_6) and converted from tonnes U to pounds U<sub>3</sub>O<sub>8</sub> and from %U to %U<sub>3</sub>O<sub>8</sub>. Cut-off grades and other assumptions, parameters and methods used to estimate resources are unknown.
- (13) Christie Lake mineral resources, and relevant assumptions, parameters and methods used for estimating, are documented in the “Technical Report for the Christie Lake Uranium Project, Saskatchewan, Canada” with an effective date of December 31, 2021 and filed under the Company’s profile on SEDAR+ and EDGAR on March 27, 2023. The Christie Lake mineral resources were estimated at a cut-off grade of 0.2% U<sub>3</sub>O<sub>8</sub>.
- (14) The summary information on Denison’s proven mineral reserve estimates was prepared from the year-end stockpile survey reported by Orano Canada, the MLJV operator.
- (15) Numbers may not add due to rounding.
- (16) The historical estimates do not comply with the requirement of NI 43-101. CIM definitions are not used.

## Mineral Properties

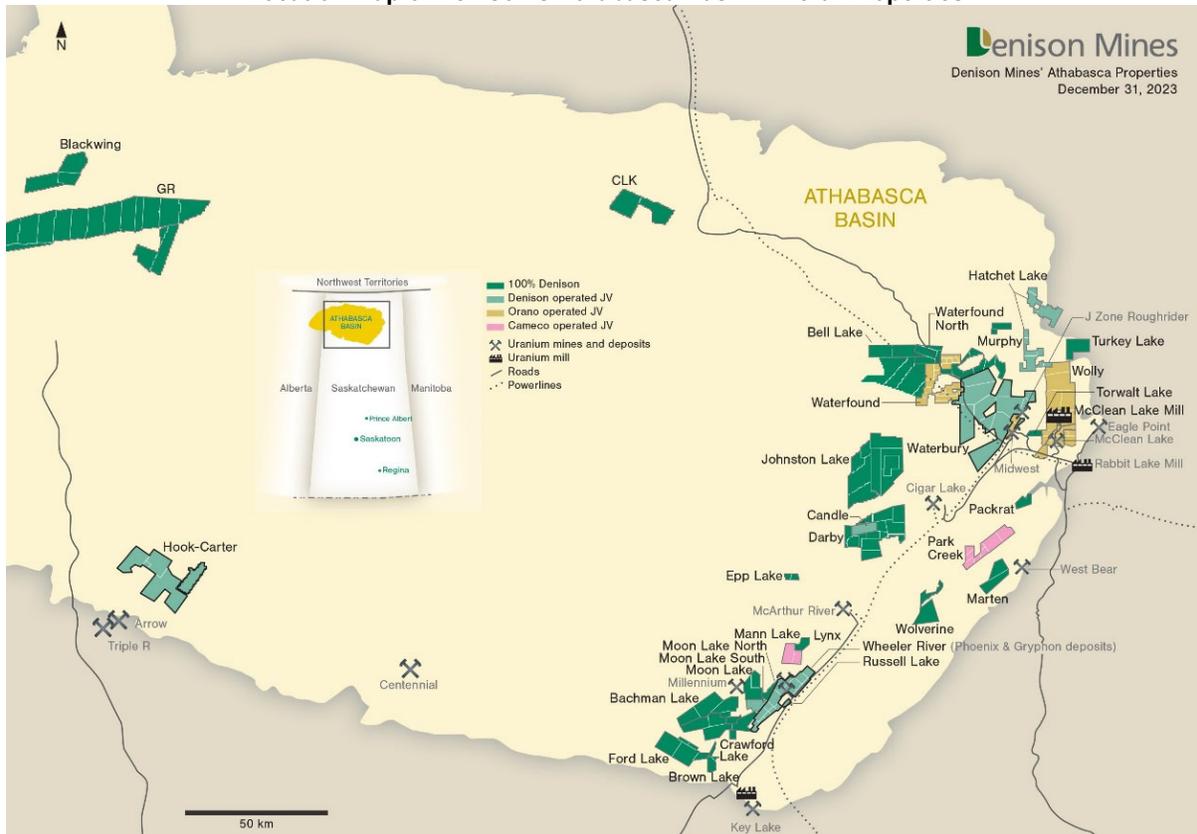
Denison’s mineral property interests are located in the Athabasca Basin region of northern Saskatchewan, the majority of which are located in the eastern portion of the Athabasca Basin, which is host to considerable existing infrastructure including uranium mines and mills, and provincial powerlines and highways (see location map, below). As at December 31, 2023, Denison has direct interests in 34 mineral properties in the Athabasca Basin, comprised of 228 claims covering approximately 385,000 hectares. Denison holds additional indirect interests in various uranium project joint ventures in Canada through its 50% ownership interest in JCU.

Denison’s exploration and evaluation operations in Saskatchewan, including its office in Saskatoon and various project interests in northern Saskatchewan, are located in regions covered by Treaty 6, Treaty 8 and Treaty 10, which encompass the traditional lands of the Cree, Dakota, Déne, Lakota, Nakota, Saulteaux, within the homeland of the Métis and within Nuhenéné.

### Denison’s Priority Properties:

- Wheeler River ..... Page 31
- Waterbury Lake ..... Page 56
- McClean Lake..... Page 75
- Midwest ..... Page 82
- Other Exploration Properties ..... Page 91

Location Map of Denison’s Athabasca Basin Mineral Properties



## Athabasca Basin Overview

The Athabasca Basin covers an area of approximately 100,000 square kilometres in northern Saskatchewan and northeastern Alberta. The Athabasca Basin is one of the principal uranium-producing districts in the world and is host to the world's highest-grade and some of the world's largest uranium mines and deposits, including the McArthur River mine and Cigar Lake mine located in the eastern Athabasca Basin.

The uranium deposits are classified as unconformity-associated (also unconformity-related and – type) deposits owing to their spatial association with a major unconformable contact between a relatively undeformed Proterozoic sedimentary basin (the Athabasca Basin) and underlying metamorphosed and deformed Archean to Palaeoproterozoic basement rocks.

A broad variety of unconformity-associated deposit shapes, sizes, and compositions have been discovered. Two distinct varieties have been classified; 1) 'egress-style' polymetallic lenses at and above the unconformity, with variable and often highly elevated base metal and rare earth elements ("REE") contents, and 2) 'ingress-style' vein sets within basement rocks, with typically lower base metal and REE contents.

Egress-style deposits can occur in the sandstone, directly above the unconformity (e.g., Cigar Lake, Sue A and B), straddling the unconformity (e.g., Phoenix, Collins Bay B Zone, Midwest Main, Midwest A, McClean North, Key Lake) or perched high above the unconformity (certain zones at McClean Lake, Midwest, Cigar Lake). Ingress-style deposits are located in the basement rocks (e.g., Gryphon, Huskie, Eagle Point, Sue C, Sue E, Millennium, Arrow, Triple R); however, the Millennium deposit and, to an extent, the Gryphon deposit also contain subordinate mineralization at and above the unconformity. The Shea Creek deposits contain mineralization in the basement, deep in the basement, at the unconformity, and perched in the sandstone. In some deposits, there is a plunge to the mineralized pods from sandstone-hosted to basement-hosted within deposit-scale strike lengths (e.g., the Rabbit Lake-Collins Bay-Eagle Point trend, Sue trend deposits, McClean North).

The Athabasca unconformity-associated deposits are typically related to graphite-bearing structural zones within the metamorphosed and deformed Archean to Palaeoproterozoic basement rocks, which are often termed 'corridors' or 'trends'. Alteration 'halos' or 'envelopes' tend to surround the mineralization, most notably in the overlying sandstone, and provide an enlarged exploration target through the detection of diagnostic alteration clays and geochemical pathfinder elements. Empirical exploration for the deposits typically involves mapping of structural corridors/trends by geophysical methods (dominantly electromagnetics, resistivity, or magnetics), followed by drill testing, given the buried or blind nature of the deposits below glacial cover or Athabasca sandstone, respectively. Drill core is subject to a variety of sampling and analytical methods to determine possible vectors toward mineralization, and downhole surveying is commonplace to test for elevated radioactivity or reconcile geophysical responses. The significant number of Athabasca uranium discoveries to date has also led to the development of numerous exploration models which are commonly used to facilitate interpretations and prioritize target areas.

Historical uranium production in the Athabasca Basin region used conventional open pit mining methods, such as the operations at Rabbit Lake, Cluff Lake, Key Lake and McClean Lake. Later in the mine life of Cluff Lake and Rabbit Lake, there was a transition to underground mining of other deposits on those properties.

The discovery of high-grade deposits such as Midwest, McArthur River and Cigar Lake in the 1980s did not immediately lead to production. The combination of challenging ground conditions (most notably the friable and water-saturated Athabasca sandstone conditions above the mineralization), depth, and the high-grade nature of the deposits, required extensive research and development to design safe extraction methods before production was possible. Production from McArthur was achieved in the early 2000s, while Cigar Lake only initiated production in 2014. Production from these mines was only made possible by their unique combination of high grades (average grades > 10% U<sub>3</sub>O<sub>8</sub>) and large scale (>300 million lbs U<sub>3</sub>O<sub>8</sub>), as well as the development of innovative mining techniques, including ground freezing combined with either raise-bore mining or the use of the jet-boring mining system (“**JBS**”). The Midwest deposits are smaller in size than McArthur River and Cigar Lake, and remain undeveloped.

In terms of mineral processing, each historical mining operation included a dedicated processing plant: Cluff Lake, Key Lake, Rabbit Lake and McClean Lake operations included on-site processing plants. Due to the rising cost of construction for such facilities and the availability of highways and other infrastructure in Saskatchewan’s North, processing of ores has transitioned to toll milling at existing facilities. McArthur River ore production is toll milled at the Key Lake mill, while Cigar Lake production is toll milled at the McClean Lake mill. With the suspension of operations at Rabbit Lake in 2016 and McArthur River in 2018, in part due to a prolonged slump in the global uranium market, only the Cigar Lake mine and the McClean Lake mill continued to operate and produce yellowcake in Saskatchewan during 2021.

In response to the COVID-19 pandemic, the Cigar Lake Joint Venture, operated by Cameco, temporarily suspended production at the Cigar Lake mine from the end of March 2020 until September 2020, and then again from the end of December 2020 until April 2021. Coordinated therewith, the MLJV suspended operations at the McClean Mill for the duration of the suspended production.

In February 2022, Cameco announced its intention to restart uranium production at its McArthur River uranium mine and Key Lake uranium mill in 2022 — while at the same time outlining its intention to, together with Orano, continue to limit overall production at McArthur River and Cigar Lake well below full production rates. In February 2023, Cameco announced that due to improved uranium market conditions, Cigar Lake will instead target operating at its licensed capacity of 18 million pounds U<sub>3</sub>O<sub>8</sub> and the plan will be for McArthur River to increase production to 18 million pounds U<sub>3</sub>O<sub>8</sub> per year starting in 2024. In February 2024, Cameco announced that it produced 15.1 million pounds U<sub>3</sub>O<sub>8</sub> at Cigar Lake and 8.3 million pounds U<sub>3</sub>O<sub>8</sub> at McArthur River in 2023 and reiterated plans to produce 18 million pounds U<sub>3</sub>O<sub>8</sub> at each of Cigar Lake and McArthur River in 2024.

In January 2024, Denison and Orano Canada announced that the MLJV has approved a restart of uranium mining operations using the joint venture’s patented SABRE mining method. Mining is planned to commence at the McClean North deposit in 2025, with 2024 activities expected to focus on preparations necessary to ready the existing SABRE mining site and equipment for continuous commercial operations, as well as the installation of pilot holes for the first mining cavities planned for excavation.

## Wheeler River

The Wheeler River project is the largest undeveloped uranium project in the infrastructure-rich eastern portion of the Athabasca Basin region, in northern Saskatchewan. 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 JCU (10%). Denison is the operator/manager of the project.

In June 2023, Denison announced the results of (i) the Phoenix FS completed for ISR mining of the high-grade Phoenix deposit and (ii) the Gryphon PFS Update for conventional underground mining of the basement-hosted Gryphon deposit.

The results of the Phoenix FS and Gryphon PFS Update were summarized in the technical report entitled “NI 43-101 Technical Report on the Wheeler River Project, Athabasca Basin, Saskatchewan, Canada”, filed on August 9, 2023 with an effective date of June 23, 2023 (the “**Wheeler Report**”), authored by David Myers P.Eng., Lorne Schwartz P.Eng., and Paul O’Hara P.Eng. of Wood Canada Limited (“**Wood**”); Gordon Graham P.Eng. of Engcomp Engineering and Computing Professionals Inc. (“**Engcomp**”), Mark Hatton P.Eng. of Stantec Consulting Ltd., Dan Johnson P.E., RM SME, then of WSP USA Environment and Infrastructure Inc., Gregory Newman P.Eng. of Newmans Geotechnique Inc., Jeffrey Martin P.Eng. of Ecometrix Incorporated, Mark Mathisen C.P.G. SLR International Corporation (“**SLR**”), William McCombe P.Eng. of Hatch Ltd., Cliff Revering P.Eng. of SRK Consulting (Canada) Inc. (“**SRK**”), and Geoffrey Wilkie P.Eng. of CanCost Consulting Inc.. The Wheeler Report is available on the Company’s website, under its profile on the SEDAR+ website at [www.sedarplus.ca](http://www.sedarplus.ca) and on EDGAR at [www.sec.gov/edgar.shtml](http://www.sec.gov/edgar.shtml).

The Phoenix FS reflects several design changes and the results of a rigorous technical de-risking program completed by Denison following the publication of the 2018 PFS and confirms robust economics and the technical viability of an ISR uranium mining operation with low initial capital costs and a high rate of return. Highlights of the Phoenix FS include:

- Base case pre-tax Net Present Value (“**NPV**”) (8%) of \$2.34 billion (100% ownership-basis) representing a 150% increase in the base-case pre-tax NPV<sub>8%</sub> for Phoenix from the 2018 PFS.
- Very robust base-case pre-tax Internal Rate of Return (“**IRR**”) of 105.9%.
- Adjusted base case after-tax NPV<sub>8%</sub> of \$1.56 billion (100% basis) and IRR of 90.0% – with Denison’s effective 95% interest in the project equating to an adjusted base case after-tax NPV<sub>8%</sub> of \$1.48 billion.
- Base case pre-tax and after-tax (adjusted) payback period of 10 months – equating to a reduction of 11 months for the pre-tax payback period from the 2018 PFS.
- Optimized production profile, based on ISR mine planning efforts evaluating production potential for individual well patterns – resulting in an increase to the planned rate of production by approximately 43% during the first five years of operations.
- Estimated pre-production capital costs of under \$420 million (100% basis), yielding a base case after-tax (adjusted) NPV to initial capital cost ratio in excess of 3.7 to 1.
- Economics that easily absorb cost-inflation and design changes impacting both operating and capital costs, confirming Phoenix’s position with estimated cash operating and all-in costs expected to be amongst the lowest-cost uranium mines in the world.

- Phoenix FS plans aligned and costed to meet or exceed environmental criteria expected to be required by the ongoing regulatory approval process.
- Updated mineral resource estimate, reflecting the results of 70 drill holes completed in support of ISR de-risking and resource delineation activities, which has upgraded 30.9 million pounds U<sub>3</sub>O<sub>8</sub> into measured mineral resources, and increased the average grade of the Zone A high-grade domain. This domain is now estimated to contain 56.3 million pounds U<sub>3</sub>O<sub>8</sub> in Measured and Indicated mineral resources at an average grade of 46.0% U<sub>3</sub>O<sub>8</sub>.
- Upgraded 3.4 million pounds U<sub>3</sub>O<sub>8</sub> into Proven mineral reserves, representing the equivalent of 85% of production planned during the first calendar year of operations.

The Gryphon PFS Update was targeted at the review and update of capital and operating costs. Mining and processing plans remain largely unchanged from the 2018 PFS aside from minor scheduling and construction sequencing optimizations. The key points include:

- Base case pre-tax NPV (8%) of \$1.43 billion (100% basis) is a 148% increase in the base-case pre-tax NPV<sub>8%</sub> for Gryphon from the 2018 PFS.
- Strong base-case pre-tax IRR of 41.4%.
- Base case after-tax NPV<sub>8%</sub> of \$864.2 million (100% basis) and IRR of 37.6% – with Denison’s effective 95% interest in the project equating to a base case after-tax NPV<sub>8%</sub> of \$821.0 million.
- Base case pre-tax payback period of 20 months, and base case after-tax payback period of 22 months – equating to a reduction of 17 months for the pre-tax payback period from the 2018 PFS.
- Gryphon remains a highly valuable project that provides Denison with an additional source of low-cost potential production to deploy significant free cash flows expected from Phoenix.

The Wheeler River project description is a summary supported by the Wheeler Report. The Wheeler Report is recommended to be read in its entirety for a more fulsome understanding of the technical aspects of the Wheeler River project. The conclusions, projections and estimates included in this description are subject to the qualifications, assumptions and exclusions set out in the Wheeler Report and in the “Risk Factors” set forth below; in particular, any advancement or development of the Wheeler River project is subject to attainment of any required approvals, agreements or resources, including capital funding.

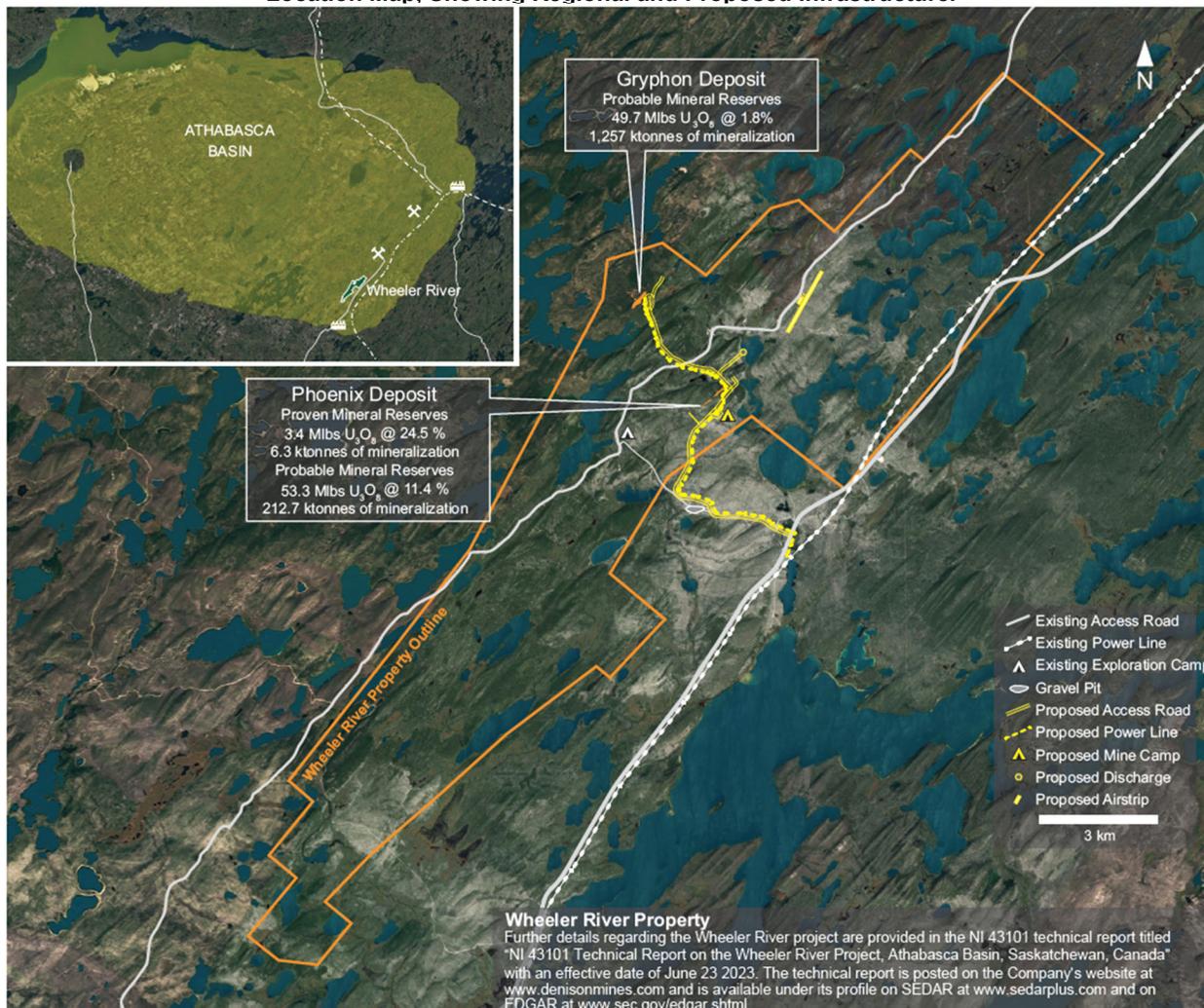
## Property Description, Location and Access

### *Project Area and Location*

Wheeler River is located in the eastern Athabasca Basin, approximately 600 km north of Saskatoon, 260 km north of La Ronge, and 110 km southwest of Points North Landing, in northern Saskatchewan. Wheeler River is comprised of a total of 19 contiguous mineral claims covering 11,720 ha and hosts the Phoenix Deposit and Gryphon Deposit. The Gryphon Deposit is located approximately 3 km northwest of the Phoenix Deposit. The centre of the Wheeler River property is located approximately 35 km northeast of the Key Lake mill and 35 km southwest of the McArthur River mine along Provincial Highway 914.

The Wheeler River property is located within the boundaries of Treaty 10 (entered into between the Government of Canada and the First Nations People of Saskatchewan and Alberta). It is also located within the traditional territory of the English River First Nation, within the homeland of the Métis and within Nuhenéné.

**Location Map, Showing Regional and Proposed Infrastructure.**



### *Permits, Environmental Liabilities, Royalties and other Encumbrances*

For the conduct of its work on the Wheeler River property to-date, Denison has obtained all permits known to be required. The advancement of Wheeler River will be subject to comprehensive permitting, approvals and licensing processes. Environmental and permitting considerations for future work are discussed in detail in Section 20 of the Wheeler Report. See "Risk Factors" for more information on this and other potential risks that may affect access, title or the right or ability to perform work on the property.

Wheeler River is subject to royalties on mineral sales and profits levied by the Province of Saskatchewan in accordance with Part III of The Crown Mineral Royalty Regulations. See "Government Regulation - Canadian Royalties" for further details. There is also a 10% Net Profits Interest associated with the property held by the WRJV in proportion to the ownership interests

of each WRJV participant, of which Denison is also a beneficiary. There are no other back-in rights or third-party royalties applicable to this property.

Denison has recognized certain environmental liabilities associated with the Wheeler River project in connection with historical and current operations, including without limitation, exploration activities, camp facilities and the feasibility field test conducted at Phoenix in 2022 and 2023.

### *Access*

Access to Wheeler River is by road, helicopter, or fixed-wing aircraft. Vehicle access to Wheeler River is by Highway 914, which terminates at the Key Lake mill. The Wheeler River Project is well located with respect to all-weather roads. The haul road between the Key Lake and McArthur River operations lies within the eastern part of the Wheeler River property.

In 2021, Denison resurfaced the 7.2 km access road from km36 (turn off from Highway 914) to the Phoenix site to facilitate regular vehicle travel and heavy equipment mobilization and demobilization from the site. The sand and gravel used to resurface the road were sourced in very close proximity to the property. The Fox Lake Road between Key Lake and McArthur River provides access to most of the northwestern side of the Wheeler River property. Gravel and sand roads and drill trails provide access by either four-wheel-drive or all-terrain vehicles to the rest of the property.

### *Climate / Operating Season*

The climate is typical of the continental sub-arctic region of northern Saskatchewan, with temperatures ranging from +32°C in summer to -50°C in winter. Winters are long and cold, with mean monthly temperatures below freezing for seven months of the year. Winter snowpack averages 70 to 90 cm. Field operations are possible year-round, except for limitations imposed by lakes and swamps and the periods of break-up and freeze-up. Freezing of surrounding lakes, in most years, begins in November, and break-up occurs around the middle of May. The average frost-free period is approximately 90 days.

The average annual precipitation for the region is approximately 450 mm, of which 70% falls as rain, with more than half occurring from June to September. Snow may occur in all months but rarely falls in July or August. The prevailing annual wind direction is from the west, with a mean speed of 12 km/h.

It is expected that any future mining operations will operate year-round. Field operations currently operate year-round and are conducted from Denison's Wheeler River camp, 4 km south of the Gryphon Deposit and 3 km southwest of the Phoenix Deposit.

### *Sufficiency of Surface Rights, Power, Water, Personnel*

There are sufficient surface rights for the planned future mining operations, including sufficient land to construct various facilities, including potential waste disposal areas and the process plant.

The site currently generates its own power. The Wheeler River property is also well located with respect to the provincial power grid. Fuel and miscellaneous supplies are stored in the existing warehouse and tank facilities at the Wheeler River camp. Abundant water is available from the numerous lakes and rivers in the area.

To support the local economy, Denison has made a commitment to utilize local businesses whenever possible. Many of these local businesses are also Indigenous-owned. However, given the nature of Denison's remote operations, mining supplies and labour will also need to be sourced from major centres such as Saskatoon, Regina, and possibly others.

### *Topography, Elevation, Vegetation*

The Wheeler River Project is characterized by a relatively flat till plain with elevations ranging from 477 to 490 metres above sea level ("**masl**"). Throughout the area, there is a distinctive north-easterly trend to landforms resulting from the passage of Pleistocene glacial ice from the northeast to the southwest. The topography and vegetation at the Wheeler River Project are typical of the taiga forest common to the Athabasca Basin area of northern Saskatchewan.

The area is covered with overburden from 0 to 119 m in thickness. The terrain is gently rolling and characterized by forested sand and dunes. Vegetation is dominated by black spruce and jack pine, with occasional small stands of white birch occurring in more productive and well-drained areas. Lowlands are generally well drained but can contain some muskeg and poorly drained bog areas with vegetation varying from wet, open, non-treed vistas to variable density stand of primarily black spruce and tamarack, depending on moisture and soil conditions. Lichen growth is common in this boreal landscape, mostly associated with mature coniferous stands and bogs.

### *Significant Risks*

Reference should be made to the "Risk Factors" and the factors and risks described in the Wheeler Report for more information.

### History

#### *Ownership*

The Wheeler River Project was staked on July 6, 1977 and was vended into the WRJV pursuant to the Wheeler River joint venture agreement dated December 28, 1978 (the "**Wheeler JV Agreement**"), among AGIP Canada Ltd. ("**AGIP**"), E&B Explorations Ltd. ("**E&B**"), and Saskatchewan Mining Development Corporation ("**SMDC**"), with each holding a one-third interest.

On July 31, 1984, all parties divested a 13.3% interest in the WRJV and allowed Denison Mines Limited, a predecessor company to Denison, to earn a 40% interest. On December 1, 1986, E&B allowed PNC Exploration (Canada) Co. Ltd. ("**PNC**") to earn a 10% interest from its 20% interest. In the early 1990s, AGIP sold its 20% interest to Cameco (successor to SMDC), resulting in Cameco holding 40%. In 1996, Imperial Metals Corporation (successor to E&B), sold its remaining 8% interest to Cameco and 2% interest to PNC. Participating interests became Cameco 48%, PNC 12%, and Denison 40%.

In late 2004, Denison earned a further 20% interest from the other parties to the WRJV, after which the participating interests were Denison 60%, Cameco 30%, and JCU (a successor to PNC) 10%. Since November 2004, Denison has been the operator of the WRJV.

In January 2017, Denison executed an agreement with the partners of the WRJV to fund 50% of Cameco's ordinary share of joint venture expenses in 2017 and 2018 in exchange for a transfer of a portion of Cameco's interest. Based on spending during 2017, Denison increased its interest

in the WRJV to 63.3%. In October 2018, Denison acquired all of Cameco's remaining interest and the WRJV became Denison (90%) and JCU (10%).

In August 2021, Denison acquired an additional 5% indirect interest in the Wheeler River Project through the acquisition of a 50% ownership interest in JCU. Denison currently has an effective 95% ownership interest in the WRJV.

### *Development History*

The Phoenix project is still at the advanced exploration stage and, except in connection with the FFT, no production has occurred on the property to-date.

### Geological Setting, Mineralization and Deposit Types

#### *Regional, Local and Property Geology*

Wheeler River is located near the southeastern margin of the Athabasca Basin in the southwest part of the Churchill Structural Province of the Canadian Shield. The Athabasca Basin is a broad, closed, and elliptically shaped cratonic basin with an area of 425 km east-west by 225 km north south. The bedrock geology of the Athabasca basin area consists of Archean and Paleoproterozoic gneisses unconformably overlain by up to 1,500 m of flat-lying unmetamorphosed sandstones and conglomerates of the mid-Proterozoic Athabasca Group.

Wheeler River is located near the transition zone between two prominent litho-structural domains within the Precambrian basement, namely the Mudjatik Domain to the west and the Wollaston Domain to the east. The Mudjatik Domain is characterized by elliptical domes of Archean granitoid orthogenesis separated by keels of metavolcanic and metasedimentary rocks. The Wollaston Domain is characterized by tight to isoclinal, northeasterly trending, doubly plunging folds developed in Paleoproterozoic metasedimentary rocks of the Wollaston Supergroup, which overlie Archean granitoid orthogenesis identical to those of the Mudjatik Domain. The area is cut by a major northeast-striking fault system of Hudsonian Age. The faults occur predominantly in the basement rocks but often extend up into the Athabasca Group due to several periods of post-depositional movement.

Local geology is very much consistent with the regional geology.

#### *Phoenix*

Phoenix was discovered in 2008 and can be classified as an unconformity-associated deposit of the unconformity-hosted variety. The deposit straddles the sub Athabasca unconformity approximately 400 m below surface and comprises three zones (A, B, C and D) which cover a strike length of about 1.1 km. The Phoenix deposit's zones A and B comprise an exceptionally high-grade core, averaging 46.0% and 22.3% U<sub>3</sub>O<sub>8</sub>, respectively. A lower-grade shell surrounds the high-grade core. The basement mineralization at Zone A occurs within local dilation zones near both ends of the deposit associated with the interpreted cross faults. No mineral resources have been estimated for either Zone C or Zone D.

Phoenix is interpreted to be structurally controlled by the WS Shear, a prominent basement thrust fault which occurs footwall to a graphitic-pelite and hanging wall to a garnetiferous pelite and quartzite unit. A minor amount of basement, fracture-hosted mineralization occurs within local dilation zones near both ends of the deposit associated with the interpreted cross faults.

The mineralization within the Phoenix deposit is dominated by massive to semi-massive uraninite associated with an alteration assemblage comprising hematite, dravitic tourmaline, illite and chlorite. Secondary uranium minerals, including uranophane and sulphides, are trace in quantity. Average nickel, cobalt, and arsenic concentrations are at the low end of the range found in other uranium deposits in the Athabasca basin.

Phoenix Zones A and B exhibit elevated concentrations of certain rare earth elements. While there is a strong correlation between the REEs and uranium mineralization, the correlation between heavy rare earth elements and the high-grade uranium domains is comparatively stronger than the correlation between high-grade uranium mineralization and light rare earth elements.

### *Gryphon*

Gryphon was discovered in 2014 and can be classified as an unconformity-related deposit of the basement-hosted variety. The deposit occurs within southeasterly dipping crystalline basement rocks of the Wollaston Supergroup below the regional sub-Athabasca Basin unconformity. The deposit is located from 520 to 850 m below surface, has an overall strike length of 610 m and dip length of 390 m, and varies in thickness between 2 and 70 m, depending on the number of mineralized lenses present.

A series of 24 stacked lenses referred to as the A, B, C, D and E-series are controlled by reverse fault structures, which are largely conformable to the basement stratigraphy and dominant foliation. The A, B and C series of lenses comprise stacked, parallel lenses which plunge to the northeast along the G-Fault which occurs between hangingwall graphite-rich pelitic gneisses and a more competent pegmatite-dominated footwall. A ubiquitous zone of silicification (Quartz-Pegmatite Assemblage) straddles the G-Fault and the A, B and C series of lenses occur in the hangingwall of, within, and in the footwall of the Quartz-Pegmatite Assemblage, respectively. The D series lenses occur within the pegmatite-dominated footwall along a secondary fault zone (Basal Fault) or within extensional relay faults which link to the G Fault. The E series lenses occur along the G-Fault, up-dip and along strike to the northeast of the A and B series lenses, within the upper basement or at the sub-Athabasca unconformity. The E series of lenses differ from the remaining sets of lenses as they are the only ones to not follow the local scale plunge of the deposit, rather the mineralization is located planar to foliation and tight to the unconformity. To date, the E series lenses are the only lenses to host unconformity mineralization at Gryphon.

Mineralization within the Gryphon deposit lenses is dominated by massive, semi-massive or fracture-hosted uraninite associated with an alteration assemblage comprising hematite, dravitic tourmaline, illite, chlorite and kaolinite. Secondary uranium minerals, including uranophane and carnotite, and sulphides are trace in quantity.

Gangue mineralogy is dominated by alteration clays (illite, kaolinite, chlorite), dravite and hematite with minor relict quartz, biotite, graphite, zircon, and ilmenite. Only trace concentrations of sulphides are noted, comprising galena, chalcopyrite, and pyrite. Notable concentrations of molybdenum and lithium are also noted within and around the mineralization, represented visually as lepidolite and molybdenite, respectively.

### *Mineral Deposit Type*

The Phoenix and Gryphon Deposits are classified as an Athabasca Basin unconformity-associated (also unconformity-related and -type) uranium deposit. Phoenix straddles the

unconformity contact between the Athabasca sandstone and underlying basement, signifying the unconformity as a major fluid pathway for uranium mineralization. Gryphon is primarily hosted in the basement rocks, with minor portions of the deposit situated at the unconformity.

Unconformity-associated uranium deposits are pods, veins, and semi-massive replacements consisting of mainly uraninite, close to basal unconformities, in particular those between Proterozoic conglomeratic sandstone basins and metamorphosed basement rocks. The uranium deposits in the Athabasca Basin occur below, across, and immediately above the unconformity, which can lie within a few metres of surface at the rim of the Basin to over 1,000 m deep near its centre. The deposits are formed by extensive hydrothermal systems occurring at the unconformity's structural boundary between the older and younger rock units.

Two end-members of the deposit model have been defined: (1) a sandstone-hosted egress-type model (i.e., Midwest A deposit) involved the mixing of oxidized, sandstone brine with relatively reduced fluids issuing from the basement into the sandstone; and (2) a basement-hosted, ingress-type deposits (i.e., Rabbit Lake deposit) formed by fluid-rock reactions between oxidizing sandstone brine entering basement fault zones and the local wall rock.

Unconformity-type uranium deposits are surrounded by extensive alteration envelopes. In the basement, these envelopes are generally relatively narrow but become broader where they extend upwards into the Athabasca Group for tens of metres to even 100 m or more above the unconformity. Hydrothermal alteration is variously marked by chloritization, tourmalinization (high boron, dravite), hematization (several episodes), illitization, silicification/desilicification, and dolomitization. Modern exploration for these types of deposits relies heavily on deep-penetrating geophysics and down-hole geochemistry.

Recently, basement-hosted deposits have become more recognized as a viable exploration target through the development of Eagle Point mine and the discovery of deposits such as Millennium, Triple R, and Arrow. Exploration typically requires the recognition of significant fault zones within basement metasediments (often associated with graphite) with associated clay and geochemical alteration haloes.

### Exploration

Excluding the years 1990 to 1994, exploration activities comprising airborne and ground geophysical surveys, geochemical surveys, prospecting, and diamond drilling have continuously been carried out on the Wheeler River property from 1978 to present.

After the discovery of the Key Lake mine in 1975/1976, the Key Lake exploration model has emphasized the spatial association between uranium deposition at, immediately above, or immediately below the unconformity with graphitic pelitic gneiss units in the basement subcrop under the basal Athabasca sandstone. The graphitic pelitic gneiss units are commonly intensely sheared and are highly conductive in contrast to the physically more competent adjoining rock types that include semipelitic gneiss, psammite, meta-arkose, or granitoid gneiss. From the late 1970s to the present, the Key Lake model has helped discover blind uranium deposits throughout the Athabasca Basin, although it is worth noting that the vast majority of EM conductors are unmineralized.

Following the Key Lake exploration model, EM techniques were the early geophysical methods of choice for the Wheeler River Project area from 1978 to 2004. More than 152-line km of electromagnetic ("**EM**") conductors have been delineated on the Wheeler River Project to depths

of 1,000 m through the quartz-rich Athabasca Group sandstones that are effectively transparent from an EM perspective. These conductors or conductor systems were assigned a unique designation, and follow-up exploration drilling successfully identified several zones of uranium mineralization.

Since 2004, Denison has completed ground geophysical surveys over the Wheeler River property, including the DC resistivity surveys that identified the drilling target that led to the discovery of the Phoenix deposit in 2008. In 2004, an airborne survey GEOTEM EM and magnetic survey collected data covering the entire Wheeler River Project while a FALCON airborne gravity gradiometer survey in 2005 targeted the unconformity uranium mineralization. A helicopter-borne versatile time-domain electromagnetic (“**VTEM**”) magnetic-radiometric survey was conducted over the Wheeler River Project in 2013 in attempt to remove noise in the interpretation of a previous survey.

### Drilling

Diamond drilling has been the principal method of exploration and delineation of uranium mineralization after initial geophysical surveys. Drilling can generally be conducted year-round. Since 1979, over 1,000 diamond drill holes and 84 reverse circulation (“**RC**”) drill holes totalling in excess of 490,000 m have been completed on the Wheeler River property.

### *Phoenix*

Since 2008, 315 drill holes totalling 145,982 m have delineated the Phoenix deposit. The Phoenix deposit area has been systematically drill tested over approximately 1 km of strike length at a nominal spacing of 25 to 50 m northeast-southwest by 10 m northwest-southeast (perpendicular to strike). Delineation diamond drilling at Phoenix was primarily done with NQ sized core (47.6 mm diameter) in holes WR-249 through WR-275 and HQ sized core (63.5 mm diameter) reducing to NQ at 350 m in holes thereafter, with most holes successfully penetrating into the basement. Some additional infill holes were drilled primarily to test the spatial continuity of the mineralization. The bulk of the flat-lying high-grade mineralization is positioned at and sub-parallel to the unconformity.

**Phoenix Drilling Completed by Denison**

<b>Year</b>	<b>No. of Holes</b>	<b>Total Drilled (m)</b>	<b>Comments</b>
2008	6	2,704	Discovery hole WR-249 drilled to test resistivity Target A. Hole WR-251 drilled to test Target B. Follow-up drilling testing mineralization to the southeast of WR-251
2009	39	18,805	Drilling higher-grade mineralization with additional drilling testing the continuity of the high-grade portion of the mineralized zone
2010	56	26,937	-
2011	66	32,553	-
2012	49	23,712	-
2013	22	11,064	Infill delineation drilling on Phoenix Zone A
2014	13	6,121	Drilling completed on Phoenix Zone A to extend high-grade portions
2015	2	1,557	-
2016	3	1,748	Diamond drilling completed in Phoenix Zone A to test ground conditions of proposed site infrastructure
2017	5	524	Drill holes completed in Phoenix Zone A to collect samples for metallurgical testing and further test ground conditions of proposed site infrastructure

Year	No. of Holes	Total Drilled (m)	Comments
2018	-	-	-
2019	7	2,518	Drilling wells to test hydraulic connectivity of Phoenix Zone A and rock mass surrounding the deposit
2020	22	7,571	PQ-sized environmental monitoring wells. Exploration drilling targeting the gap between Phoenix Zones A and B, and Phoenix Zones B and C
2021	15	5,990	15 wells drilled within Mining Phase 1 and two exploration holes
2022	10	4,177	PQ-sized monitoring wells in Mining Phase 1, 2 and 4

### *Gryphon*

The first exploration drilling in the Gryphon area began in 1988 and continued intermittently through 2013. In 2014, Denison completed a drilling campaign of 23 holes for 16,666 m which included the Gryphon discovery hole WR-556. Following the discovery of Gryphon, definition drilling has been carried out on all lenses (A through E series). To date, Denison and predecessor companies have drilled 278 holes, totalling 156,600 m, in the immediate Gryphon deposit area, of which 216, totalling 119,720 m drilled between 1985 and 2017, have delineated the Gryphon deposit. Diamond drilling at Gryphon was primarily done with NQ sized core (47.6 mm diameter) with most holes angled between 60° and 79° to the northwest.

Gryphon Drilling Completed by Denison		
Year	No. of Holes	Total Drilled (m)
2013	3	1,515
2014	26	17,915
2015	53	30,861
2016	73	43,605
2017	91	43,273
2018	23	14,157

### Sampling, Analysis and Data Verification

See “Athabasca Exploration: Sampling, Analysis and Data Verification” for details.

### Mineral Processing and Metallurgical Testing

#### *Phoenix*

Test programs, including various forms of leaching tests, process plant circuit tests, and effluent and solid waste streams treatment steps, have been conducted on the Phoenix deposit before and during the Phoenix FS. The results of the tests indicate the ability to leach uranium using in-situ techniques, allow a representative recovery curve to be assembled, and indicate geochemistry requirements for subsurface remediation.

Leaching testwork for Phoenix has included:

- Grinding, leaching and conventional downstream milling tests in 2014 conducted by SRC
- Batch leach tests and bottle roll/agitation leach tests in 2017 conducted by Inter-Mountain Laboratories Inc. with alkaline and acidic based lixivants
- Leach temperature tests on crushed core in 2020 conducted by SRC

- Column leach tests on blended crushed core in 2021 conducted by SRC
- Column leach and remediation tests on crushed and screened core from individual hydrogeologic units (variability) conducted by SRC in 2022
- Static uranium ore dissolution (jar) test on intact core in 2018 conducted by SRC
- Coreflood tests on intact core in 2018 to 2022 conducted by SRC
- FFT leaching and remediation in 2022 conducted by Denison

The main objective of the FFT was to demonstrate injection of lixiviant and recovery of uranium bearing solution from the CSW test pattern. The FFT was a full-scale proof of concept of the ISR method in a thick and high-grade area of the deposit likely to be targeted for initial production.

The following process plant testwork has been conducted on the Phoenix deposit. The results informed the criteria and design of the process plant described in the Phoenix FS, with specific attention paid to environmental requirements for waste streams and to end-product quality.

- Four batch testing campaigns in 2021 and 2022, by SRC, of the following circuits: Iron and radium precipitation (using NaOH and lime), yellowcake (“**YC**”) precipitation, YC drying/calcing, and two stages of effluent treatment
- Five zero valent iron (“**ZVI**”) tests in 2022, by SRC, using fixed bed columns, for selenium removal as option for third stage of the effluent treatment
- Tests conducted in 2022 of third-party proprietary ion exchange and electroreduction (“**IX/ER**”) technology, as an option for selenium removal from treated effluent

### *Gryphon*

In 2017, Denison undertook a metallurgical testwork program at SRC Geoanalytical Laboratories, directly managed by Denison. Denison also completed a parallel test program at the Orano Service d’Études de Procédés et Analyses (“**SEPA**”) laboratories at Bessines-sur-Gartempe, France. SRC and SEPA are ISO 17025 certified. The objectives of the testwork programs were to further develop the optimum processing conditions and collect additional data to support engineering design, including confirming the adequacy of the McClean Lake mill for processing Gryphon ore:

- Grinding test
- Leaching tests on three composite samples to validate leaching characteristics
- Settling and filtration tests
- Solvent extraction tests
- Yellowcake Precipitation tests
- Tailings neutralization test

### Mineral Resource and Mineral Reserve Estimates

Mineral resources are reported in accordance with CIM Definition Standards (CIM, 2014) and prepared in accordance with the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (CIM, 2019).

The estimates for Phoenix are presented assuming ISR extraction. The estimates for Gryphon are presented assuming underground mining methods.

Denison is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the mineral resource estimate, other than what is described in this AIF and the Wheeler Report. See "Risk Factors".

**Phoenix Mineral Resource Statement, Effective Date June 23, 2023**

Confidence Category	Domain	Volume (x1000 m <sup>3</sup> )	Density (g/cm <sup>3</sup> )	Tonnes (kt)	Average Grade (%U <sub>3</sub> O <sub>8</sub> )	Contained U <sub>3</sub> O <sub>8</sub> (Mlb)
Measured	ZoneA_HG	6.7	3.84	25.9	50.7	28.9
	ZoneA_LG	16.5	2.33	38.3	2.3	2.0
	Total	23.2	2.77	64.2	21.8	30.9
Indicated	ZoneA_HG	8.8	3.37	29.6	42.0	27.4
	ZoneA_LG	57.9	2.33	134.8	2.0	5.8
	ZoneB_HG	4.3	2.66	11.5	22.3	5.7
	ZoneB_LG	17.1	2.34	40.1	0.9	0.8
	Total	88.1	2.45	216.0	8.3	39.7
<b>Total Measured and Indicated</b>		<b>111.3</b>	<b>2.52</b>	<b>280.2</b>	<b>11.4</b>	<b>70.5</b>
Inferred	ZoneA_Bsmt	2.4	2.34	5.6	2.6	0.3

**Notes:**

- (1) Mineral resources are reported at a cut-off grade of 0.1% U<sub>3</sub>O<sub>8</sub>.
- (2) Mineral resources are reported using a uranium price of US\$55/lb U<sub>3</sub>O<sub>8</sub> and total combined mining, processing and G&A operating costs of US\$5.85/lb U<sub>3</sub>O<sub>8</sub>.
- (3) Mineral resources are inclusive of mineral reserves.
- (4) All figures have been rounded to reflect the relative accuracy of the estimate and may not sum due to rounding.

Due to the high-grade nature of the Phoenix deposit, additional infill drilling related to installation of an ISR well field will provide further definition of the high-grade uranium mineralization within the deposit footprint, leading to possible changes in the estimated uranium content. However, it is estimated that, given the current drill density within the deposit, any possible changes to the estimated uranium content would not be material based on the current geological understanding of the deposit.

**Phoenix Mineral Reserve Statement, Effective Date June 23, 2023**

Confidence Category	Tonnes (kt)	Grade (% U <sub>3</sub> O <sub>8</sub> )	Recoverable U <sub>3</sub> O <sub>8</sub> (Mlb)
<b>Proven</b>			
Phase 1	6.3	24.5	3.4
Subtotal Proven	6.3	24.5	3.4
<b>Probable</b>			
Phase 1	41.3	20.2	18.4
Phase 2	45.2	13.8	13.7
Phase 3	20.3	11.0	4.9
Phase 4	68.9	7.2	10.9
Phase 5	37.0	6.6	5.4
Subtotal Probable	<b>212.7</b>	<b>11.4</b>	<b>53.3</b>
<b>Total Proven and Probable</b>	<b>219.0</b>	<b>11.7</b>	<b>56.7</b>

**Notes:**

- (1) Mineral reserves are estimated at a cut-off grade of 0.5% U<sub>3</sub>O<sub>8</sub> based on the ISR mining method, using a long-term uranium price of US\$50/lb U<sub>3</sub>O<sub>8</sub> and a CA\$/US\$ exchange rate of 1.33. The mineral reserves are based on a mine operating cost of \$0.78/lb U<sub>3</sub>O<sub>8</sub>, process operating cost of \$5.20/lb U<sub>3</sub>O<sub>8</sub>, and process recovery of 99%.

- (2) A mine recovery of 80.6% has been applied to the tonnage to convert the mineral resources to mineral reserves. Recoverable U<sub>3</sub>O<sub>8</sub> refers to ISR recoverable and does not account for process losses.

The aggregate mine feed to the plant has been estimated to contain 56.7 million pounds U<sub>3</sub>O<sub>8</sub>. This represents 80.6% recovery of the measured and indicated mineral resource available for in-situ recovery and is the mineral reserve estimate determined from this study.

The FS analysed the varying recovery rates amongst hydrogeological units (“**HGUs**”) and was a significant step in the definition of ISR efficacy for this deposit. Recovery varies based on the permeability and geochemistry of the HGUs and their interaction with adjoining units. To characterize the behaviour of ISR, a hydraulic tomography model was developed to estimate permeabilities in three dimensions throughout the deposit. These values were used in a hydrogeologic simulation to calculate in-situ flows between injection and recovery wells through the HGUs. The resulting flow field was input to a geochemical model to simulate recovery per well, per HGU. This recovery result was used to revise the well layout and individual flows in the hydrogeologic model. Several iterations of this modelling system were run to realize the optimized result.

The recovery curve used as a basis for the geochemical model was obtained empirically from metallurgical testing.

In determining the conversion of mineral resources to mineral reserves for the application of the ISR mining method to a heterogeneous unconformity style deposit, several modifying factors were considered. These include, but were not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social, and government factors. While a significant portion of the Phoenix mineral resource is classified as measured, demonstrating the highest degree of confidence in relation to geologic parameters, the cumulative assessment of all modifying factors supports the classification of probable mineral reserves for a large portion of the deposit, with a requirement of higher confidence in the modifying factors achieved through operating experience.

Estimated proven mineral reserves are based on the 2022 FFT, which provided additional confidence in the ISR method and ability to recover U<sub>3</sub>O<sub>8</sub> within the tested region of the deposit. A stockpile of 14,400 lb U<sub>3</sub>O<sub>8</sub> in uranium bearing solution was recovered to surface during the FFT, representing the initial ramp-up of a leach recovery curve. To calculate the proven mineral reserves, the recovery determined through computer modelling for Phase 1 was applied to the estimated in situ mass contacted during the FFT.

**Gryphon Mineral Resource Statement, Effective Date August 7, 2018**

<b>Confidence Category</b>	<b>Mineralized Domain</b>	<b>Tonnes (kt)</b>	<b>Grade (%U<sub>3</sub>O<sub>8</sub>)</b>	<b>Contained U<sub>3</sub>O<sub>8</sub> (Mlb)</b>
Indicated	Gryphon A1HG	148	7.6	24.7
	Gryphon A1LG	365	0.8	6.7
	Gryphon A2	262	1.0	5.5
	Gryphon A3	36	0.4	0.3
	Gryphon B1	161	1.1	3.7
	Gryphon B2	158	1.5	5.2
	Gryphon B3	59	1.3	1.7
	Gryphon C1	105	1.2	2.7
	Gryphon D1HG_HW	17	5.0	1.8
	Gryphon D1HG_MD	11	7.4	1.8
	Gryphon D1HG_FW	15	7.5	2.5
	Gryphon D1LG	153	0.6	1.9
	Gryphon D4	89	0.7	1.4

	Gryphon E2	65	1.1	1.7
<b>Total Indicated</b>	<b>Gryphon</b>	<b>1,643</b>	<b>1.7</b>	<b>61.9</b>
Inferred	Gryphon A4	2	0.3	0.0
	Gryphon B5	10	0.3	0.1
	Gryphon D2	5	0.4	0.0
	Gryphon D3	13	1.2	0.4
	Gryphon E1	31	1.3	0.9
	Gryphon E2	12	2.0	0.5
<b>Total Inferred</b>	<b>Gryphon</b>	<b>73</b>	<b>1.2</b>	<b>1.9</b>

**Notes:**

- (1) Mineral resources for the Gryphon Deposit are constrained by underground mining shapes using a minimum mining width of 2 m and an incremental cut-off grade of 0.2% U<sub>3</sub>O<sub>8</sub>. The cut-off grade include considerations of a long-term uranium price of US\$55/lb, US\$/CA\$ exchange rate of 0.75, process recovery of 97%, an underground mine operating cost of \$130/t, haulage cost of \$32/t, process operating cost of \$280/t, G&A cost of \$104/t and incremental operating cost component of \$260/t for low-grade material.
- (2) High-grade mineralization was capped at 30% U<sub>3</sub>O<sub>8</sub> and restricted at 20% U<sub>3</sub>O<sub>8</sub> for the A1HG and capped at 20% U<sub>3</sub>O<sub>8</sub> for the D1HG with no search restrictions.
- (3) Low-grade mineralization was capped at 20% U<sub>3</sub>O<sub>8</sub> for the C1 domain with search restrictions applied to U<sub>3</sub>O<sub>8</sub> grades greater than or equal to 10.0% U<sub>3</sub>O<sub>8</sub>.
- (4) Low-grade mineralization was capped at 15% U<sub>3</sub>O<sub>8</sub> for the B1, B2, E1, and E2 domains with search restrictions applied to U<sub>3</sub>O<sub>8</sub> grades greater than or equal to 10.0% U<sub>3</sub>O<sub>8</sub> for the B1 domain and 5.0% U<sub>3</sub>O<sub>8</sub> for the E2 domain.
- (5) Low-grade mineralization was capped at 10% U<sub>3</sub>O<sub>8</sub> for the A1-A4, B3-B7, C4-C5, and D2-D4 domains with no search restrictions.
- (6) Low-grade mineralization was capped at 5% U<sub>3</sub>O<sub>8</sub> for the D1 domain with no search restriction.
- (7) Bulk density is derived from grade using a formula based on 279 measurements from Gryphon.
- (8) Mineral resources are reported inclusive of mineral reserves.
- (9) Figures may not sum due to rounding.

**Gryphon Mineral Reserve Statement, Effective Date September 1, 2018**

<b>Confidence Category</b>	<b>Tonnes (Mt)</b>	<b>Grade (% U<sub>3</sub>O<sub>8</sub>)</b>	<b>Contained U<sub>3</sub>O<sub>8</sub> (Mlb)</b>
Probable	1.257	1.8	49.7
<b>Total</b>	<b>1.257</b>	<b>1.8</b>	<b>49.7</b>

**Notes:**

- (1) Mineral reserves are stated at a processing plant feed reference point.
- (2) Mineral reserves for the Gryphon Deposit are estimated at a cut-off grade of 0.58% U<sub>3</sub>O<sub>8</sub> based on longhole mining using a long-term uranium price of US\$50/lb and a US\$/CA\$ exchange rate of 0.8. The mineral reserves are based on a mine operating cost of \$150/t, mill operating cost of \$275/t, G&A cost of \$99/t, transportation cost of \$50/t, milling recovery of 97%, and 7.25% fee for Saskatchewan royalties. Mineral reserves include diluting material and mining losses.

The mineral reserve for Gryphon is estimated at 49.7 Mlb U<sub>3</sub>O<sub>8</sub> (1.2 Mt grading at 1.8% U<sub>3</sub>O<sub>8</sub>) as summarized in the above table.

The mine design and mineral reserve estimate have been completed to a level appropriate for a PFS. The Gryphon block model did not include any measured mineral resource material. All mineral reserves were converted from indicated mineral resources and are classified as probable mineral reserves. The inferred mineral resources contained within the mine design are considered as waste.

## Mining Operations

### *Phoenix*

The uranium ISR process, as proposed for Phoenix, involves the preparation of an acidic mining solution in the process plant that is transferred to the injection solution handling system at the wellfield to cause the dissolution of uranium compounds from the targeted mineralized zone. The

acidic solution will dissolve and mobilize the uranium, allowing the dissolved uranium to be pumped to the surface as uranium bearing solution (“**UBS**”). UBS is recovered from the wellfield and transferred to the nearby process plant for uranium precipitation, drying, and packaging.

Containment of the solution is a requirement in ISR operations to ensure recovery of the uranium and to minimize regional groundwater infiltration into the mineralized zone and associated dilution of the mining solution. For Phoenix, it is proposed that artificial ground freezing will be implemented around the perimeter of the mineralized zone creating a vertical hydraulic barrier between the ISR zone and the external natural hydrogeology. The freeze wall will be established by drilling a series of vertical cased holes from surface and keying them into the basement rock. Circulation of a low temperature brine solution in the holes will remove heat from the ground, freezing the natural groundwater, and establishing an impermeable frozen wall around the deposit.

Benefits of ISR operations relative to traditional mining methods generally include:

- Minimal environmental impacts, including low noise, dust, and air emissions, low water consumption levels, minimal surface disturbance, and reclamation of the area.
- Ability to scale production up or down to meet market demands.
- Low initial capital costs and short timeframe to production.
- Low operating costs.
- Enhanced safety practices and procedures for workers – with minimal exposure to natural radiation associated with high-grade uranium orebodies and no requirement to work in an underground mining setting (as all work is performed from surface).

The Company’s evaluation of the ISR mining method at Phoenix, as detailed in the Wheeler Report, has identified several significant environmental and permitting advantages, particularly when compared to the impacts associated with conventional uranium mining in Canada. The proposed ISR mining operation for Phoenix is expected to produce a low tonnage of solid waste relative to conventional uranium mill tailings, generate very small volumes of waste rock, and has the potential for low volumes of treated water discharge to surface water bodies, as well as the potential to use the existing power grid to operate on a near zero carbon emissions basis.

The planned use of ground freezing to isolate the ISR operation, has the potential to streamline the mining process, minimize interaction with the environment, and facilitate controlled reclamation of the site at decommissioning.

Taken together, ISR mining at Phoenix has the potential to achieve a superior standard of environmental sustainability when compared to conventional mining and milling operations.

### *Gryphon*

The planned mining method for Gryphon is conventional longhole stoping with backfill. Longhole stoping is a widely used conventional mining method applied in both the Canadian uranium industry as well as in the broader mining industry for the extraction of base metals, gold, and other commodities.

According to the planned approach, access to the Gryphon deposit will be established through two shafts. The primary shaft will provide for movement of personnel and supplies, ore/waste hoisting, and fresh air to the underground operations. The second shaft will be solely for exhaust

air and secondary egress. Heated fresh air will be delivered via the production shaft, with return air exhausted up the ventilation shaft. Both shafts will be excavated through blind boring methods. Blind bored shafts have been selected for vertical access in favour of typical full-face shaft sinking with cover grouting or freeze curtain protection. Blind bored shafts offer more competitive costs and construction schedules, and a reduced risk profile while sinking through saturated ground conditions. A composite steel/concrete liner will be installed over the full length of the shaft and grouted into basement rock. The main mine dewatering system will consist of a clean water pumping system that will pump decanted water to surface via piping in the ventilation shaft.

Access from the production shaft to the mine workings will be via a single ramp located on the hangingwall. Stope overcut and undercut drifts will include 100% shotcrete coverage and 150 mm of ballast on the floor to reduce the potential for radiation exposure.

The mine has been divided into five mining blocks, E Zone, Lower D, Upper and Lower Main, and Upper SW. Each mining block will be mined from the bottom up. Ore will be truck hauled to a rockbreaker/grizzly station and hoisted to surface. The mine is expected to produce approximately 605 t/d of ore and an average of 330 t/d of waste rock during the steady state operating period.

The Gryphon PFS Update assumes that the ore will be hoisted to surface and transported to the McClean Lake mill for processing. A two-year ramp-up to full production is planned, with the full production rate set at 9 million pounds  $U_3O_8$  per year. Processing at the McClean Lake mill will require the negotiation and execution of a toll milling agreement, which is not currently established, and will also require regulatory approvals, which have not been obtained.

## Processing and Recovery

### *Phoenix*

The uranium bearing solution from the Phoenix wellfield will be directed to a self-contained processing facility located adjacent to the wellfield. The process design was developed from the process plant testing campaigns, using UBS column leach test solution as feed.

In the process plant, the first step is removal of impurities such as iron and radium from the UBS as solids in the stage 1 (Fe/Ra) precipitation circuit. The stage 1 solids are placed as filter cake in totes on a storage pad, for shipment offsite. Next, the purified leach solution (“**PLS**”) feeds the stage 2 (YC) precipitation circuit, producing uranyl peroxide YC product solid, which is then dried and packaged for shipment.

The barren leach solution (“BLS”) from stage 2 (YC) precipitation feeds the effluent treatment (ET) circuit, comprised of three stages. The first ET stage (ET stage 1) is low pH neutralization, which precipitates most of the remaining radionuclides. The resulting solids are placed as filter cake in totes along with the process plant stage 1 (Fe/Ra) precipitation circuit cake product. The second stage (ET stage 2) is high pH neutralization, which removes most of the remaining dissolved solids, forming a waste solids stream composed mainly of gypsum. This is pumped as slurry to a disposal pond for consolidation. The third ET stage neutralization (ET stage 3) targets selenium removal and adjusts final pH to near neutral. A small selenium-bearing waste solids stream is blended with the gypsum waste for disposal.

The different types of chemical reagents will be stored, used, and managed to ensure worker and environmental safety, in accordance with standards developed by regulatory agencies and vendors.

Uranium recovery was estimated by evaluating the losses of the individual circuits and combining into an overall steady state recovery. The final mass balance recovery is estimated to be 96.5%, as shown in the following table:

Item	Uranium Content (%)
Process plant feed	100.0
Fe/Ra losses	3.0
ET losses	0.5
<b>Process plant recovery</b>	<b>96.5</b>

It is estimated that during the ramp-up period for production recovery will be lower, resulting in a Year 1 recovery of 93.4% and a life of mine (“LOM”) process plant recovery of 96.3%.

The majority of the Fe/Ra and ET losses end up in the process precipitate solids (“PPS”). Preliminary estimate for recovery of uranium from reprocessing the PPS is 90%. The recovery from the PPS potentially increases the overall Phoenix recovery by 2.7%. The LOM recovery is summarized in the following table:

Item	Uranium Recovery (%)
Process plant recovery	96.3
Process precipitate solids recovery	2.7
<b>Overall Phoenix recovery</b>	<b>99.0</b>

### Gryphon

The Gryphon PFS Update assumes that Gryphon ore will be transported to the McClean Lake mill for processing. The mill is currently processing material from the Cigar Lake mine; however, it has additional licensed processing capacity to a total annual production of up to 24 million pounds U<sub>3</sub>O<sub>8</sub>.

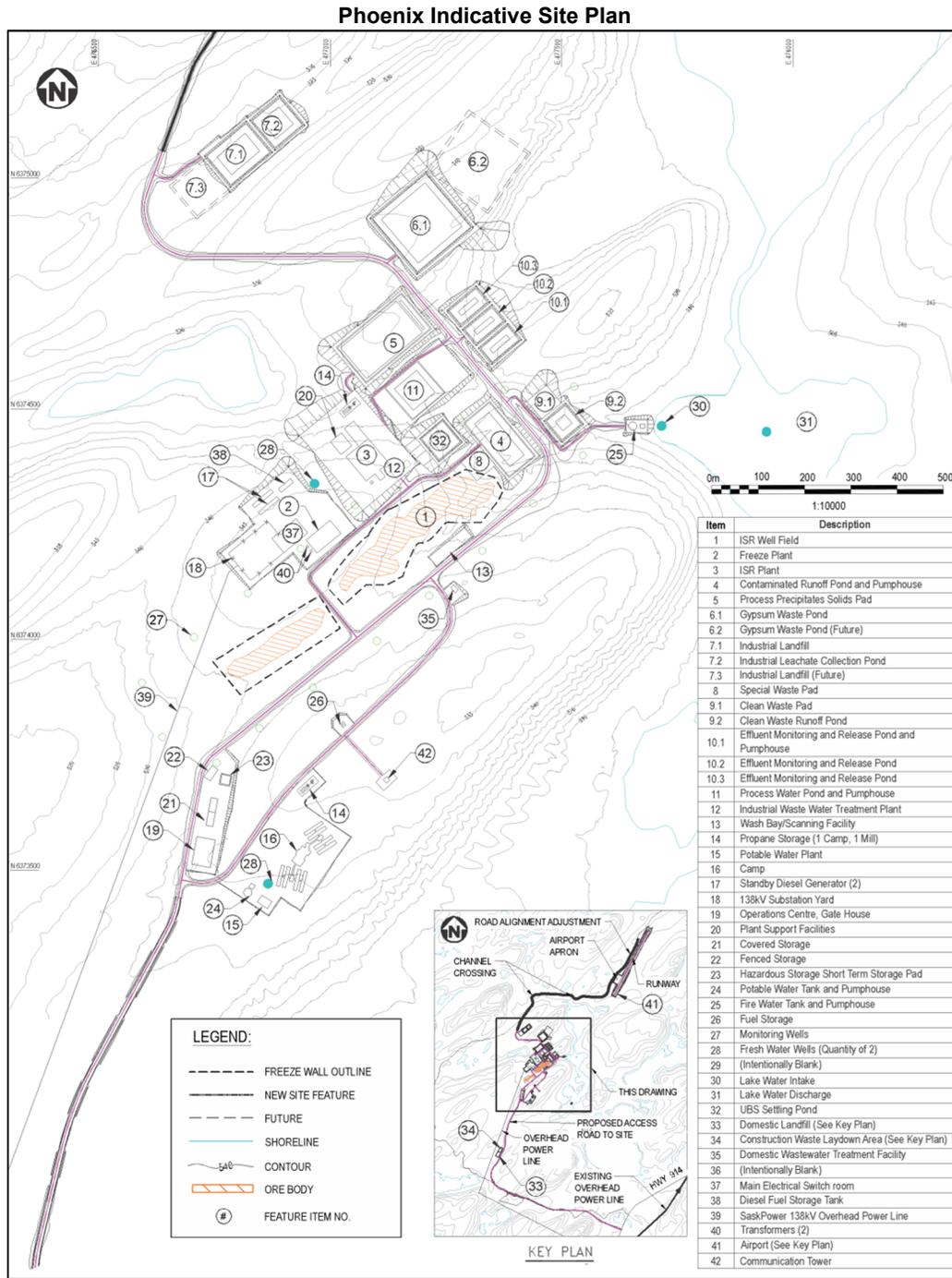
The mine plan for Gryphon aligns well with expected available capacity at the McClean Lake mill. Proposed Gryphon Deposit production scenarios do not exceed McClean Lake’s production capacity given certain assumptions regarding future production from the Cigar Lake mine. Gryphon ore is expected to be milled in parallel to Cigar Lake Phase 2 production, assumed in the Wheeler Report to be up to 15 million pounds U<sub>3</sub>O<sub>8</sub> per year, allowing for Gryphon ore processing at a peak of 9 million pounds U<sub>3</sub>O<sub>8</sub> per year.

Processing the Gryphon Deposit will require certain modifications to the McClean Lake mill. These modifications include expansion of the leaching circuit, the addition of a filtration system to complement the counter current decantation circuit capacity, the installation of an additional tailings thickener, and expansion of the acid plant. Various other upgrades will also be required throughout the mill to permit production at the full licensed capacity.

# Infrastructure, Permitting and Compliance Activities

## Phoenix Infrastructure

The Phoenix site layout is reasonably compact around the deposit, and working within the natural terrain where practical, to limit environmental disturbance. Modular or temporary facilities are planned where practical to reduce impact and simplify site closure. The camp is designed for 100 occupants and for expansion to 150 if and as needed.



The site plan is organized into radiological areas for control purposes. The wellfield, plant and nearest ponds are designated site locations where radioactive materials may be used or stored. Unauthorized persons are prohibited from entering radiation areas. The camp and operations facilities south of the production area are deemed non-radiation areas. Non-Radiation areas are areas where no radioactive materials are used or stored. The main site road will form a tertiary barrier between the radiation and non-radiation areas.

The planned infrastructure includes a gravel road from Highway 914 to site and an electrical power line from existing SaskPower distribution. A new airstrip and domestic and construction waste management areas are also included in site infrastructure plans.

Water is drawn from Whitefish Lake to the east. Well water is also available, which will be used to prepare potable water in the treatment plant near the camp. Domestic wastewater is sent to a mechanical treatment plant which produces water usable in the wellfield, and solids that are disposed in the industrial landfill.

### *Phoenix Permitting and Compliance Activities*

Environmental studies of the Phoenix ISR operation are significantly advanced. Baseline environmental data collection, technical assessments, plus extensive engagement and consultation with Indigenous and non-Indigenous interested parties have been completed with sufficient rigor to support development and submission of the Draft EIS, and associated technical documents, to the provincial and federal regulators in 2022. The draft EIS outlines the Company's assessment of the potential effects, including applicable mitigation measures, of the proposed ISR uranium mine and processing plant planned for Wheeler River.

Based on the information and related evaluation and assessment of effects, results show that the ISR operation can be constructed, operated, and decommissioned in a manner that is not likely to cause significant residual adverse effects to the biophysical or human environments, on its own or cumulatively with existing and reasonably foreseeable developments. Importantly, the Phoenix FS designs and plans incorporate learnings and mitigation measures identified through the EA process.

See "Government Regulation – Environmental Assessments" for more information.

In addition to the EA process, Denison will be required to obtain construction and operations permits from the Saskatchewan Ministry of Environment and Licences from the CNSC. While some overlap between the EA process and licensing/permitting is possible, generally licensing and permitting is expected to be completed following the EA process.

Denison recognizes the importance of early engagement and has been developing relationships with key interested parties since 2016. Amongst Denison's guiding principles is the utmost respect for Indigenous communities, Indigenous Rights, and traditional knowledge. Denison wishes to work in partnership to return meaningful benefits from the Wheeler River project to potentially impacted Rights holders, communities, and/or groups.

Denison understands the importance of protecting the area in which it is working, including the land, the water, the animals, the air and culture. Denison welcomes input from all interested parties through regulatory engagement and consultation. Processes have been established with and for interested parties to work directly with Denison to express comments (positive or negative)

or recommendations regarding its activities so the input can be incorporated into project plans, designs, and decisions.

Since 2016, Denison has engaged with Interested Parties to develop meaningful relationships and facilitate a collaborative approach to engagement and the advancement of the Wheeler River Project. Denison has developed and implemented an engagement plan to guide and structure such engagement activities. Engagement activities for Interested Parties are tailored to comply with both federal and provincial regulatory legislation and, importantly, meet the expectations of the parties.

To support its engagement and consultation activities for the Wheeler River project, Denison has developed practices to (1) ensure that employment opportunities are established for residents from the communities of interest; (2) procure goods and services from suppliers from the communities of interest and/or Indigenous-owned suppliers, to support continued exploration and evaluation activities; (3) support important community-led activities related to wellness and/or the preservation of traditional knowledge; and (4) solicit input through engagement and consultation activities into aspects of project designs (for example, selection of mining methods, access road routing, and selection of preferred treated water discharge locations).

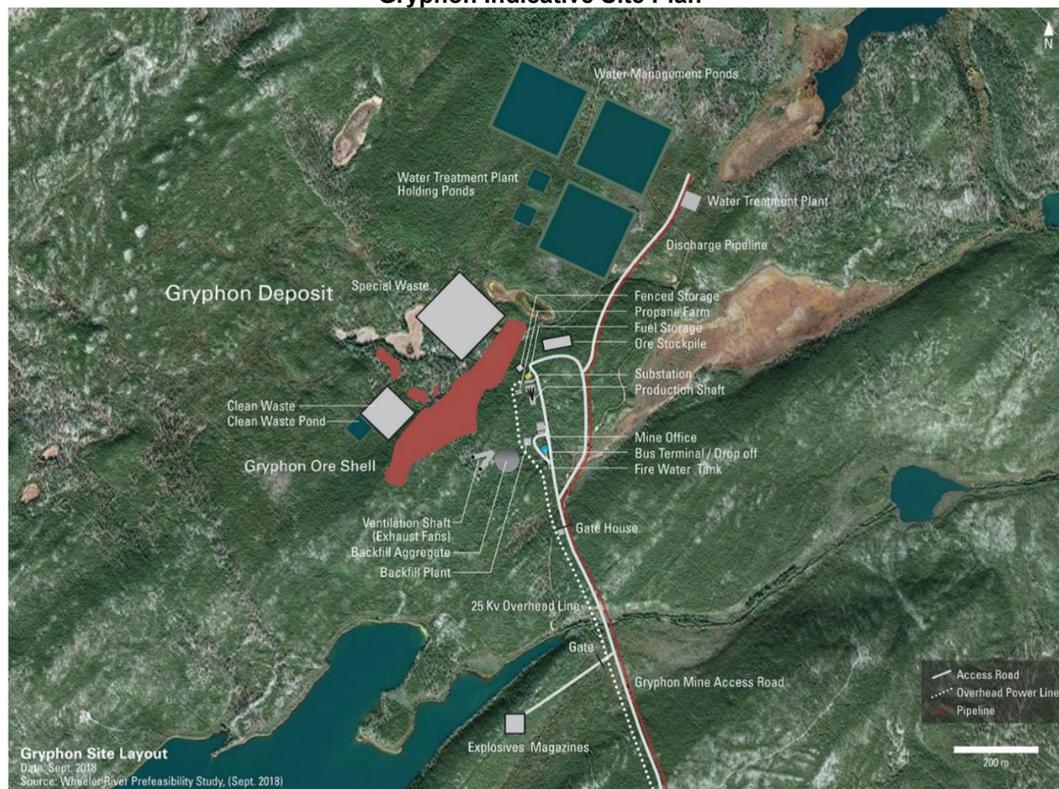
While the engagement to date has focused on the Phoenix Project, the activities are also generally relevant to the Gryphon Project. Engagement to date has been extensive, and Denison's approach with respect to consultation has been thorough and responsive to the requests of the public, Indigenous groups, and regulatory agencies.

See "Environmental, Health, Safety & Sustainability Matters" for further details.

### *Gryphon*

A conceptual layout of the plan view of the Gryphon site surface facilities shows the relative scale and nominal footprint size of major infrastructure items, including shafts, ore stockpile, waste rock storage, backfill plant, water treatment plant, water treatment and management ponds, fuel and propane storage, explosive storage and operations centre. It is assumed the Phoenix camp will be used during Gryphon mine development and production.

## Gryphon Indicative Site Plan



Gryphon is approximately 3 km northwest of the Phoenix deposit. Access to the Gryphon site will be via a 2 km road extension from the Phoenix site development. It will also be accessible by the airstrip northeast of the Phoenix deposit. Production from the Gryphon site will be trucked to the existing McClean Lake mill to the northeast, via existing Provincial Highway 914, including approximately 50 km of new road between the McArthur River mine and the Cigar Lake mine.

### *Gryphon Permitting and Compliance Activities*

Although the current EIS and licensing efforts are not focused on the Gryphon Project, significant baseline information has been gathered through the EA programs completed on the Wheeler River property. It is likely that additional and confirmatory baseline data collection will be required to complete the environmental approval process for the Gryphon Project. As a result of a change in Federal legislation in 2019, the Gryphon Project will undergo an EA to meet the requirements of the Saskatchewan Environmental Assessment Act; however, no Federal EA will be required.

Based on the existing understanding of the proposed Gryphon Project, there is no reason to assume the Gryphon Project could not successfully complete an environmental assessment which could be acceptable to the federal and provincial regulatory regimes and the Gryphon Project's stakeholders.

Additional regulatory approvals will be similar to those of the Phoenix ISR operation, whereby a Provincial permit and a CNSC licence will be prerequisites ahead of Gryphon Project construction and operation. When Gryphon moves forward, while consultation for Phoenix is relevant, consultation specific to Gryphon will be undertaken.

The decommissioning and reclamation plan for Gryphon will need to be reviewed and developed in more detail as the Gryphon Project is advanced.

## Phoenix Capital and Operating Costs and Economic Analysis

### *Capital Costs*

The estimated initial capital cost of the Phoenix Project is \$419.4 million expressed in first-quarter 2023 Canadian dollars. This estimate falls under the AACE International Recommended Practice No. 47R-11 Class 3 Classification Guideline, with an expected accuracy to be within -15%/+25% of the Phoenix Project's final cost, including contingency. The costs include construction of the initial ground freezing plant and wells, the first phase of production wells, and the ISR process plant and infrastructure required for first production.

Additional pre-commitment costs of \$67.4 million are necessary to advance the Phoenix Project definition for regulatory purposes, and specifically to support a licence to construct satisfying the Canadian Uranium Mines and Mills Regulations SOR/2000-206. Once a licence to construct has been obtained the Phoenix Project will be considered de-risked sufficiently to enable the final investment decision ("**FID**"). The pre-commitment work includes engineering advancement, additional testwork, early procurement items, grid power design and execution, and management of these activities. Some of this work is in progress.

Sustaining capital is estimated to be \$234.1 million and considers expansion of the wellfield and ground freezing system, and development of the injection solution system as the wellfield advances, expansion of the gypsum storage pad and modification to the process plant to accommodate well remediation.

<b>Phoenix Initial Capital Cost Estimate</b>		
<b>Area</b>	<b>Description</b>	<b>Cost (\$M)</b>
<b>Direct Cost</b>		
	Mining	63.0
	In-situ leach process plant	102.6
	Surface facilities	14.7
	Utilities	34.8
	Electrical	19.1
	Civil and earthworks	39.6
Total Direct Cost		273.8
<b>Indirect Cost</b>		
	Indirect costs	70.5
	Owner's costs	32.7
Total Indirect Cost		103.2
	Contingency	42.6
<b>Total Capital Costs</b>		<b>419.4</b>

**Note:** Figures may not sum due to rounding.

### *Operating Costs*

The operating costs over the Phoenix LOM is estimated at \$478.1 million. Average operating costs are estimated at \$8.51/lb U<sub>3</sub>O<sub>8</sub> (US\$6.28/lb U<sub>3</sub>O<sub>8</sub>) produced. Operating costs during the first five years of production are expected to be \$6.64 (US\$4.90) per pound U<sub>3</sub>O<sub>8</sub>, benefitting from increased scale of operations and higher concentrations of uranium contained in recovered UBS.

During the remaining years of production, operating costs are expected to be \$13.69 (US\$10.10) per pound U<sub>3</sub>O<sub>8</sub>.

Phoenix Operating Costs			
Cost Area	Total Cost (\$M)	Cost (\$/lb U <sub>3</sub> O <sub>8</sub> )	Percentage of Total (%)
Mining	44.4	0.79	9
Processing	294.8	5.25	62
Transport to converter	13.7	0.24	3
Site support / G&A	125.1	2.23	26
<b>Total</b>	<b>478.1</b>	<b>8.51</b>	<b>100</b>
<b>Total US\$</b>		<b>6.28</b>	
<b>U<sub>3</sub>O<sub>8</sub> Sales (Mlb)</b>		<b>56.2</b>	

Note: Figures may not sum due to rounding.

### Economic Analysis

The financial evaluation of Phoenix generates positive before and after-tax results.

Phoenix Summary of Economic Results		
Description	Unit	Base Case <sup>1</sup>
<b>Pre-Tax Valuation Indicators</b>		
Undiscounted Cash Flow	\$B	3.63
NPV @ 8%	\$B	2.34
IRR	%	105.9
<b>After-Tax Valuation Indicators</b>		
<b>Basic After-Tax<sup>2</sup></b>		
Undiscounted Cash Flow	\$B	2.25
NPV @ 8%	\$B	1.43
IRR	%	82.3
Payback	Months	11
<b>Adjusted After-Tax<sup>2</sup></b>		
Undiscounted Cash Flow	\$B	2.41
NPV @ 8%	\$B	1.56
IRR	%	90.0
Payback	Months	10

**Notes:**

- (1) Spot price forecast is based on composite midpoint scenario from UxC's Q2 2023 Uranium Market Outlook and is stated in constant (not-inflated) dollars and a CA\$/US\$ exchange rate of 1.35.
- (2) Basic after-tax valuation does not apply Denison's estimated tax pool balances and is considered the base case for the economic analysis in the FS. The adjusted after-tax valuation applies the estimated tax pool balances.

The financial analysis was carried out using a discounted cash flow methodology. Net annual cash flows were estimated to project yearly cash inflows (or revenues) and subtract projected cash outflows (such as capital and operating costs, royalties, and taxes). These annual cash flows were assumed to occur at mid-year and were discounted back to the date of FID to proceed with construction. Discounted cash flows were totalled to determine the NPV of the Phoenix Project at a discount rate of 8%.

The Phoenix Project is most sensitive to fluctuations in the U<sub>3</sub>O<sub>8</sub> price and feed grades and less sensitive to changes in capital costs and least sensitive to changes in operating costs.

## Gryphon Capital and Operating Costs and Economic Analysis

### *Capital Costs*

The estimated initial capital cost for the Gryphon Project is \$737.4 million, expressed in third-quarter 2022 Canadian dollars. Costs developed from first principles in the 2018 study were escalated by 36% based on the Chemical Engineering Plant Cost Index for equipment and materials. Labour, subcontract, equipment rental and contractor indirect costs were escalated by 10%, and other materials were escalated by 20%.

This estimate falls under the AACE International Recommended Practice No. 47R-11 Class 4 Classification Guideline, with an expected accuracy to be within -15% to -30% and +20% to +50% of Gryphon Project's final cost including contingency. The costs include shaft construction, underground development and mobile equipment, and McClean Lake mill upgrades.

<b>Gryphon Initial Capital Cost Estimate</b>		
<b>Area</b>	<b>Area Description</b>	<b>Cost (\$M)</b>
<b>Direct Cost</b>		
	Shafts	222.4
	Surface facilities	63.0
	Underground	63.9
	Utilities	5.3
	Electrical	5.4
	Civil and earthworks	16.0
	McClean Lake mill upgrade	67.9
	Off-site infrastructure	43.7
Total Direct Cost		487.6
<b>Indirect Cost</b>		
	Indirect costs	76.5
	Owner's costs	25.6
Total Indirect Cost		102.1
	Contingency	147.7
<b>Total Capital Cost</b>		<b>737.4</b>

**Note:** Figures may not sum due to rounding.

Additional pre-commitment costs of \$56.5 million are estimated necessary to advance the Gryphon project definition for regulatory purposes, and specifically to support a licence to construct satisfying the Canadian Uranium Mines and Mills Regulations SOR/2000-206. Upon receipt of licence to construct, Gryphon will be considered de-risked sufficiently to enable the FID. The pre-commitment work includes a feasibility study, environmental assessment, engineering advancement, additional testwork, early procurement items, grid power design and execution, and management of these activities.

Sustaining capital is estimated to be \$98.7 million and considers underground development, construction and equipment.

### *Operating Costs*

The operating costs over the LOM is estimated at \$843.2 million. Average operating costs are estimated at \$17.27/lb U<sub>3</sub>O<sub>8</sub> (US\$12.75/lb U<sub>3</sub>O<sub>8</sub>) produced.

### Gryphon Operating Costs

Cost Area	Total Cost (\$M)	Cost (\$/lb U <sub>3</sub> O <sub>8</sub> )	\$/t Processed
Mining	334.3	6.85	265.85
McClellan Lake mill	427.6	8.76	340.08
Transport to converter	12.9	0.27	10.30
Site Support / G&A	68.3	1.40	54.32
<b>Total</b>	<b>843.2</b>	<b>17.27</b>	<b>670.55</b>
<b>Total US\$</b>		<b>12.75</b>	
<b>U<sub>3</sub>O<sub>8</sub> Sales (Mlb)</b>			<b>48.8</b>

**Note:** Figures may not sum due to rounding.

### *Economic Analysis*

The financial analysis was carried out using a discounted cash flow methodology. Net annual cash flows were estimated to project yearly cash inflows (or revenues) and subtract projected cash outflows (such as capital and operating costs, royalties, and taxes). These annual cash flows were assumed to occur at mid-year and were discounted back to the date of FID to proceed with construction. Discounted cash flows were totalled to determine the NPV of the Gryphon Project at a discount rate of 8%.

The financial evaluation of the Gryphon Project using the updated cost estimate generates positive before and after-tax results. The results show a base case after-tax NPV of \$864.2 million at a 8% discount rate, an IRR of 37.6% and a payback period of 22 months.

The Gryphon Project is most sensitive to fluctuations in the U<sub>3</sub>O<sub>8</sub> price and feed grades and less sensitive to changes in capital costs and least sensitive to changes in operating costs.

### Current and Contemplated Exploration, Development, and Production Activities

#### *Phoenix*

The results of the Phoenix FS indicate that Denison's proposed uranium project is technically feasible and economically viable under the assumptions presented in the Wheeler Report. The Phoenix FS is considered sufficiently reliable to guide Denison in a decision to advance to the next phase of project development through front-end engineering design and detailed design to advance Phoenix to a point where the project is de-risked sufficiently to enable the FID. This includes field and laboratory testing, front-end engineering and design, detailed design, and early commitments for long-lead items to enable design and planning.

#### *Gryphon*

Pursuant to the Wheeler Report, the qualified persons who have reviewed Gryphon have set out a recommended program to prepare the Gryphon project to be advanced to the feasibility study stage of analysis. This includes infill and delineation drilling to advance the understanding of geology, mineralization controls and mineral resource for the Gryphon deposit, further metallurgical test work to further validate the performance of processing Gryphon ore at the McClellan Lake mill, geotechnical requirements and recommendations for further advancement of Gryphon in subsequent stages, feasibility hydrogeological testing at Gryphon, and the collection of additional environmental baseline information.

## Waterbury Lake

The Waterbury Lake property interests are owned by the WLULP, which is a partnership between Denison (69.33%) and KWULP (30.65%), as limited partners, and WLUC (0.02%), as general partner. Denison holds a 60% interest in WLUC (KWULP, 40%) and, in aggregate, holds a 69.35% interest in the WLULP through its limited partner and general partner ownership interests (KWULP, 30.65%). Denison is operator of the project.

In November 2020, Denison completed a preliminary economic assessment for the project (the “**Waterbury PEA**”), as summarized and reported in the technical report entitled “Preliminary Economic Assessment for the Tthe Heldeth Túé (J Zone) Deposit, Waterbury Lake Property, Northern Saskatchewan, Canada” effective October 30, 2020 (the “**Waterbury Report**”).

The Waterbury Report, completed in accordance with NI 43-101 and filed on December 30, 2020, evaluates a THT ISR operation estimated to produce total mine production of 9.7 million pounds of  $U_3O_8$  (177,664 tonnes at 2.49%  $U_3O_8$ ) over an approximate six year mine-life with final processing occurring at Denison’s 22.5% owned McClean Lake mill with a base case pre-tax NPV of \$177 million (8% discount rate), IRR of 39.1%, and initial capital expenditures of \$111.6 million, excluding pre-construction evaluation and development costs. The base-case economic analysis assumes uranium sales are made at UxC’s forecasted annual “Composite Midpoint” spot price from the Q3 2020 Uranium Market Outlook, stated in constant dollars (from ~US\$49/lb  $U_3O_8$  to US\$57/lb  $U_3O_8$ ). The Waterbury PEA was prepared on a project (100% ownership) and pre-tax basis, as each WLULP partner is subject to different tax and other obligations.

This project description is based on the Waterbury Report, a copy of which is available on the Company’s website, under its profile on the SEDAR+ website at [www.sedarplus.ca](http://www.sedarplus.ca) and on EDGAR at [www.sec.gov/edgar.shtml](http://www.sec.gov/edgar.shtml). The conclusions, projections and estimates included in this description are subject to the qualifications, assumptions and exclusions set out in the Waterbury Report. The Waterbury Report is recommended to be read in its entirety for a more fulsome understanding of the technical aspects of the project.

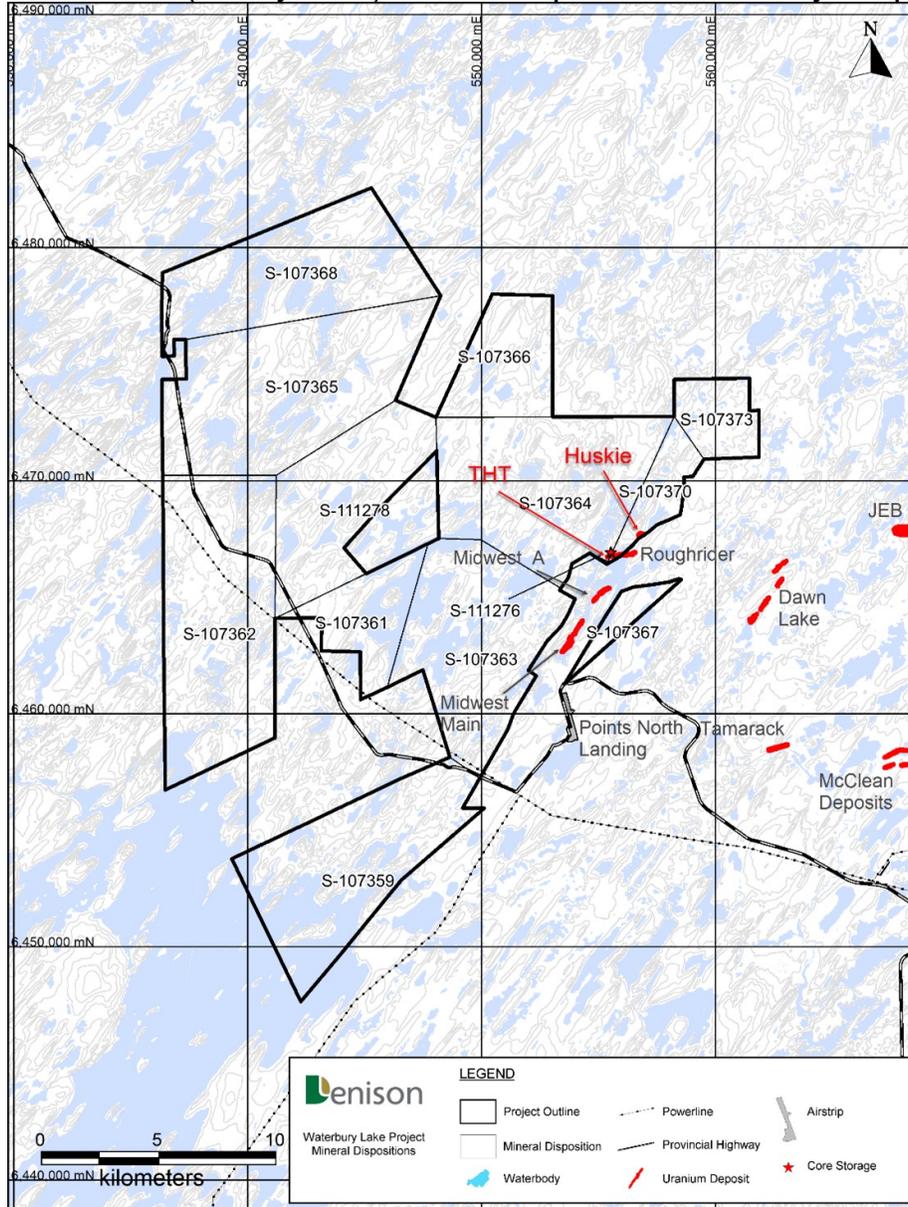
### Property Description, Location and Access

The Waterbury Lake property is located within the eastern part of the Athabasca Basin in Northern Saskatchewan, which is within Treaty 10, in Nuhenéné / Athabasca Denesųliné territory, and within the Métis Homeland.

The Waterbury Lake project, as of December 31, 2023, is comprised of thirteen (13) mineral dispositions, covering 40,256 ha. and contains two deposits: the THT deposit and Huskie deposit. The deposits are located within the property near its eastern edge. All dispositions have sufficient approved assessment credits to maintain the ground in good standing until at least 2033.

The project dispositions are approximately 750 km by air north of Saskatoon and about 420 km by road north of the town of La Ronge. Points North Landing, a privately-owned service centre with accommodations and an airfield, is located near the eastern edge of the property. Several uranium deposits are located nearby including the Roughrider, McClean Lake, Midwest Main, and Midwest A deposits.

**Location of the THT (formerly J Zone) and Huskie Deposits on the Waterbury Lake project**



Any uranium produced from the Waterbury Lake property is subject to uranium mining royalties in Saskatchewan in accordance with Part III of The Crown Mineral Royalty Regulations. See “Government Regulation – Canadian Royalties”. Denison has a 2% net smelter return royalty on the portion of the project that it does not own. There are no other contractual royalties on the property.

There are no known environmental liabilities associated with the Waterbury Lake property, and there are no other significant factors and risks that may affect access, title, or the right or ability to perform work on the property.

## History

Uranium exploration activities have been conducted over various portions of the Waterbury Lake mineral claims over the past 50 years. The current Waterbury Lake mineral claims were originally staked by Strathmore Minerals Corp. in 2004. Strathmore subsequently spun out its Canadian assets to Fission in 2007. On January 30, 2008, KWULP and Fission entered into an earn-in agreement for the Waterbury Lake property, pursuant to which Fission granted KWULP the exclusive rights to earn up to a 50% interest in the Waterbury Lake property by funding \$14,000,000 of expenditures on or before January 30, 2011. Additionally, Fission retained an overriding royalty interest in the property of 2% of net smelter returns. On April 29, 2010, KWULP had fully funded its \$14 million of expenditures and consequently earned a 50% interest in the property. Fission and KWULP subsequently formed the WLULP in December 2010 with each party owning an equal interest. In April 2011, Fission exercised a back-in option right and increased its interest in the WLULP to 60%.

Effective April 26, 2013, Denison acquired Fission and all of Fission's rights and entitlements to the Waterbury Lake property, including the 2% net smelter returns royalty. Denison became manager of WLULP and operator of Waterbury Lake. KWULP has not funded spending programs of the WLULP since January 2014 and, as a result, Denison has increased its interest in the WLULP while KWULP has diluted.

The THT uranium deposit was discovered during the winter 2010 drill program. The second drill hole of the campaign, WAT10-063A, was an angled hole drilled from a peninsula extending into McMahon Lake. It intersected 10.5 metres of uranium mineralization grading 1.91%  $U_3O_8$ , including 1.0 metre grading 13.87%  $U_3O_8$  as well as an additional four meters grading at 0.16%  $U_3O_8$ . Subsequent drilling led Fission to focus on a significant mineralized trend immediately adjacent to the southeastern boundary of disposition S-107370. The maiden mineral resource estimate for THT was issued by Fission in 2011.

Denison first discovered mineralization for the Huskie deposit in summer 2017 drill hole WAT17-466A, which intersected 9.10%  $U_3O_8$  over 3.7 metres, including 16.78%  $U_3O_8$  over 2 metres, from 306.5 to 310.2 metres depth. Further drilling in 2017 and 2018 resulted in a maiden mineral resource estimate in December 2018.

## Geological Setting, Mineralization and Deposit Types

The Waterbury Lake property is located near the southeastern margin of the Athabasca Basin in the southwest part of the Churchill Structural Province of the Canadian Shield. The Athabasca Basin is a broad, closed, and elliptically shaped, cratonic basin with an area of 425 km east-west by 225 km north-south. The bedrock geology of the area consists of Archean and Paleoproterozoic gneisses unconformably overlain by flat-lying, unmetamorphosed sandstones and conglomerates of the mid-Proterozoic Athabasca Group.

The Waterbury Lake property is located near the transition zone between two prominent litho-structural domains within the Precambrian basement, the Mudjatik Domain to the west and the Wollaston Domain to the east. The Mudjatik Domain is characterized by elliptical domes of Archean granitoid orthogenesis separated by keels of metavolcanic and metasedimentary rocks, whereas the Wollaston Domain is characterized by tight to isoclinal, northeasterly trending, doubly plunging folds developed in Paleoproterozoic metasedimentary rocks of the Wollaston Supergroup, which overlie Archean granitoid orthogenesis identical to those of the Mudjatik Domain. The area is cut by a major northeast-striking fault system of Hudsonian Age. The faults

occur predominantly in the basement rocks but often extend up into the Athabasca Group due to several periods of post-depositional movement.

The basement geology beneath the Waterbury Lake project is comprised of approximately northeast-trending corridors of metasediments wrapping around orthogneissic domes. Locally, within the Discovery Bay trend, an east-west trending corridor of metasediments bounded to the north and south by thick zones of orthogneiss that, based on interpretation of aeromagnetic images, may represent two large dome structures. The metasediments and the orthogneiss domes are interpreted to be Paleoproterozoic and Archean in age, respectively.

The THT deposit is hosted within an east-west trending faulted package of variably graphitic and pyritic metasediments bounded by orthogneiss to both the north and south. The metasedimentary assemblage, which ranges in thickness from 90 to 120 metres and is moderately steep dipping to the north consists of, from north to south, a roughly 50 metre thick pelitic gneiss underlain by a 20 metre thick graphitic pelitic gneiss, underlain by a 10 to 15 metre thick quartz-feldspar wedge, followed by a 20 metre thick graphitic pelitic gneiss, underlain by a 15 to 25 metre thick pelitic gneiss, then back into a footwall orthogneiss. There are discontinuous offsets at the unconformity that range from a few metres to as much as ten metres.

THT is currently defined by 268 drill holes intersecting uranium mineralization over a combined east-west strike length of up to 700 metres and a maximum north-south lateral width of 70 metres. The deposit trends roughly east-west (80°) in line with the metasedimentary corridor and cataclastic graphitic fault zone. A 45 metre east-west intermittently mineralized zone occurs in the target area formerly known as Highland, separating the THT deposit into two segments referred to as the eastern and western lenses which are defined over strike lengths of 260 and 318 metres, respectively. A thin zone of unconformity uranium mineralization lies to the north of the intermittently mineralized zone interpreted to represent a mineralized block that has been faulted and displaced northwards, referred to as the mid lens.

Mineralization thickness varies widely throughout the THT deposit and can range from tens of centimetres to over 19.5 metres in vertical thickness. In cross-section, THT mineralization is roughly trough-shaped with a relatively thick central zone that corresponds with the interpreted location of the cataclasite and rapidly tapers out to the north and south. Locally, a particularly high-grade (upwards of 40%  $U_3O_8$ ) but often thin lens of mineralization is present along the southern boundary of the metasedimentary corridor, as seen in holes WAT10-066, WAT10-071, WAT10-091, and WAT10-103. Ten-metre step-out drill holes to the south from these high-grade holes have failed to intersect any mineralization, demonstrating the tight nature of mineralization.

Uranium mineralization at the THT deposit is generally found within several metres of the unconformity, at depths ranging from 195 to 230m below surface. Mineralization occurs in three distinct settings: (1) entirely hosted within the Athabasca sediments, (2) entirely within the metasedimentary gneisses or (3) straddling the boundary between them. A semi-continuous, thin zone of uranium mineralization has been intersected in occasional southern THT drill holes well below the main mineralized zone, separated by several meters of barren metasedimentary gneiss. This mineralized zone is informally termed the South-Side Lens and can host grades up to 3.70%  $U_3O_8$ , as seen in drill hole WAT11-142.

The Huskie deposit is entirely hosted within competent basement rocks below the sub-Athabasca unconformity primarily within a faulted, graphite-bearing pelitic gneiss ("graphitic gneiss") which forms part of an east-west striking, northerly dipping package of metasedimentary rocks flanked

to the north and south by granitic gneisses. The Athabasca Group sandstones that unconformably overlie the basement rocks are approximately 200 metres thick.

The deposit comprises three stacked, parallel lenses (Huskie 1, Huskie 2 and Huskie 3), which are conformable to the dominant foliation and fault planes within the east-west striking graphitic gneiss unit. The drilling to date suggests the grade, thickness, and number of lenses present is controlled by the presence of northeast striking faults that cross-cut the graphitic gneiss. The northeast striking faults identified at the Huskie deposit are interpreted to be part of the regional Midwest structure. The deposit occurs over a strike length of approximately 210 metres, dip length of approximately 215 metres and has a true thickness of approximately 30 metres (individual lenses vary in true thickness, typically from 1 metre to 7 metres). The deposit occurs at vertical depths ranging between 240 and 445 metres below surface and 40 to 245 metres below the sub-Athabasca unconformity. The high-grade mineralization within the lenses consists of massive to semi-massive uraninite (pitchblende) and bright yellow secondary uranium minerals occurring along fault or fracture planes, or as replacement along foliation planes. Lower grade mineralization is disseminated within highly altered rocks proximal to fault planes. The mineralization is intimately associated with hematite, which both occur central to a broad and pervasive alteration envelope of white clays, chlorite and silicification.

### Exploration

With the exception of drilling and related work, exploration on the Waterbury Lake property has mostly been in the form of geophysical surveys. Airborne magnetic surveys have been flown property-wide and have been used to identify significant basement structures and to help map basement rock types. Airborne and ground-based EM surveys have also been carried out across the property to define conductive, likely graphitic basement structures that may be associated with uranium mineralization. Additionally, ground-based induced polarization (DC-IP) and gravity surveys have aimed to identify zones of low resistivity and negative gravity anomalies resulting from quartz dissolution and clay alteration.

A 16 line, 28.8 kilometre DCIP resistivity survey was completed during October 2018. The survey was designed to map the possible extension of the Midwest structure onto the Waterbury Lake property and to define possible drill targets for future testing.

The 2020 geophysical program consisted of 17.6 line kilometres of TEM surveying was completed on the WAT20-G1 grid. This survey defined a weak south-dipping conductor: Conductor 'C'. The eastern extent of this conductor has poor amplitude and is interpreted to extend deeply into the basement. This interpretation aligns well with the results of drill hole WAT19-493, which was drilled, in 2019, in the GB Northeast area.

A small moving loop electromagnetic ("**SML EM**") survey was initiated in the winter of 2022 to resolve conductive lithologies associated with the interpreted southwest extension of the Midwest structural corridor as it may trend on to the Waterbury project lands on disposition S-107359. Results of the initial survey lines showed that the conductivity associated with the Midwest corridor did not trend onto the Waterbury project lands, and the remainder of the survey was cancelled.

No significant geological mapping has been conducted on the Waterbury Lake property to date as the property is predominantly covered by a thick layer of Quaternary sediments resulting in poor outcrop exposure; however, several reconnaissance scale surface geochemical surveys have been undertaken on the Waterbury Lake property.

## Drilling

The THT deposit is well defined, as 268 drill holes have intersected uranium mineralization over a combined east-west strike length of approximately 700 metres and a maximum north-south lateral width of 70 metres. The mineralization thickness varies from tens of centimetres to 19.5 metres and the mineralization is found within several metres of the unconformity at depths of 195 to 230 metres. The THT deposit has been drilled, on average, at 10 metre by 25 metre spacings across the deposit and in some cases a more dense drill spacing has been applied. The genesis and structural complexity of the deposit are well understood.

Aside from THT, target areas that have seen the most drilling are the GB Zone, Oban South, and GB Northeast. A brief summary of each of these target areas is found below:

*GB Zone* – Nine drill holes were completed during the winter of 2019 to follow up on basement-hosted mineralization discovered during the summer 2018 drilling program. The winter 2019 drill holes were oriented steeply to the northeast on an approximate 100 x 100 metre spacing to test the faulted graphitic basement sequence which dips steeply to the southwest. Basement-hosted mineralization was intersected in drill hole WAT19-480, highlighted by 0.15% U<sub>3</sub>O<sub>8</sub> over 6.0 metres, including 0.26% U<sub>3</sub>O<sub>8</sub> over 3.0 metres. Additional basement-hosted mineralized intercepts were obtained approximately 100 metres to the southeast of WAT19-480 in drill hole WAT19-486, highlighted by 0.25% U<sub>3</sub>O<sub>8</sub> over 2.0 metres and 0.22% U<sub>3</sub>O<sub>8</sub> over 1.5 metres.

*Oban South* – The target area at Oban South comprises the interpreted intersection of the east-west trending Oban South graphitic conductor and the north-northeast trending regional Midwest structure. Three drill holes were completed as an initial test of the geological concept. The drilling successfully identified a faulted graphitic unit within the basement, which was hydrothermally altered, and a broad zone of desilicification within the lower sandstone, which included 10 ppm uranium and over 100 ppm boron within the basal 12.5 metres of sandstone immediately overlying the unconformity.

*GB Northeast* – A single reconnaissance drill hole, WAT19-493, was completed in 2019 to test a coincident airborne electromagnetic conductor and magnetic low approximately 2.5 kilometres to the northeast of the GB Zone. The drill hole intersected moderately to locally strong sandstone alteration and an altered and faulted graphitic pelite unit immediately below the unconformity. Geochemical sampling returned up to 200 ppm uranium over 0.5 metres, associated with semibrittle graphitic faulting. In 2022, seven holes were completed at GB Northeast, where drilling on each fence identified structurally-controlled alteration potentially indicative of a uranium mineralizing system. The strength of the alteration increased as drilling advanced to the southwest, approaching an interpreted flexure in the conductive trend.

*Hamilton Lake* – In 2022, two holes were drilled at Hamilton Lake to test the edges of a broad, N-S trending resistivity anomaly defined from DC-IP resistivity data collected in 2016. No significant structure or alteration was encountered in the two holes drilled at Hamilton Lake.

## Sampling, Analysis and Data Verification

For THT, drill core was split once geological logging, sample mark up and photographing were completed. All drill core samples were marked out and split at the splitting shack by employees, put into 5-gallon sample pails and sealed and transported to Points North, Saskatchewan only prior to shipment. The samples were then transported directly to SRC in Saskatoon, Saskatchewan by Marsh Expediting. All geochemical, assay and bulk density samples were split

using a manual core splitter over the intervals noted in the sample booklet. Half of the core was placed in a plastic sample bag with the sample tag and taped closed with fibre tape. The other half of the core was returned to the core box in its original orientation for future reference. All drill core samples were evenly and symmetrically split in half in order to try and obtain the most representative sample possible. Mineralized core samples which occur in drill runs with less than 80% core recovery are flagged for review prior to the resource estimation process.

Recovery through the mineralized zone is generally good and assay samples are assumed to adequately represent in situ uranium content. SRC offers an ISO/IEC 17025:2005 accredited method for the determination of  $U_3O_8$  weight % in geological samples. Rock samples are crushed to 60 % at -2 mm, and a 100-200g sub-sample is split out using a riffler. The sub-sample is further crushed to 90% at -106 microns using a standard puck and ring grinding mill. An aliquot of pulp is digested in a concentrated mixture of  $HNO_3:HCl$  in a hot water bath for an hour before being diluted with deionized water. Samples are then analyzed by a Perkin Elmer ICP-OES instrument (models DV4300 or DV5300).

Drill core samples collected for bulk density measurements were first weighed as they are received and then submerged in deionized water and re-weighed. The samples are then dried until a constant weight is obtained. The sample is then coated with an impermeable layer of wax and weighed again while submersed in deionized water. Weights are entered into a database and the bulk density of the core waxed and un-waxed (immersion method) is calculated and recorded. Not all density samples had both density measurements recorded. Water temperature at the time of weighing is also recorded and used in the bulk density calculation. The detection limit for bulk density measurements by this method is 0.01 g/cm<sup>3</sup>.

Prior to the summer 2010 drill program, the only QAQC procedures implemented on drill core samples from the project were those performed internally by SRC. The in-house SRC QAQC procedures involve inserting one to two quality control samples of known value with each new batch of 40 geochemical samples. All of the reference materials used by SRC on the Waterbury project are certified and provided by CANMET Mining and Mineral Services. The SRC internal QAQC program continued through the 2013 drill program. Starting in the summer of 2010 and continuing into the 2013 drill program (discontinued after DDH WAT13-350), an internal QAQC program was designed by Fission to independently provide confidence in the core sample geochemical results provided by SRC. The internal QAQC sampling program determines analytical precision through the insertion of sample duplicates, accuracy through the insertion of materials of "known" composition (reference material) and checks for contamination by insertion of blanks. Blanks, reference standards and duplicates were inserted into the sample sequence including field duplicates (quarter core every 1 in 20 samples), prep and pulp duplicates (inserted by SRC every 1 in 20 samples) and blank samples (1 sample for every mineralized drill hole). Beginning in 2012 certified, internal reference standards were used in all holes drilled at Waterbury Lake, replacing the re-analysed low, medium and high-grade reference samples. The results of the QAQC programs indicate there are no issues with the drill core assay data. The data verification programs undertaken on the data collected from the Project support the geological interpretations, and the analytical and database quality, and therefore the data can support mineral resource estimation.

With respect to its work on the Huskie deposit, Denison has developed and documented several QA/QC procedures and protocols for all exploration projects which include the following components: (a) Determination of precision – achieved by regular insertion of duplicates for each stage of the process where a sample is taken or split; (b) Determination of accuracy – achieved

by regular insertion of standards or materials of known composition; and (c) Checks for contamination – achieved by insertion of blanks.

SRC has a quality assurance program dedicated to active evaluation and continual improvement in the internal quality management system. The laboratory is accredited by the Standards Council of Canada as an ISO/IEC 17025 Laboratory for Mineral Analysis Testing and is also accredited ISO/IEC 17025:2005 for the analysis of U<sub>3</sub>O<sub>8</sub>. The laboratory is licensed by the CNSC for possession, transfer, import, export, use, and storage of designated nuclear substances by CNSC Licence Number 01784-5-24.74. As such, the laboratory is closely monitored and inspected by the CNSC for compliance.

All analyses are conducted by SRC, which has specialized in the field of uranium research and analysis for over 30 years. SRC is an independent laboratory, and no associate, employee, officer, or director of Denison is, or ever has been, involved in any aspect of sample preparation or analysis on samples from the THT or Huskie deposits.

The SRC uses a laboratory management system (“LMS”) for quality assurance. The LMS operates in accordance with ISO/IEC 17025:2005 (CAN-P-4E) “*General Requirements for the Competence of Mineral Testing and Calibration Laboratories*” and is also compliant to CAN-P-1579 “*Guidelines for Mineral Analysis Testing Laboratories*”. The laboratory continues to participate in proficiency testing programs organized by CANMET (CCRMP/PTP-MAL).

#### ISR Field Testing

In 2023, the Company completed an inaugural ISR field test program at THT on the Waterbury Lake property. The program included (i) the installation of an eight well ISR test pattern designed to collect an initial database of hydrogeological data, (ii) testing of a permeability enhancement technique, (iii) the completion of hydrogeologic test work, highlighted by the achievement of hydraulic conductivity values consistent with those from the Waterbury PEA, and (iv) the execution of an ion tracer test which established a 10 hour breakthrough time between the injection and extraction wells, while also demonstrating hydraulic control of the injected solution. Overall, the program successfully achieved each of its planned objectives.

#### Mineral Processing and Metallurgical Testing

A preliminary assessment of the mineralogical and leaching characteristics of a representative selection of drill core samples from the THT deposit was undertaken between July and December 2011 by Mineral Services Canada.

The study was based on a suite of 48 samples of mineralized material collected from thirty-two drill holes (2010 and 2011 programs). These were chosen to provide good spatial representation of the THT mineralization as well as representing a wide range of uranium content. The samples were derived from the half split core remaining after the initial geochemical / assay sampling process. All samples were submitted to SRC for comprehensive mineralogical analysis and preparation of thin sections for petrographic analysis. The results of mineralogical work were used, in conjunction with spatial considerations, to define suitable composite samples for preliminary leaching test work undertaken by the Saskatchewan Research Council’s Mining and Minerals Division (“**SRCMD**”).

Mineralogical analysis, utilizing XRD, quantitative mineralogical analysis (Q-Min), petrography and SEM-EDS analysis, determined that the most abundant uranium-bearing minerals in the THT

deposit are uraninite and/or pitchblende, and coffinite. The gangue mineralogy is essentially comprised of various amounts of quartz, phyllosilicates (illite-sericite, chlorite, biotite, kaolinite) and (Fe, Ti)-oxides (hematite, goethite and anatase). Feldspars also occur in most samples and carbonates as well as a variety of sulphides are locally present. Ni-arsenides are recognized throughout the samples as well. The results of the mineralogical analyses identified five groupings of samples with ore mineralogies typically dominated by either uranium oxide or uranium silicate phases.

Preliminary acid leaching tests were undertaken by SRCMD on composite samples prepared from the sample set. Only the leaching time and rate of acid addition were considered in the tests while the other parameters (e.g. solid percentage in the slurry, temperature, pressure and agitation conditions) remained fixed. A total of five composite samples were defined based on spatial location. Acid leaching ( $H_2SO_4$ ) was performed on each of the composite samples for 12 hours under atmospheric pressure and at a temperature of 55-65°C. Agitation was used to create adequate turbulence. Sodium Chlorate was used as the oxidant. The tests were undertaken on the assay lab rejects from XRD analyses that were ground to 90% passing 106 microns. The percentage of solids in the slurry was set at 50%. The only variables were the acid addition and leaching residence time. Two different  $H_2SO_4$  dosages were used to create an initial leaching environment with 25 mSc/cm and 55 mSc/cm, respectively. Each composite sample was split into two subsamples labelled A and B. The A sample was used to test high acid addition with high initial conductivity and the B sample was used to test low acid addition with low initial conductivity. The preliminary acid leaching tests showed that maximum extraction rates of 97.6 % to 98.5 %  $U_3O_8$  can be obtained (depending on the acid addition) within 4 to 8 hours of leaching time, and that the leaching efficiency was variably affected by acid addition and leaching time.

Additional test work was undertaken in 2020. Leaching tests to determine key ISR data such as optimum reagent addition rates at lower leaching temperatures (10 to 20 degrees Celsius) and expected UBS head grade were conducted and the outcomes were used to drive reagent quantities.

A new composite THT east pod metallurgical testing sample was generated from 33 individual assay reject samples stored at the SRC facilities in Saskatoon. The individual samples, distributed through the deposit, allowed for the preparation of a deposit representative sample. The composite sample assayed 2.72%  $U_3O_8$ . Acid leaching tests at 10 deg C, using hydrogen peroxide ( $H_2O_2$ ) oxidant, with varying sulphuric acid ( $H_2SO_4$ ) concentrations (100, 80, 60 and 40 g/L) showed that extraction rates of 90%  $U_3O_8$  can be obtained within 2 hours of leaching time, and that the leaching efficiency was affected by acid addition.

### Mineral Resource Estimates

The Mineral Resources for the Waterbury Lake Project comprise the THT and the Huskie deposits. The Mineral Resource Statement presented herein represents the Mineral Resource evaluation prepared for the Waterbury Lake Project in accordance with NI 43-101.

#### *The Heldeth T   Deposit*

The THT deposit is estimated to contain an indicated mineral resource, using a base case cut-off grade of 0.10%  $U_3O_8$ , totaling 12,810,000 lbs based on 291,000 tonnes at an average grade of 2.00%  $U_3O_8$  (100% basis). A range of mineral resources at various  $U_3O_8$  cut-off grades (COG) has been estimated for THT. The current indicated mineral resource is stated using a grade cut-off of 0.10%  $U_3O_8$ .

For the 2013 mineral resource estimate, a 3D wireframe model was constructed based generally on a cut-off grade of 0.03 to 0.05 %  $U_3O_8$  which involved visually interpreting mineralized zones from cross sections using histograms of  $U_3O_8$ . 3D rings of mineralized intersections were created on each cross section and these were tied together to create a continuous wireframe solid model in Gemcom GEMS 6.5 software. The modeling exercise provided broad controls on the size and shape of the mineralized volume. Inverse distance squared interpolation restricted to a mineralized domain was used to estimate tonnes, density and  $U_3O_8$  grades as well as gold, arsenic, cobalt, copper, molybdenum and nickel grades into the block model.

Two passes were used to interpolate all of the blocks in the wireframe, but 99% of the blocks were filled by the first pass. The size of the search ellipse, in the X, Y, and Z direction, used to interpolate grade into the resource blocks is based on 3D semi-variography analysis (completed in GEMS) of mineralized points within the resource model. For the first pass, the search ellipse was set at 25 x 15 x 15 metres in the X, Y, and Z directions, respectively. For the second pass, the search ellipse was set at 50 x 30 x 30 metres in the X, Y and Z directions, respectively. The Principal azimuth is oriented at 75°, the principal dip is oriented at 0° and the Intermediate azimuth is oriented at 0°.

### *Huskie Deposit*

The Huskie Deposit is currently estimated to contain an inferred mineral resource, using a base case cut-of-grade of 0.10%  $U_3O_8$ , totaling 5,687,000 lbs  $U_3O_8$  based on 268,000 tonnes at an average grade of 0.96%  $U_3O_8$  (100% basis). The Huskie Deposit resource estimate was prepared by Denison and independently audited and verified to confirm that the mineral resources were estimated in accordance with the widely accepted CIM Estimation of Mineral Resource and Mineral Reserve Best Practices Guidelines. The mineral resources may be affected by further infill and exploration drilling that may result in increases or decreases in subsequent mineral resource estimates. The mineral resources may also be affected by subsequent assessments of mining, environmental, processing, permitting, taxation, socio-economic, and other factors.

For the 2018 mineral resource estimate, GEOVIA GEMS™ software (version 6.8) was used to build three-dimensional mineralized wireframes for the Huskie 1, Huskie 2 and Huskie 3 lenses based on lithological and structural data from core logs and geochemical assay (or radiometric probe) data collected from 28 holes totaling 12,273 metres completed by Denison. A lower cut-off of 0.05%  $U_3O_8$  and a minimum thickness of 1 metre was selected for the mineralized wireframe model.

The mineral resource model was constrained by the mineralization wireframes. The assay database (%  $U_3O_8$  or % e $U_3O_8$ ) used for resource modelling consists of 201 assays from the 10 mineralized boreholes, contained within the three mineralized lenses. The 0.5 metre interval assays were composited to 1.0 metre lengths. Capping was considered, with only assay data from Huskie 2 being capped for %  $U_3O_8$ . Density values were assigned to the database based on a regression between  $U_3O_8$  and density data pairs using the relationship determined for Denison's Gryphon deposit, which is also hosted within comparable basement rocks. The validity of the Gryphon grade:density regression for the Huskie deposit was confirmed by plotting 12 bulk dry density samples collected by the technical report authors from the Huskie deposit. Variograms were modelled to determine appropriate search radii for grade estimation.

An accumulation-like approach was used, wherein " $U_3O_8$ \*density" and "density" were estimated into a three-dimensional block model, constrained by wireframes in two passes using ID2. A % $U_3O_8$  grade was then calculated into each block by dividing the estimated  $U_3O_8$ \*density by the

estimated density. A block size of 10 by 5 by 5 metres was selected. Search radii were based primarily on visual observations and variogram analyses. The estimation of U<sub>3</sub>O<sub>8</sub>\*density and density were based on two estimation passes. The block model was validated using nearest neighbour estimation and by visual inspection of the block grades relative to composites and swath plots comparing the ID2 and nearest neighbour model. All blocks were classified as Inferred.

No pre-feasibility or feasibility studies have been completed to allow conversion of the mineral resources to mineral reserves. Consequently, no mineral reserves exist for the Waterbury Lake property at the present time.

### Mining Operations

The THT deposit is proposed to be mined using the ISR method. The Indicated Mineral Resource used for the Waterbury PEA mine plan includes only the THT East pod, estimated at 9.7 million pounds of U<sub>3</sub>O<sub>8</sub> with an average grade of 2.49% over 178,000 tonnes.

A small percentage of the THT East pod resource has not been included in the mine plan due to sterilization by freeze methods. Due to the geometry of the deposit and the nature of freeze technology applied to the deposit to allow for sufficient containment of mining fluid, the extreme western and easternmost portions of the deposit have not been considered in the Potentially Recoverable Resource. The collective resource attributed to sterilization is 206,180 lbs, representing 1.7% of the THT East pod.

Additionally, an 85% mining recovery factor was applied to the projected resource available for mining to account for sweep efficiencies and metallurgical recovery envisioned and deemed appropriate for the nature of the THT deposit. The mining recovery factor is a product of the metallurgical recovery and sweep efficiencies based on knowledge gained during the project development of the Phoenix deposit utilizing the ISR method. The sweep efficiency is defined as the percentage of mineralized rock in contact with the lixiviant as it circulates between the injection wells and surrounding recovery wells. The metallurgical recovery is determined by the amount and rate at which the uranium dissolves from the rock when in contact with the lixiviant.

**Tthe Heldeth Túé East Pod Projected Mine Production (0% Grade cut-off <sup>(1)</sup>)**

<b>Deposit Category</b>	<b>Classification</b>	<b>Percentage</b>	<b>Tonnes</b>	<b>Pounds U<sub>3</sub>O<sub>8</sub> (100% Basis)</b>	<b>Grade (% U<sub>3</sub>O<sub>8</sub>)</b>
THT East Pod: In-Situ Resource	Indicated	100%	211,997	11,633,762	2.49%
Sterilized Resource	Indicated	100%	(2,980)	(206,180)	-
THT East Pod: Mineable Resource	Indicated	100%	209,017	11,427,582	-
Mining Recovery Factor		85%			
<b>Projected Mine Production</b>			<b>177,664</b>	<b>9,713,445</b>	<b>2.49%</b>

(1) Projected Mine Production presented at a 0% grade cut off to reflect nonselective ISR mining method.

The foregoing is based upon estimated indicated mineral resources. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

A key hydrologic property that affects ISR mining is the permeability (hydraulic conductivity) of the ore zone and, just as importantly, the hydraulic communication (interconnectedness of the permeability/porosity) across the ore zone. The ability to transmit fluids through the ore body via well injection and recovery is fundamental to the efficacy of ISR mining.

Denison has performed permeameter testing of exploratory boring cores that were recovered from the ore zone and overlying and underlying strata at the site. The permeameter testing was conducted utilizing a portable nitrogen gas probe permeameter adapted for testing drill core pieces. Permeameter testing measures the matrix permeability of the core sample. Permeameter testing was performed by applying an epoxy ring at the sample location and sealing the permeameter probe against the ring to ensure a tight seal. Pressure is measured upstream of the probe tip at a sampling interval of two seconds, and the pressure decay of the nitrogen gas injection is measured to determine permeability in the drillcore at the sample location. In general, the gas pressure pulse applied to the drillcore is approximately 30 to 50 psi, and test durations are less than 20 minutes per test. This methodology was applied extensively at the Phoenix project, with testing conducted on core at approximate 10 centimeter intervals, resulting in a total of over 1,200 measurements.

Permeameter test results were reported for 150 core sample measurements in the THT East pod. Of the 150 measurements, 25 were from core collected within the mineralized zone, 43 were from the overlying Athabasca Sandstones, with the remainder from the underlying metasedimentary basement. The samples were further grouped into lithologic units.

Given the positive correlation between bulk hydraulic conductivity testing and permeameter testing of core samples in estimating hydraulic conductivity at the Phoenix deposit at Wheeler River, it is reasonable to assume a similar correlation for the THT deposit based on a comparable geologic setting. The recently conducted permeameter testing from the THT deposit should provide a reasonable initial estimate of hydraulic conductivity, although, the degraded state of the core most likely biased the tested samples toward lower permeabilities. Based on the currently available data, the hydraulic conductivity estimated from the THT permeameter testing appears to be notably lower than what was estimated for the Phoenix Project.

Several factors should be considered in the evaluation of permeability and its potential impacts to ISR mining applied to the THT deposit. First, as previously indicated, the samples suitable for conducting the permeameter testing are biased toward the more dense and intact (and likely lower permeability) core material. Second, the inter-well spacing (distance between wells within a well pattern) planned for the project will be less than what is proposed for the Wheeler River project at the Phoenix deposit, which will reduce the residence time for lixiviant to move from injection well to extraction well. Third, application of permeability enhancement methods will be utilized to increase the near well-bore permeability within the mineralized zone.

In conventional ISR operations, containment of the mining solution is typically achieved by natural impermeable bounding layers in the geological strata and/or by creating a natural drawdown (via pumping) of the water table towards the ore zone. At the THT deposit, there is a natural impermeable layer below the deposit, in the form of a competent package of basement rocks, but the deposit is otherwise hydraulically connected to the vast regional groundwater system in the overlying sandstone formation that defines the Athabasca Basin.

In order to maintain containment, the entire deposit will be isolated by use of an artificial and impermeable freeze wall that will surround the deposit. The freeze wall will be established by drilling a series of cased holes from surface and along the perimeter of the deposit, and keyed into the basement rock. The freeze wall will be comprised of 92 holes planned at a 7 metre spacing at the target depth of 200 metres and extend 30 metres below the unconformity elevation. The freeze wall is planned to be drilled entirely from land on the peninsula on McMahan Lake which extends to the eastern portion of THT. Freeze holes will be angled out to surround the mining zone with the minimum drilling angle limited to 45° to reduce technical risk of drilling and installing

the freeze holes. Circulation of a low temperature brine solution in the holes will remove heat from the ground, freezing the natural groundwater, and establishing an impermeable frozen wall around the deposit.

The wellfield design included in the Waterbury PEA uses 184 wells at 7 metre spacing arranged in a 5-spot pattern, with four injection wells around one recovery well. The wells will be drilled from surface within the freeze wall and angled out to penetrate the mineralized zone at depth with a roughly 7 metre spacing.

Eight MWs will be installed outside of the freeze wall to detect and remediate any excursion of lixiviant from the mining zone.

<b>Summary THT ISR Wellfield Wells</b>		
	<i>Number of Wells</i>	<i>Drill Metres</i>
Recovery Wells	66	20,637
Injection Wells	118	36,896
Monitoring Wells	8	1,750
<b>Total</b>	<b>192</b>	<b>59,283</b>

### *Processing and Recovery Operations*

Final mineral processing of the UBS expected to be recovered from the THT deposit is assumed to occur at the nearby McClean Lake mill. The mill is owned by the MLJV of which Orano Canada holds a 77.5% interest, and Denison Mines Inc. (a wholly-owned subsidiary of Denison) holds a 22.5% interest. The mill is currently processing material from the Cigar Lake mine under a toll milling agreement (up to 18 million lbs U<sub>3</sub>O<sub>8</sub> per year); however, it has approximately 6 million lbs U<sub>3</sub>O<sub>8</sub> per year in additional licenced processing capacity, with a total licensed capacity of up to 24 million lbs U<sub>3</sub>O<sub>8</sub> per year. The Waterbury PEA assumes a recovery rate of 98.5% from the processing of UBS from the THT deposit at the McClean Lake mill.

It is assumed that the UBS will be transported to McClean Lake in trucks utilizing specifically designed tanks for transportation. The trucks would return with necessary lixiviant to complete ISR mining at THT. The McClean Lake Mill is assumed to have all necessary infrastructure to process the UBS and provide the lixiviant except for the facilities to provide surge storage of UBS and lixiviant at both the THT site and at McClean Lake.

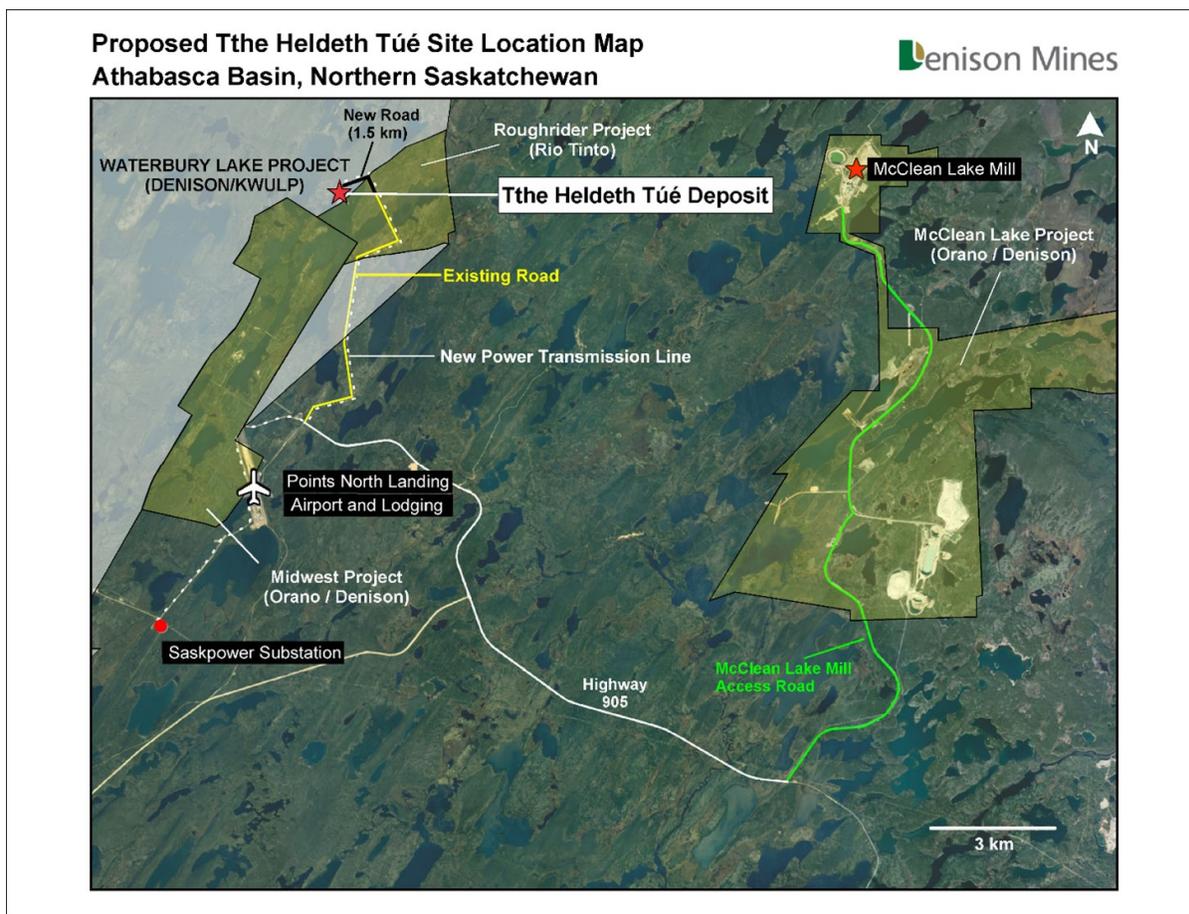
The limited metallurgical testing of the THT deposit and other reviews indicate that a UBS head grade of 7 g/l may be possible through enhanced permeability techniques commercially available. The metallurgical tests completed during the Waterbury PEA indicate that approximately 27,000 tonnes of sulphuric acid will be required to leach the approximate 10 million lbs of U<sub>3</sub>O<sub>8</sub> located within the THT East pod. Approximately 9,000 tonnes of hydrogen peroxide will be required. Lixiviant concentrations of 35 g/L hydrogen peroxide and 100 g/L of sulphuric acid have been estimated from metallurgical leach tests. Currently available data from metallurgical leach tests indicate no iron needs be added to the lixiviant.

Processing THT at the McClean Lake mill would require minor mill modifications. THT UBS, trucked to the mill, would be stored in a tank or pond, providing surge capacity for both the mine and mill. From the UBS storage it would be pumped into the mill leach circuit. The McClean mill may find it advantageous to mix the UBS into their leaching process to take advantage of the low pH, reducing acid addition rates for their other feed streams. Following CCD solution clarification, the solution would be processed as per the current mill flowsheet.

Toll milling agreement terms have not been assessed as part of this study. UBS from the THT deposit at a production rate 2.1 million lbs of  $U_3O_8$ /yr will make up a small portion of the entire McClean Lake mill feed (estimated in the range of 10 to 15%). Final drummed “yellowcake” will be a blend of the entire feed stream through McClean. The THT deposit is a relatively clean ore feed source in comparison to either Cigar Lake or the Midwest deposits both of which have contaminants of concern, that could result in penalties at the refinery. The scope of this study has not considered what other ores will be co-milled with the THT UBS, and therefore the final product make-up cannot be determined.

### *Infrastructure, Permitting and Compliance Activities*

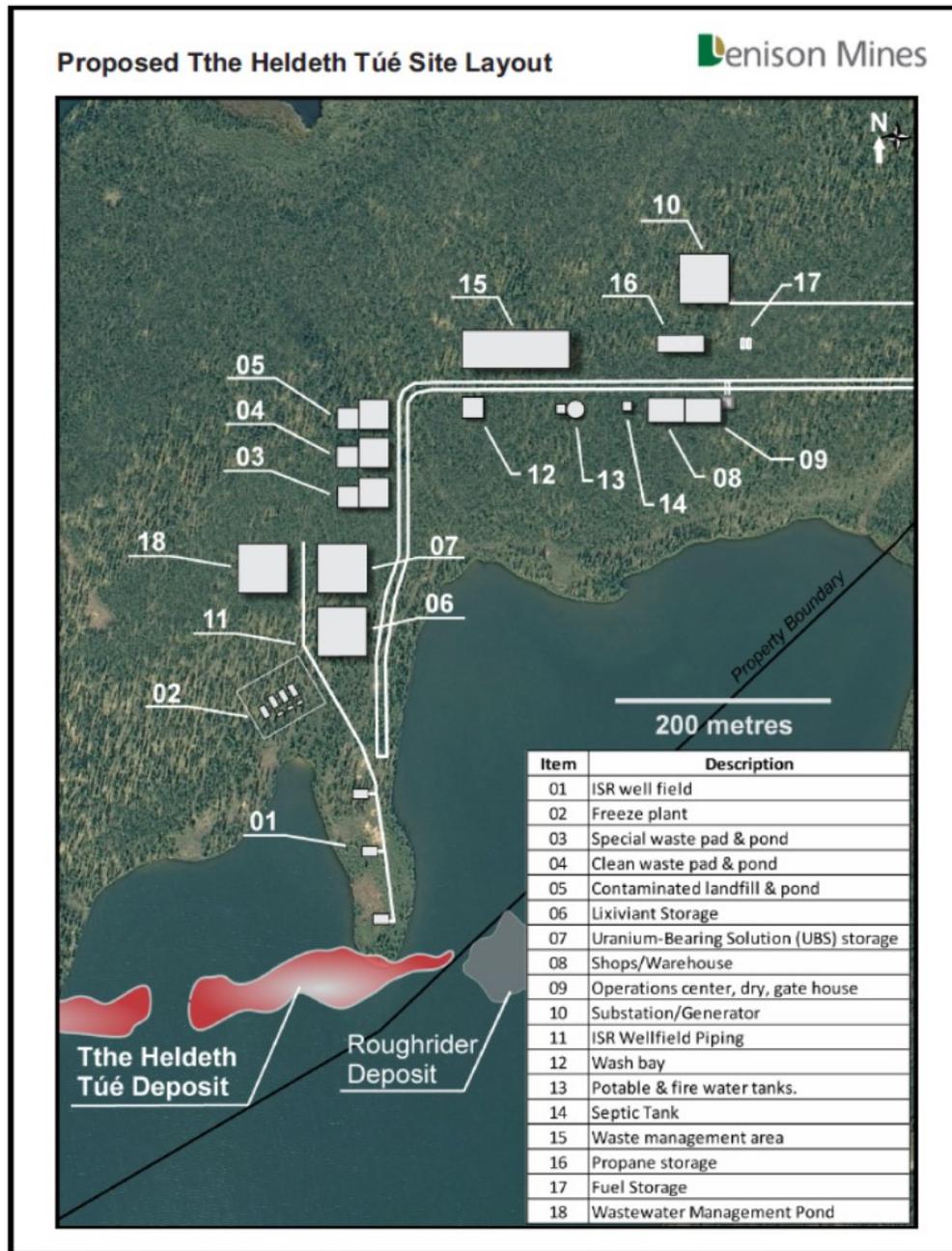
The THT site infrastructure has been modelled after the Wheeler River Phoenix infrastructure scaled appropriately for the requirements of the THT project.



Main land access to the site is from Saskatchewan Highway 905, via a road developed by Rio Tinto for Roughrider exploration requirements (with that project subsequently acquired by Uranium Energy Corp.). A road extension of 1.5 km will be required to access the ISR wellfield. Additionally, the existing road has been assumed to be upgraded from highway 905 to facilitate trucking of UBS and lixiviant.

The planned surface infrastructure at the THT site includes ISR wellfield and header houses, freeze plant, special and clean waste pads, UBS and lixiviant transportation pump stations for loading and unloading transport trucks, UBS storage pond, lixiviant solution storage pond,

contaminated landfill, operations center (with potable water, fire suppression, and septic), electrical distribution, wash bay, warehouse, shop, propane and fuel storage tanks, and operational waste water management pond.



Due to the initial capital costs required to install a standalone processing plant at THT, processing of the THT deposit is expected to occur at the McClean Lake mill with the UBS being transported via trucks from the THT site to McClean Lake on the existing provincial road (45 kilometre one way). The trucks would complete the return trip to THT loaded with lixiviant.

Electrical power has been chosen for the PEA to be fed from a substation located approximately 13 km from the THT Site. Power has been assumed to be brought to site at 25 kV. A tradeoff

study was completed as part of this study to compare line power to power generated at site, the conclusion of which favored line power. Additional work studying transmission and distribution options is required should further studies be completed.

At this stage, no environmental fatal flaws have been identified for the project. Through project design and implementation of various best management practices, project effects on the environment are expected to be avoided or minimized while meeting all applicable environmental guidelines and regulations. Given the proximity of the project to a surface waterbody it is likely that the most significant public concern will be the potential impacts to the lake, and it will be imperative for Denison to demonstrate how the groundwater and surface water environments will remain protected. The project will require completion of a provincial environmental assessment and federal licensing which includes the review of the environmental assessment to support a licensing decision. The approval process is anticipated to take 24 months following the submission of the draft licensing and environmental impact assessment documents.

Denison recognizes the importance of early identification of Interested Parties, and in particular, Indigenous and non-Indigenous Communities of Interest who may have an interest in the THT project based on historical and / or contemporary land use activities, known and asserted traditional territories, and / or historical precedent with the uranium industry in the eastern Athabasca Basin region. As noted above, also of importance is the strong interest most Interested Parties hold with respect to the protection of water, further underscoring the need for a proper and complete engagement strategy. As part of this process, Denison has identified a number of potential Communities of Interest for the THT project and can begin the process of suitable and appropriate engagement for the stage of the development of the THT project. This will assist Denison to determine the number and scale of Impact Benefit Agreements, which are often an important element as part of advancing a resource extraction project through the regulatory process in Canada.

### *Capital and Operating*

The capital costs for the THT project were estimated relying on available data from the Wheeler PFS Report and the 2016 NI 43-101 Cigar Lake Operation Technical Report, as well as based on quotes and first principles estimates. The initial capital investment is estimated at \$111.6 million, sustaining capital at \$24.8 million and decommissioning costs at \$25.2 million. The initial CAPEX includes a 30% contingency and excludes \$20.1 million of project evaluation costs that must be incurred prior to construction. These costs should be considered when assessing the merit of advancing the project to a development decision in the future. The THT capital costs are outlined as follows:

<b>THT Capital Costs (\$ million) <sup>(1)</sup></b>			
	<b>Initial</b>	<b>Sustaining</b>	<b>Total</b>
Wellfield	49.6	24.4	74.0
Milling (McClellan Lake modifications)	1.1	-	1.1
Surface facilities	2.1	-	2.1
Utilities	0.7	-	0.7
Electrical	5.0	-	5.0
Civil & earthworks	5.8	0.4	6.2
Offsite infrastructure	7.5	-	7.5
Decommissioning	-	19.4	19.4
Construction Indirect	14.0	-	14.0
<b>Subtotal</b>	<b>85.8</b>	<b>44.2</b>	<b>130.0</b>
Contingency	25.8	5.8	31.6
<b>Total Capital Costs (100%)</b>	<b>111.6</b>	<b>50.0</b>	<b>161.6</b>

(1) Initial capital costs exclude \$20.1 million of estimated pre-construction project evaluation and development costs.

The operating costs for the THT project were estimated relying on available data from the Wheeler PFS Report as well as historical milling cost from the MLJV for Toll Milling fees estimates, as well as first principal estimates. The total operating costs are estimated at \$155.7 million (\$16.27 per lb of produced U<sub>3</sub>O<sub>8</sub>).

The THT ISR operation is estimated to produce total mine production of 9.7 million pounds U<sub>3</sub>O<sub>8</sub> over an approximate six year mine-life with final processing occurring at Denison's 22.5% owned McClellan Lake mill.

<b>THT Operating Cost per Pound U<sub>3</sub>O<sub>8</sub></b>		
	<b>CAD\$</b>	<b>US\$</b>
Mining / Wellfield	5.73	4.31
Milling / Processing	8.07	6.07
Transport to converter	0.53	0.40
Site support and administration	1.94	1.46
<b>Total Operating Costs per pound U<sub>3</sub>O<sub>8</sub></b>	<b>\$16.27</b>	<b>\$12.23</b>

Each WLULP partner reports its share of the operations in its own tax return. As each partner has a unique tax profile, the THT project has been evaluated using two different cash flow model approaches:

- **Pre-Tax Basis** - A pre-tax discounted cash flow model which shows the economics of the project on a 100% basis. This case includes the Saskatchewan uranium Resource Surcharge (3.0%) and the Saskatchewan Basic Royalty (4.25% with Resource Credit) and excludes tax specific items related to Canadian Federal and Provincial income taxes and Saskatchewan profit-based royalties, each of which will vary depending on each partner's unique facts and circumstances; and
- **Post-Tax Basis** - A post-tax discounted cash flow model, specific to Denison which shows the economics of the project based on Denison's ownership interest in the project. This case includes the Saskatchewan uranium Resource Surcharge (3.0%) and the Saskatchewan Basic Royalty (4.25% with Resource Credit) as well as tax specific items related to Canadian Federal and Provincial income taxes and Saskatchewan profit-based royalties and other non-tax related items which are unique and applicable to Denison's economic interest in the THT project.

The calendar years referred to in the economic model developed for the Project are indicative only and should not be understood as reflecting the Company's plans for advancing the project. Any advancement of the Project, or the timing thereof, is subject to various factors, some of which may be outside of the Company's control. The Company has advised that it will provide additional applicable guidance on its intentions to advance the Project in its public disclosure, as appropriate.

Inputs and assumptions to both the pre-tax and post-tax cash flow models include:

- An estimated 3-year pre-production period;
- LOM production of 177,664 tonnes at an average grade of 2.49% U<sub>3</sub>O<sub>8</sub> containing 9,713,445 lbs of U<sub>3</sub>O<sub>8</sub>;
- A project mine production period of approximately 6 years, reaching current planned capacity of 2.1 million lbs of U<sub>3</sub>O<sub>8</sub> in the second year of production, operating at that rate for four years and declining to 0.3 million lbs of U<sub>3</sub>O<sub>8</sub> in the final year of production;
- Estimated metallurgical process uranium recoveries of 98.5%;
- A base case uranium pricing scenario, provided by Denison, and based on UxC's Q3-2020 Uranium Market Outlook Report Composite Midpoint spot price projection, in constant / uninflated dollars, ranging from US\$49.43 to US\$57.07 per pound U<sub>3</sub>O<sub>8</sub> during the THT mine production period, translated to CAD using an exchange rate of 1.33 CAD/USD;
- Project capital costs of \$161,608,000 (100% basis). This amount excludes \$20,127,000 of pre-construction project evaluation and development capital costs (100% basis);
- Project operating costs of \$155,693,000 (100% basis);
- No inflation or escalation of revenue or costs has been incorporated. Costs are expressed in 2020 Canadian dollars;
- Adjustments for financing (via debt or equity) and any associated carrying charges thereon (interest, other financing charges) are not included;
- Adjustments for working capital (timing adjustments in cash receipts re uranium sales and / or CAPEX, OPEX payments) are not included; and
- The THT economic model does not include any intellectual property charges that may be borne by the project in the future from the use of Wheeler River ISR related proprietary information.

The pre-tax base case cash flow model is based on the inputs noted above and the following additional notes:

- The evaluation of the project is on a 100% ownership basis;
- No toll milling revenue or production credits applicable to MLJV participants is included;
- No Saskatchewan Profit Royalty is included;
- No provincial / federal tax calculations are included; and
- Net Present Value ("NPV") calculations assume a discount rate of 8% (see Section 22.5.1 of PEA for additional information) and are measured from the start of the pre-production period.

The THT project economic results are quite sensitive to the price of uranium. To illustrate the impact on the project from lower and higher uranium price assumptions than those in the pre-tax base case, the PEA considers an additional two pricing scenarios: (1) the Low Case, which uses an estimated fixed uranium selling price of US\$35.00/lb U<sub>3</sub>O<sub>8</sub> for all production; and (2) a High Case, which uses an estimated fixed uranium selling price of US\$65.00/lb U<sub>3</sub>O<sub>8</sub> for all production.

A summary of the economic results of the pre-tax low, base and high case scenarios are illustrated in the table below.

<b>Pre-tax Economic Results (100% basis) Summary – Low, Base and High Case</b>			
	<b>Low Case</b>	<b>Base Case</b>	<b>High Case</b>
<b>Uranium price assumption</b>	US\$35 per lb U <sub>3</sub> O <sub>8</sub>	UxC spot price <sup>(3)</sup>	US\$65 per lb U <sub>3</sub> O <sub>8</sub>
<b>Pre-tax NPV<sub>8%</sub> <sup>(1)</sup></b>	\$38,260,000	\$177,295,000	\$264,932,000
<b>Pre-tax IRR <sup>(1)</sup></b>	17.4%	39.1%	50.0%
<b>Pre-tax payback period <sup>(2)</sup></b>	~33 months	~22 months	~18 months

(1) NPV and IRR are calculated to the start of pre-production activities for the THT project.

(2) Payback period is stated as number of months to pay-back from the start of January 2028.

(3) Spot price forecast is based on “Composite Midpoint” scenario from UxC’s Q3’2020 Uranium Market Outlook (“UMO”) for the years 2028 to 2033 and is stated in constant (not-inflated) dollars.

The post-tax base case cash flow model is specific to Denison’s ownership interest in Waterbury Lake and Denison’s specific facts and circumstances, including:

- Adjustments for Denison’s share of pre-construction project evaluation and development capital costs including contingency, and the associated impact on estimated tax pools Denison will have available to it to reduce taxable income for Saskatchewan Profit Royalties as well as Canadian Federal and Provincial income taxes;
- The economic benefits associated with DMI’s 22.5% share of the MLJV as it relates to THT toll milling at McClean;
- The impact of the Saskatchewan Profit Royalty applicable on uranium production; and
- Denison’s expected Federal and Provincial income taxes payable (refer to section 22.6.1 of the Waterbury PEA for additional information).

Discounting for NPV calculations remains at 8% (refer to Section 22.5.1 of Waterbury PEA for additional information), and the impact of estimated net smelter royalties of \$3.8 million owing to Denison on KWULP’s share of THT production has not been included (refer to Section 4.5 of Waterbury PEA for additional information).

A summary of the economic results of the post-tax low, base and high case scenarios reported in the PEA are illustrated in the table below.

Denison, through Denison Waterbury Corp, currently has a 69.35% aggregate ownership interest in the WLULP. At the date of the PEA, Denison’s ownership interest was 66.90%. The post-tax modeling has not been updated for Denison’s increased ownership position.

**Post-tax Economic Results (Denison's Share<sup>(1)</sup>) Summary - Low, Base and High Case**

	Low Case	Base Case	High Case
Uranium price assumption	US\$35 per lb U <sub>3</sub> O <sub>8</sub>	UxC spot price <sup>(4)</sup>	US\$65 per lb U <sub>3</sub> O <sub>8</sub>
Post-tax NPV <sub>8%</sub> <sup>(2)</sup>	\$13,564,000	\$72,470,000	\$109,038,000
Post-tax IRR <sup>(2)</sup>	13.5%	30.4%	38.9%
Post-tax payback period <sup>(3)</sup>	~34 months	~23 months	~19 months

(1) Amounts are based on Denison's ownership of 66.90% at the date of the PEA.

(2) NPV and IRR are calculated to the start of pre-production activities for the THT project.

(3) Payback period is stated as number of months to pay-back from the start of January 2028.

(4) Spot price forecast is based on "Composite Midpoint" scenario from UxC's Q3'2020 Uranium Market Outlook ("UMO") for the years 2028 to 2033 and is stated in constant (not-inflated) dollars.

The PEA is a preliminary analysis of the potential viability of the project's mineral resources, and should not be considered the same as a Pre-Feasibility or Feasibility Study, as various factors are preliminary in nature. There is no certainty that the results from the PEA will be realized. Mineral resources are not mineral reserves and do not have demonstrated economic viability.

### **McClellan Lake**

The McClellan Lake projects are owned by Denison (22.5%) and Orano Canada (77.5%). Orano Canada is the operator/manager of the projects.

Except as otherwise noted below, the project descriptions are based on the Company's technical reports: (A) the "Technical Report on the Denison Mines Inc. Uranium Properties, Saskatchewan, Canada" dated November 21, 2005, as revised February 16, 2006 (the "**McClellan Technical Report**"), (B) the "Technical Report on the Sue D Uranium Deposit Mineral Resource Estimate, Saskatchewan, Canada" dated March 31, 2006 (the "**Sue D Report**"), and (C) the "Technical Report on the Mineral Resource Estimate for the McClellan North Uranium Deposits, Saskatchewan" dated January 31, 2007 (the "**McClellan North Technical Report**"), copies of which are available on the Company's website and under its profile on the SEDAR+ website at [www.sedarplus.ca](http://www.sedarplus.ca). Scott Wilson RPA (since acquired by SLR) was engaged to prepare and deliver the McClellan Technical Report (authored by Richard E. Routledge, M.Sc., P.Geol.), the Sue D Report and the McClellan North Technical Report (each authored by Richard E. Routledge, M.Sc., P.Geol. and James W. Hendry, P.Eng.). Each author was an independent Qualified Persons for the purposes of NI 43-101. By letter dated October 20, 2009, Orano Canada received from Scott Wilson RPA subsequent corrections to the resource estimate in the McClellan North Technical Report, which revisions have been incorporated herein as applicable.

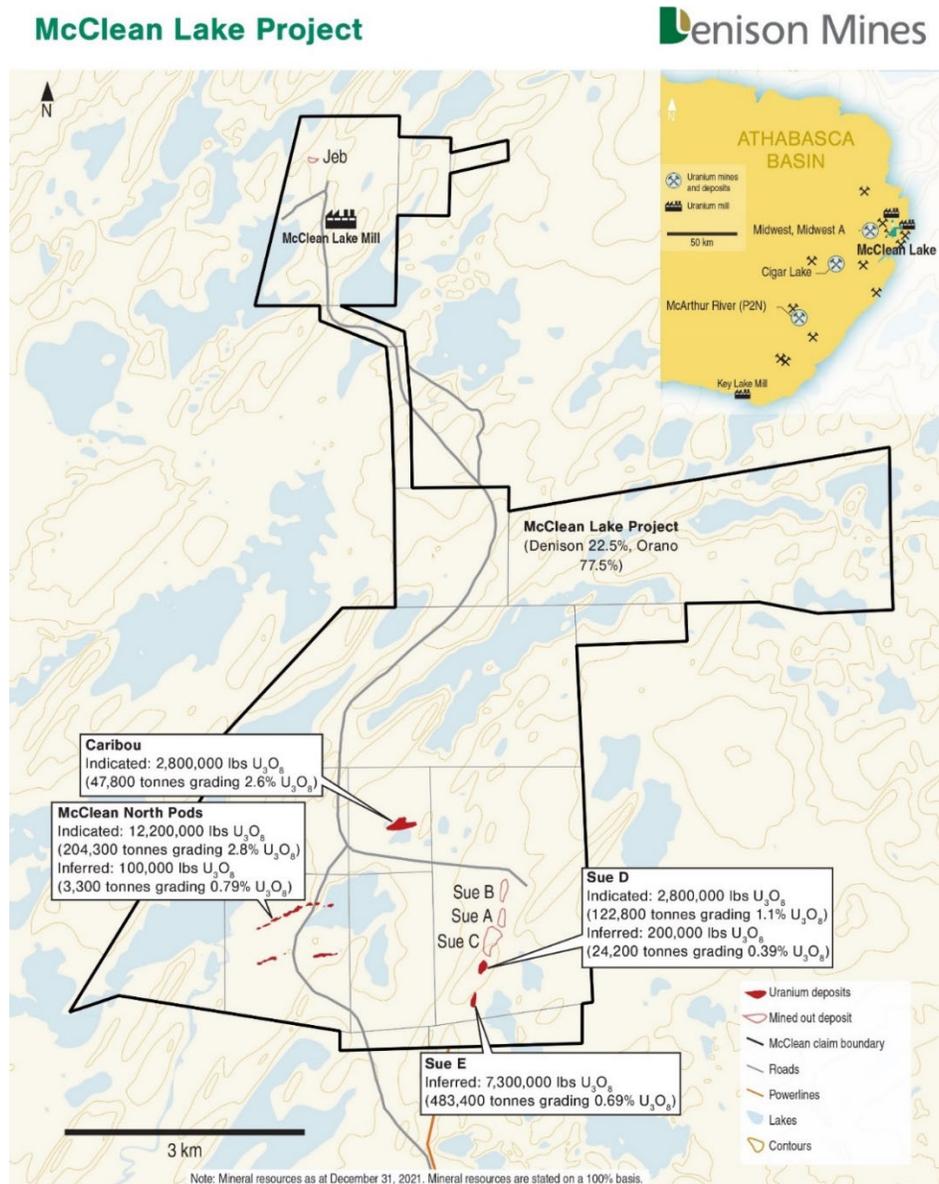
The conclusions, projections and estimates included in this description are subject to the qualifications, assumptions and exclusions set out in the technical reports. The reports are recommended to be read in their entirety for a more fulsome understanding of the technical aspects of the projects.

### Property Description, Location and Access

The McClellan Lake property is located within the eastern part of the Athabasca Basin in northern Saskatchewan, approximately 26 kilometres west of the Rabbit Lake mine and approximately 750 kilometres north of Saskatoon. Access to the McClellan Lake site is by both road and air. Goods are transported to the site by truck over an all-weather road connecting with the provincial highway system. Air transportation is provided through the Points North airstrip about 25 kilometres from the project site.

The mineral property consists of four (4) mineral leases covering an area of 1,147 hectares and 13 mineral claims covering an area of 3,111 hectares. The right to mine the McClean Lake deposits was acquired under these mineral leases, as renewed from time to time. Mineral leases are for terms of 10 years with the right to renew for successive 10-year periods provided that the leaseholders are not in default of the terms of the lease. A mineral claim grants the holder the right to explore for minerals within the claim lands and the right to apply for a mineral lease. The current mineral leases have terms that expire between November 2025 and August 2026 and title to the mineral claims is secure until at least 2041. It is expected that the leases will be renewed in the normal course, as required, to enable all the McClean Lake deposits to be fully exploited.

The right to use and occupy the lands at McClean Lake has been granted in a surface lease agreement with the province of Saskatchewan. The McClean surface lease was entered into in 2002, has a term until 2035 (33 years) and covers a land area of approximately 3,677 hectares.



The uranium produced from the McClean Lake deposits is subject to uranium mining royalties in Saskatchewan in accordance with Part III of The Crown Mineral Royalty Regulations. See “Government Regulation - Canadian Royalties.” In addition, a royalty of 2% of the spot market price on all U<sub>3</sub>O<sub>8</sub> produced from the Sue E deposit is payable to the previous owner of a portion of the deposit.

### History

Several operators and related joint ventures have managed the McClean Lake project from 1968 to present. Their involvement has resulted in the discovery of several uranium deposits including McClean North, McClean South, JEB, Sue trend (A,B,C,D,E) and Caribou. Exploration activities over the project have involved extensive geophysical surveys, both airborne and ground, in addition to exploration/delineation diamond drilling.

Uranium production from the McClean Lake deposits at the onsite McClean mill facility to date (current to 2021) is approximately 50 million pounds U<sub>3</sub>O<sub>8</sub>. The ore feed for production is almost entirely sourced from mining activities of the Sue (A, B, C, and E) and JEB deposits.

#### *1968 – 1974 (Gulf Minerals Canada Ltd.)*

From 1968 to 1974, the entire area was held under permit (Permit #8) by Gulf Minerals Canada Ltd. During this period, Gulf flew an airborne radiometric survey over the area and conducted reconnaissance and ground level surveys.

#### *1974 – 1985 (Canadian Occidental Petroleum Ltd.)*

In 1974 Gulf reduced their land holding and allowed Permit #8 to lapse. Canadian Occidental Petroleum Ltd. (“**CanOxy**”) acquired the ground and flew a reconnaissance survey over the area in July of that same year and staked a 260 square kilometre area called then the Wolly property (now divided into the McClean Lake and Wolly properties). CanOxy operated the project from 1974 to 1985 at first without partners, then in 1977, in partnership with Inco Ltd.

Initial exploration consisted of geochemical and ground radiometric prospecting with follow up drilling. Several geophysical methods were also used, but correlation with geochemical and radiometric anomalies was generally poor. In 1977, airborne magnetic and EM surveys were flown over the property. The results indicated conductive trends and helped to better define the regional basement structure and lithology. The first significant discovery came in 1978, when the Tent Lake zone was found along a major conductive trend. Following this discovery, the emphasis was on geophysical rather than geochemical or radiometric targets. From 1979 to 1985, several major discoveries were made based mainly on geophysics and improved geological interpretations. This included the McClean North deposit in 1979, the McClean South deposit in 1980, the Candy Lake zone in 1981 and the JEB deposit in 1982. During this period, CanOxy completed 781 drill holes for 118,540 metres of drilling; most of them concentrated in the area now known as the McClean Lake property.

CanOxy prepared estimates of tonnages, grades and contained uranium for McClean Southeast and Southwest deposits as of 1980, which have not been verified by Denison. The results of these estimates are set out below. The Company is not treating this historical estimate as current mineral resources or mineral reserves.

### *1985 – 2020 (Minatco / Denison Mines / OURD)*

In January 1985, Minatco entered into a joint venture agreement with CanOxy and Inco to become the operator of the project. Geophysical and drilling programs were conducted throughout the project area to follow up existing mineralized areas and explore new zones. In 1987, an additional zone (Pod 5) was found in McClean North. Several very significant discoveries were also made the following year, in 1988: two new mineralized zones, Sue A and B were found in the Sue area, which would lead to the discovery of the highly productive Sue trend; mineralization was indicated on the McClean South conductor, west of the McClean Southwest pod; and additional mineralization was found in McClean North. Additional work in the Sue area over the next few years, led to the Sue C deposit in 1989, the Sue D deposit in 1990 and the Sue E deposit in 1991. From 1985 to 1993, Minatco completed 1,160 drill holes for a total of 171,090 metres of drilling, most of them concentrated again in the area now known as the McClean Lake property.

In 1990, the CanOxy-Inco JV sold out to Minatco. In 1993, Denison Mines Ltd. exchanged with Minatco a 70% interest in the Midwest Lake project for a 22.5% interest in the McClean Lake project. OURD obtained a 7.5% interest. Orano Canada's predecessor acquired the uranium assets of Minatco in Canada and became operator of the McClean Lake Project. The McClean Lake property was then created and defined as a portion of the Wolly property outlined by a surface lease (containing the JEB, Sue and McClean deposits).

### *2020 (Orano Canada / Denison)*

In 2020, OURD sold its 7.5% interest in the MLJV to Orano Canada.

### Geological Setting, Mineralization and Deposit Types

The McClean Lake uranium deposits lie near the eastern margin of the Athabasca Basin in the Churchill Structural Province of the Canadian Shield. The bedrock geology of the area consists of Precambrian gneisses unconformably overlain by flat lying, unmetamorphosed sandstones and conglomerates of the Athabasca Group. The Precambrian basement complex is composed of an overlying Aphebian aged supracrustal metasedimentary unit infolded into the older Archean gneisses. The younger Helikian aged, Athabasca sandstone was deposited onto this basement complex. The basement surface is marked by a paleoweathered zone with lateritic characteristics referred to as regolith.

The McClean Lake uranium deposits which include the Sue deposits (A to E), McClean deposits (North and South), Caribou deposit and JEB deposit are unconformity-related deposits of the unconformity-hosted variety.

### Exploration and Drilling

Exploration activities including ground geophysics and diamond drilling were conducted by Orano Canada from 1994 to present. The majority of exploration has been focused on areas of known mineralization at McClean North/South, Sue Trend, JEB and the Tent Seal Trend. Other target areas on the property which have also been subject to ground geophysics and drilling include Candy Lake, Bena, Vulture and Moffat Lake. In 2002 the discovery of Caribou, the high- grade unconformity related uranium deposit was made approximately 2 kilometres northwest of the Sue C open pit. No other significant discoveries have been made since 2002. During the period 1994 to 2019 Orano Canada completed 98,498 metres of drilling in 505 holes, with no significant exploration conducted on the property in 2020.

The 2021 exploration program was designed to test for the potential expansion of previously discovered mineralization in the McClean South 8W and 8E pods, as well as to test for new mineralization in the surrounding area. Fifteen drill holes totaling 4,083 metres were completed during the 2021 program. Three of the final four drill holes completed by Orano Canada returned uranium mineralization at the McClean South target area, with the results highlighted by drill hole MCS-34, which returned 8.67%  $U_3O_8$  over 13.5 metres (including 78.43%  $U_3O_8$  over 1.1 metres), with a cut-off grade of 0.05% and true thickness estimated to be approximately 85%.

The 2022 exploration program focused on testing the extents of the high-grade mineralization discovered in the 2021 drill program at McClean South. 23 drill holes were drilled, totaling 5,862 metres. Ten of the 23 drill holes returned notable uranium mineralization, including drill hole MCS-58, which returned 2.96%  $U_3O_8$  over 15.5 metres, including 24.49%  $U_3O_8$  over 1.5 metres, located approximately 54 metres to the southeast of drill hole MCS-34. Overall, the results from 2022 have successfully expanded the footprint of the mineralized zone to approximately 180 metres in strike length. Additional evaluation drilling was conducted at the McClean North deposit. See “Denison Operations-SABRE Mining Program” for further details.

No exploration program was conducted in 2023 nor is planned for 2024.

#### Sampling, Analysis and Data Verification

The following description applies to all exploration on the McClean Lake property.

Following the completion of a drill hole, the hole is radiometrically logged using a downhole slim-line gamma probe. The gamma-log results provide an immediate equivalent uranium (“eU”) value for the hole, which, except in high-grade zones, is reasonably accurate. The gamma-log results, however, have not been used for the purposes of estimating mineral reserves or resources unless core loss is significant. 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 always collected where mineralization is located. A background geochemistry sample is collected every 10 metres down the hole.

All sampled core is split in half, one half retained and the other sent to an independent laboratory. Lost core is not an issue at the McClean project as core recovery has been good. Control samples are routinely assayed with each batch of core samples analyzed.

The mineralization in the various McClean deposits is highly variable in both mineralogy and uranium content. The principal minerals identified in the deposits are pitchblende, uraninite and niccolite. As a result of the highly variable uranium content, a variable density formula was developed for the McClean deposits. This formula was modified over the years to account for the fact that it originally tended to underestimate  $U_3O_8$  content where the  $U_3O_8$  values were associated with high values of nickel and arsenic.

No opinion can be given regarding security of samples in the mid to late 1970s and the late 1980s other than to indicate that subsequent geological work and all metallurgical and geotechnical work have confirmed the results. All procedures reviewed follow generally accepted industry practice. A good demonstration of the reliability is that JEB and the Sue deposits (B and C) have been mined out and more uranium has been recovered into stockpiles than had been estimated from surface drilling.

## Mineral Reserve and Mineral Resource Estimates

Estimation procedures have evolved over the years. At the time of the feasibility study in 1990, polygonal methods were used for the JEB, the Sue A, the Sue B, the Sue C deposits and for the McClean zones. Prior to the start of mining at the JEB deposit, the mineral reserves were re-evaluated using computerized methods whereby block models were constructed and geostatistical methods were implemented. Much more recently, these mineral resource estimates have been further refined using Whittle pit optimization software. Appropriate tests and audits of the databases on all the McClean deposits have been carried out by past qualified Denison personnel. In the case of JEB, Sue C and Sue B, the amount of  $U_3O_8$  recovered into stockpiles was higher than that estimated from surface drilling.

The Company received the McClean Technical Report from Scott Wilson RPA (now SLR) on its mineral reserves and mineral resources at certain of the deposits (Sue A, B, E and McClean North and Caribou) at McClean Lake. See “Mineral Reserves and Mineral Resources”, above, for a summary of the mineral resource and mineral reserve estimates remaining, after adjusting for mining activity, as applicable.

In preparing the McClean Technical Report, Scott Wilson RPA reviewed previous estimates of mineral reserves and mineral resources at the applicable properties, and examined and analyzed data supporting the previous estimates, as well as other available data regarding the properties, including extensive information from Orano Canada.

For the Sue E deposit, Scott Wilson RPA constructed a block model using indicator kriging to both map out and geologically constrain mineralized areas. A block that had at least one nearby composite within 10 metres of its centre, and that had composites from at least two different drill holes in its search neighbourhood was classified as part of the indicated mineral resource. The indicated mineral resource was evaluated by Scott Wilson RPA in 2005 using Whittle economic evaluation software showing that the Sue E pit economics were robust and mineral reserves were estimated. Mining was completed at the Sue E pit during 2008 recovering about 91% of the probable mineral reserves estimated. Scott Wilson RPA classified approximately 7.3 million of the pounds outside the current pit as inferred mineral resources. Confirmatory drilling in 2006 by the operator has indicated that this may be reduced to 2.0 million pounds, but mineral resources have not been re-estimated.

The mineral resource estimate for the Caribou deposit is based on a block model for which grade was interpolated using ordinary kriging. Since there were no plans for the mining of this deposit at the date of the McClean Technical Report, the economic potential was not evaluated and mineral reserves were not estimated.

With respect to the Sue D deposit, the Company received the Sue D Report in 2006, authored by Scott Wilson RPA. Scott Wilson RPA carried out an independent mineral resource estimate for Sue D by conventional 3-D computer block modeling. A minimum vertical mining width of two metres was employed with a 0.1%  $U_3O_8$  cut-off.

Due to the significant increase in the price of uranium from 2004 to 2006, Denison engaged Scott Wilson RPA to re-evaluate the uranium resources in the McClean North trend that are amenable to other methods of mining. The original McClean Technical Report had only evaluated mineral resources and mineral reserves of the high grade portions under the assumption that they would be mined using a blind shaft mining method. The McClean North Technical Report on the mineral reserves and resources at the McClean North uranium project was completed in 2007.

The re-evaluation of McClean North was carried out by conventional 3-D computer block modeling. Wire frames were constructed for each of pods 1, 2 and 5. The estimate included internal dilution, but not external dilution, and was carried out at a 0.1% U<sub>3</sub>O<sub>8</sub> cut-off. This mineral resource estimate is based entirely on diamond drill information. Block cell dimensions were selected at 8 metre (easting) x 5 metre (northing) and a 2 metre bench height or approximately 180 tonnes/block. Scott Wilson RPA constructed a mineral resource wireframe based on kriging, and constructed a special waste wireframe, that generally surrounds the mineral resource wireframe, using similar kriging parameters but with larger search distances. Subsequent to this report, the Company and Scott Wilson RPA reviewed the block model and estimation procedures in October 2009 and made a slight revision to the mineral resource estimate for the McClean North deposit.

### Mining Operations

McClean Lake consists of nine known ore deposits: JEB; Sue A, B, C, D and E; McClean North; McClean South; and Caribou. 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 also commenced, 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).

The remaining ore reserves consist of a limited quantity of stockpiled ore from historical Sue B open pit mining operations and SABRE test mining activities at McClean North. Approximately 87,454 tonnes of Sue B ore at a grade of 0.35% U<sub>3</sub>O<sub>8</sub> and 2,481 tonnes of McClean Lake North ore (mined via SABRE, as defined below), at an average grade of 0.80% U<sub>3</sub>O<sub>8</sub>, are stockpiled on surface.

Low-grade special waste from the mining of the JEB, Sue C, Sue A, Sue E and Sue B deposits has been disposed of in the mined-out Sue C pit. In the future, Cigar Lake special waste is also expected to be disposed of in the Sue C Pit. By agreement between the CLJV and the MLJV, costs to update the Sue Water Treatment Plan and costs to dewater the Sue C pit for Cigar Lake special waste will be shared 50/50 between the CLJV and MLJV.

Since 2006, various test mining programs have also been conducted at McClean North. In 2023, Denison and Orano Canada approved a restart of uranium mining operations using the joint venture's patented SABRE mining method. Mining is planned to commence at the McClean North deposit in 2025, with 2024 activities expected to focus on preparations necessary to ready the existing SABRE mining site and equipment for continuous commercial operations, as well as the installation of pilot holes for the first mining cavities planned for excavation. See "Denison Operations-SABRE Mining Program" for more information.

### Processing and Recovery Operations

Processing of the McClean Lake ore stockpiles is anticipated to occur prior to the end of life of the McClean Lake mill. Historical processing of the McClean Lake orebodies through 2000 to 2010 has demonstrated strong performance, with recoveries above 97%. The MLJV anticipates processing of the remaining stockpiles to have similar performance results.

## Development and Production

In 2012, Orano Canada (then AREVA) initiated an internal study evaluating the feasibility of mining the McClean North, Caribou and Sue D deposits via conventional underground methods. The internal study was completed in April 2014; however, no formal technical report has been prepared by Denison in accordance with NI 43-101 and the MLJV has deferred a production decision.

As part of the continuing development of the SABRE mining method in 2021, a test mining program at McClean North generated 1,500 tonnes of high-value ore, which was processed at the McClean Lake mill in late 2021. In 2022 the SABRE site was reopened to complete pond cleaning activities and the relocation of certain infrastructure. Additionally, drilling of 17 holes into the McClean North deposit were completed during the fall to support resource evaluation and confirmation ahead of future assessments or mining. See “Denison Operations-SABRE Mining Program” for more information.

## Infrastructure, Permitting and Compliance Activities

The McClean Lake uranium mill, one of the world’s largest uranium processing facilities, is contracted to process ore from the Cigar Lake mine under a toll milling arrangement between the MLJV and the CLJV. The site has been in operation since the late 1990’s and consists of the mill, a tailings management facility, administration offices and building, camp facilities, back-up power supply, water treatment plants and a host of other minor facilities. The site is connected to the provincial power grid and provincial highways. Points North Landing Airport provides transportation to and from site for personnel on a daily basis.

As a uranium site, the CNSC permits the operations. The current license has a term until June 30, 2027. See “Denison’s Operations – McClean Lake Mill – Mill Licence” for more details.

## **Midwest**

The Midwest project is owned by Denison (25.17%) and Orano Canada (74.83%) pursuant to the Midwest Joint Venture Agreement. Orano Canada is the operator of the project.

Except as otherwise noted below, this project description is based on the project’s technical report entitled “Technical Report with an Updated Mineral Resource Estimate for the Midwest Property, Northern Saskatchewan, Canada” dated March 26, 2018 (the “**Midwest Technical Report**”), a copy of which is available on the Company’s website, under its profile on the SEDAR+ website at [www.sedarplus.ca](http://www.sedarplus.ca) and on EDGAR at [www.sec.gov/edgar.shtml](http://www.sec.gov/edgar.shtml).

The conclusions, projections and estimates included in this description are subject to the qualifications, assumptions and exclusions set out in the technical report. The Midwest Technical Report is recommended to be read in its entirety for a more fulsome understanding of the technical aspects of the project.

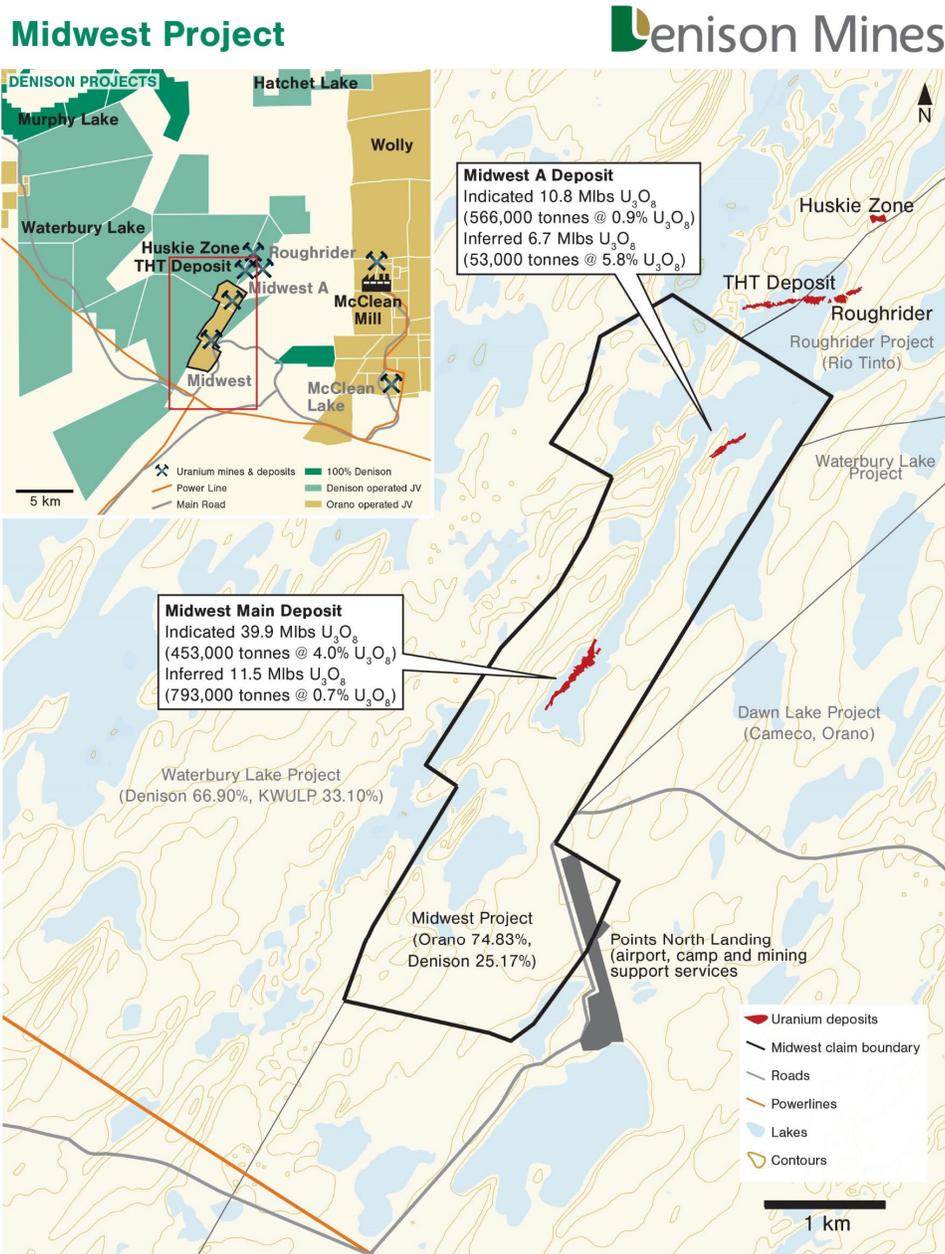
## Property Description, Location and Access

The Midwest property is located within the eastern part of the Athabasca Basin in northern Saskatchewan. The northern portion of the property is located on South McMahan Lake, about one kilometre from the Points North Landing airstrip and about 25 kilometres west by existing

roads from the McClean Lake mill on the McClean Lake property. The site is approximately 750 km by air north of Saskatoon and about 420 km by road north of the town of La Ronge.

Access to the Midwest property is by both road and air. Goods are transported to the site by truck over an all-weather road connecting with the provincial highway system. Air transportation is provided through the Points North airstrip.

**Location of the Midwest Main and Midwest A deposits on the Midwest project**



The property consists of three (3) contiguous mineral leases, covering 1,426 hectares and contains both the Midwest Main and Midwest A deposits. The mineral lease containing the Midwest Main deposit (ML 5115) is 556 hectares in size. Each of the mineral leases is at an annual assessment rate of \$75.00 per hectare and has sufficient approved assessment credits to

maintain the ground in good standing until 2041. There is no current production from these mineral leases. Leases must be renewed every 10 years as part of an administrative process.

Since the completion of the underground test mine at the Midwest Main deposit in 1988 and 1989, the site has been under an environmental monitoring and site security surveillance program. At present, there is an inactive water treatment plant, two water storage ponds and a core storage area on the site, as well as a dam in the Mink Arm of South McMahon Lake. All of the facilities used in the test mine program and all of the existing surface facilities are located on lands owned by the province of Saskatchewan. The right to use and occupy the lands was granted in a surface lease agreement with the province of Saskatchewan. The original surface lease agreement of 1988 was replaced by a new agreement in 2002. This new surface lease is valid for a period of 33 years. Obligations under the surface lease agreement primarily relate to annual reporting regarding the status of the environment, the land development and progress made on northern employment and business development. The Midwest surface lease covers an area of approximately 646 hectares.

Any uranium produced from the Midwest deposits is subject to uranium mining royalties in Saskatchewan in accordance with Part III of The Crown Mineral Royalty Regulations. See "Government Regulation - Canadian Royalties." A portion of Denison's interest in the Midwest project (i.e. 5.5% of the project reducing to 3.44% after payout) is subject to a sliding-scale, gross overriding royalty ranging from 2% to 4% payable to two previous owners of a portion of the Midwest project.

There are no known significant factors or risks that may affect access, title, the right, or ability of Orano Canada to perform work at/on the Midwest property.

### History

Initial exploration work in the vicinity of the two Midwest deposits began in 1966. Canada Wide Mines Ltd., a subsidiary of Esso Resources Canada Ltd., was operator of the project from 1968 to 1982. From 1968 to 1975, exploration was carried out on an exploration permit which included the area covered by the current mineral leases. Most of the work was concentrated on the area near South McMahon Lake where uranium mineralized boulders were found. In 1974, the exploration permit was changed to mineral leases.

During the winter season of 1977, one of the holes drilled through the unconformity encountered mineralization. In January 1978, the Midwest Main deposit was intersected by the first drill holes. During 1978 through 1980, a further 439 holes were drilled (for a total of about 650) to delineate the deposit and to explore the surrounding area of the mineral leases.

In 1987, Denison acquired a 45% interest in the Midwest project and became the operator. An underground test mine program was completed in 1989 which confirmed the results of the surface drilling program and identified a high grade historical mineral reserve containing 35.7 million pounds of  $U_3O_8$  at an average diluted grade of 4.5%  $U_3O_8$ , considered to be mineable by underground methods. This is a historical estimate, not being treated as current mineral reserves. During this time, Denison also performed an EM-37 survey and geotechnical drilling on the Midwest Main deposit. Exploration drilling was conducted to the east (1988) and along the conductive trend to the north of Midwest Main deposit (1989).

In 1993, the respective owners of McClean Lake and Midwest combined their interests to make two complementary projects with one mill at McClean Lake. In order to accomplish this, a portion

of Denison's interest in Midwest was exchanged for an interest in McClean Lake. This transaction, together with several related ownership changes, resulted in Denison's ownership interest in Midwest being reduced to 19.5% and Minatco, Orano Canada's predecessor in title, becoming the operator.

In 1999, Denison increased its interest in Midwest by 5.50% through the exercise of first refusal rights. With the uncertainty of the timing and costs of the Midwest development and the desire to eliminate the obligation to pay advance and future royalties on production from Midwest, Denison decreased its interest in Midwest from 25% to 19.96% effective March 31, 2001. Orano Canada, the operator/manager of Midwest, also reduced its interest from 70.5% to 54.84% for the same reason.

At the end of 2004, in order to take advantage of rapidly increasing uranium prices, Denison again increased its interest at Midwest, along with its joint venture partners, by buying the 20.70% interest in Midwest then held by Redstone Resources Inc. This purchase permitted Denison to acquire a further 5.21% interest in Midwest, bringing its interest to 25.17%. Orano Canada's interest increased to 69.16% and OURD's interest increased to 5.67%.

In 2020, OURD sold its interest in Midwest to Orano Canada.

#### Geological Setting, Mineralization and Deposit Types

The Midwest deposits are classified as 'unconformity-type' uranium deposits and occur approximately 200 metres below surface straddling the unconformable contact between overlying Athabasca Group sandstones and the underlying Paleoproterozoic and Archean basement rocks belonging to the Wollaston-Mudjatik Transition Zone. The north-northeast Midwest structural trend that controls the Midwest Main and Midwest A uranium deposits follows a steeply-dipping, graphitic pelitic gneiss, basement unit that is bounded by granitic gneisses or granite to both the east and west. The sub-Athabasca unconformity surface is relatively flat on a regional scale, however there is a slight uplift along the north-northeast Midwest trend and a generally higher elevation to the east. Fault zones in the basement are often characterized by brecciation and strong hydrothermal alteration with clay mineral development. These fault zones generally extend into the overlying Athabasca Group sandstone.

The Midwest Main deposit is lens to cigar shaped, 600 metres long, 10 to over 100 metres wide, with thicknesses ranging from 5 metres to 10 metres. The deposit consists of a near-massive, high-grade mineralized core that straddles the unconformity approximately 210 metres below surface. The high-grade core is surrounded by lower-grade, more dispersed, fracture-controlled mineralization in both sandstone and, in minor amounts, in basement rocks. The high-grade mineralization forms a roughly flat-lying lensoid concentration, with a root extending down into the basement rocks along a steeply-dipping fault.

The Midwest A deposit is approximately 450 metres long, 10 to 60 metres wide, ranges up to 70 metres in thickness and occurs between 150 and 235 metres below surface. Mineralization straddles the unconformity contact with minor amounts hosted within basement structures immediately below the unconformity. Thicker zones of mineralization above the unconformity are concentrated in conglomerate units at the base of the Athabasca sandstone. Similar to Midwest Main, a high-grade core of mineralization is surrounded by a lower-grade, more dispersed, fracture-controlled envelope.

## Exploration and Drilling

Under Orano Canada's operatorship, exploration activities resumed in 2004. Exploration drilling was initiated some three kilometres to the northeast of the Midwest deposit to test ground around historical hole MW-338 which returned an isolated intercept of 3.8 metres at 6.9% U<sub>3</sub>O<sub>8</sub>. Between 2005 and 2009, a further 50,831 metres of drilling was completed in 191 drill holes on the property, which discovered and delineated the Midwest A deposit and identified and evaluated several other mineralized areas, including the Josie Zone, lying between the Midwest and the Midwest A deposits. 76 of these holes (20,794.9 metres) have intersected the mineralization associated with the Midwest A deposit. Additional geophysical programs were also conducted.

The Midwest Main deposit was intensively drilled in the late 1970's and 1980s. Drill holes defining the Midwest deposit include 615 drill holes, of which 362 are mineralized. By type, these include exploration, shallow reconnaissance (<100 metres), and geotechnical drill holes. Between 2004 and 2017, only 11 drill holes have been completed on the Midwest Main deposit area under Orano Canada's operatorship. Four inclined geotechnical holes were drilled in 2004 and four shallow geotechnical drill holes were completed in 2006. Three additional exploration drill holes were carried out within the deposit outlines in 2006 (MW-677, MW-678, and MW-685).

No exploration work was conducted at Midwest during the period 2010 to 2017, 2019 or 2020. The winter 2018 drill program comprised 4,709 metres in 12 completed diamond drill holes. Drilling was conducted on the Points North conductor (6 drill holes, 2,269 metres) to test exploration targets, and at Midwest Main (6 drill holes, 2,440 metres) to collect additional information from the unconformity-hosted mineralized zone and to test underlying basement targets. The drilling validated mineralization at the Midwest Main deposit (based on preliminary radiometric equivalent uranium results), but did not intersect any high-grade mineralization on the Points North conductor, or below the Midwest Main deposit within the basement.

In 2021, Orano Canada completed an exploration program consisting of 2,669 metres of diamond drilling in 8 holes completed over four different target areas: The Camille Zone (4 holes), Midwest Main (1 hole), the Dam Zone (1 hole), and the Points North Zone (2 holes). Elevated radioactivity and indicative alteration were identified from drilling in each of these areas.

For 2022, a two-line, 4.0 km Moving Loop Transient Electromagnetic Survey (ML-TEM) was completed north of the Midwest A deposit, towards the northern claim boundary, to better define the Midwest conductor north of the Midwest A deposit. The survey results confirm the apparent dextral offset in the Midwest conductor, which will have implications when generating drill targets for future exploration programs.

No exploration work was undertaken in 2023 nor is planned for 2024.

## Sampling, Analysis and Data Verification

During 2017, Orano Canada undertook a comprehensive review of the databases for both the Midwest Main and Midwest A deposits ahead of an updated mineral resource estimate. Concerns were identified at both deposits that needed to be addressed to increase both the confidence and the accuracy of the final estimate.

Given the historical nature of the data at Midwest Main a limited amount of data was readily available digitally: downhole gamma probe ("**probe**") data existed only as paper logs making it previously unavailable to be used, no comprehensive 3D geological model was available, perched

mineralization was not fully modeled, and further data QAQC was needed. Midwest A has a much more modern data set; however, no dry bulk density measurements were available, the latest drilling from September 2007 to December 2009 was not taken into account in the previous estimate, and the High Grade Zone was assigned an average uranium grade rather than performing grade modelling. Additionally, both deposits required new probe to chemical uranium assay grade (“**grade**”) correlations for the calculation of eU, combination of probe and grade data based on core recovery and probing/drilling parameters to be available for estimation, updated lithology and structural models (geological models), and an updated block model.

Work began with verifying the grade data against assay certificates and a historical nine track database from ESSO. Some discrepancies were noted in the sample locations as well as some of the grades due to typographical errors. When compared to the original drill logs and the probe logs, these were able to be rectified.

The Midwest deposits often have core loss associated with the mineralization, due to the high amount of clay alteration and quartz dissolution which makes core recovery while drilling difficult. This results in gaps in the grade dataset that are typically addressed by using probe radiometric eU data. Digital probe data was available for Midwest A, however for Midwest Main most of probe data was never digitized and remained only available on paper logs. The paper logs for 218 holes were digitized and added to the Midwest data set. This was followed up by ensuring the probe data was depth corrected (depth matched with grade data), as well as the creation of new probe to grade correlations for both deposits.

Midwest Main had a robust density to grade correlation; however, Midwest A did not have any dry bulk density measurements taken. The only density data at Midwest A was in the form of specific gravity measurements which do not take into account porosity and therefore tend to overestimate the density. Due to the high density of uranium, density is a vital reference for the expected tonnage of high-grade uranium deposits, which has a direct effect on the amount of uranium estimated. Given this uncertainty at Midwest A, previous resource estimations were forced to use a very conservative grade to density regression formula to avoid overestimation of resources. During a 2017 site visit, 25 dry bulk density measurements were taken from the remaining Midwest A drill core and sent for dry bulk density and geochemical analyses. A new grade to density regression formula was established showing an increase to the correlation by approximately 10%.

Various chemical assay methods have been employed at the Midwest Project prior to Orano Canada assuming operatorship in 2004. The methods described herein pertain to the program from 2004 onwards. Drill core with anomalous total gamma radioactivity (>200 counts per second utilizing a SPP2 or SPPy scintillometer) was sampled over 0.5 metre intervals. Sampling is undertaken on site by splitting the core in half, with one half submitted for analysis and the other half retained in the core box for future reference. Uranium chemical assays are performed by SRC in Saskatoon. Sample preparation involves crushing and pulverizing core samples to 90% passing -106 microns. Splits of the resultant pulps are initially submitted for multi-element ICP-MS analysis following partial (HNO<sub>3</sub>:HCl) and total (HF:HNO<sub>3</sub>:HClO<sub>4</sub>) digestions. Samples with ≥ 1,000 ppm U (partial digest) are re-assayed for U<sub>3</sub>O<sub>8</sub> using an ISO/IEC 17025:2005 accredited method for the determination of U<sub>3</sub>O<sub>8</sub> weight %. Pulp splits are digested using aqua-regia and the solution analyzed for U<sub>3</sub>O<sub>8</sub> weight % using ICP-OES.

For composite exploration samples, collected over 20 metre (upper sandstone) or 10 metre intervals (lower sandstone and basement), major and trace elements are determined using ICP-MS or ICP-OES after partial and total digestions. Boron values are obtained through NaO<sub>2</sub>/NaCO<sub>3</sub>

fusion followed by ICP-OES. In addition to internal checks by SRC, Orano Canada has rigorous QAQC procedures including the insertion of standard reference materials, blanks and field duplicates.

For mineral resource estimation purposes, wherever core recovery was less than 75%, the eU values derived from a calibrated downhole gamma probe are substituted for chemical assays where possible. Core recovery at Midwest Main is typically good with poorer recovery observed at Midwest A. For the Midwest A and Midwest Main updated mineral resource estimates reported herein, 64% and 16% of the assay intervals relied on eU grades, respectively.

Orano Canada has performed detailed QAQC and data verification, where possible, of all datasets, which in Denison's opinion are in accordance with industry best practice. Denison has performed additional QAQC and data verification of the drilling database including review of the QAQC methods and results, verification of assay certificates against the database assay table, review of downhole probe and eU calculation procedures, standard database validation checks and two site visits to the Midwest project in early 2018. Denison has reviewed Orano Canada's procedures and protocols and considers them to be reasonable and acceptable for mineral resource estimation.

### Mineral Processing and Metallurgical Testing

Several programs of metallurgical testing have been carried out on Midwest Main mineralization. The two main studies were completed by Melis Engineering in 1990 and by SEPA (Service d'Études, de Procédés et Analyses, engineering department of the Orano Group in France) in 1998. Both studies show that good metallurgical recovery of uranium can be achieved. The current McClean mill milling process differs from what was planned by Melis as a separate facility was planned in the study. The leaching tests done by SEPA on the Midwest Main mineralization samples showed that 99.5% of uranium could be extracted using the following conditions:

- Leach time 24 hours
- Acid addition 120 kg/tonne
- Free acid at end of test 25 g/l
- Oxidation, O<sub>2</sub> at 2 bar pressure
- Redox 470 m.v.

The current process for Cigar Lake ore being processed at the McClean mill requires an eight hour leaching time which is substantially less than what is proposed as optimal for Midwest Main ore (24 hours).

The Midwest Main deposit has a relatively high amount of arsenic (5-10% overall), which could affect the water quality discharge from the mill if not properly precipitated into the tailings. The SEPA study proposed using ferric sulphate to precipitate the arsenic in the tailings. Currently the mill is addressing moderate arsenic levels in the Cigar Lake ore feeds using barium chloride and ferric sulphate to precipitate it from solution.

Test work was conducted by Denison in 1992 at Lakefield Research to determine if the recovery of nickel and cobalt was feasible along with the extraction of uranium (Lakefield Research, 1992). Test work indicated that a precipitate with good grades of nickel and cobalt could be produced from a raffinate solution after the arsenic and radium are precipitated. It is estimated that an overall process recovery of 54% for both nickel and cobalt could be achieved.

The McClean mill has seen many upgrades and changes since the 1992 and 1998 studies were conducted. Review of the studies and additional metallurgical testing will likely need to be conducted prior to assessing the feasibility of mining of Midwest Main.

There has been no mineral processing or metallurgical test work completed on the Midwest A deposit.

### Mineral Resource Estimates

The Company retained SRK to independently review and audit an updated mineral resource estimate for the Midwest project completed by Orano Canada in November 2017. The review and audit was done in accordance with CIM Definition Standards (2014) and NI 43-101. The Company received a memorandum from SRK dated March 9, 2018, which was incorporated into the Midwest Technical Report. See “Mineral Reserves and Mineral Resources”, above, for a summary of the mineral resource estimate for the Midwest project.

In November 2017, Orano Canada provided Denison with a comprehensive project database consisting of drill hole data, mineralized wireframes and block models for both the Midwest Main and Midwest A deposits. The Midwest database was sent to SRK to conduct review and audit of the updated mineral resource estimate completed by Orano Canada. For the audited mineral resource estimate, SRK used data collected from several drilling campaigns completed between 1977 and 2009, including a total of 156 drill holes for Midwest A and 305 drill holes for Midwest Main. The audited mineral resource estimate includes expanded Low Grade and High Grade zones for Midwest A and three primary mineralized zones at Midwest Main, namely Unconformity, Perched and Basement zones. A summary of the audited estimation methodology and for Midwest A and Midwest Main are described below.

The Midwest A block model consists of two main mineralized domains, Low-Grade and High-Grade zones constructed using a 0.05% U cut-off with minimum thickness of two metres and 10.0% U cut-off with minimum thickness of one metre, respectively. A perched zone was identified, but was not considered for resource estimation. The Midwest A deposit consists of data from 113 boreholes of which 69 boreholes intersect the mineralization itself. Grades are comprised of 64% eU data, derived from a calibrated downhole gamma probe, and 36% chemical assay data. Sample data were composited to one metre length. An accumulation-like approach was used, wherein GxD (where grade is in percent uranium) and density were estimated into a three-dimensional block model, constrained by wireframes in two passes using ordinary kriging. The grade was then calculated into each block by dividing the estimated GxD by the estimated density. A block size of 5 by 5 by 2 metres was selected. Search radii were based on variogram analyses with a relatively flat ellipsoid used aligned roughly to the unconformity surface.

Grade capping was not performed, however, the treatment of high grades was considered during estimation by limiting the influence of GxD composites greater than 20 and density composites greater than 3, to a neighbourhood of 7.5 cubic metres within the low-grade zone. Classification is based on drillhole spacing, with blocks classified as Indicated only found in the sandstone and upper basement portion of the Low Grade zone with drillhole space of 30 metres or less. The lower basement and all other sandstone blocks are classified as inferred mineral resources.

The Midwest Main block model considered three styles of mineralization to construct the mineralized domains: unconformity, perched and basement. Mineralized domains were constructed using a 0.05% U cut-off with a minimum thickness of two metres. The Midwest Main deposit consists of data from 305 boreholes that intersected the mineralization, with new

downhole gamma probe eU data for unsampled locations or in areas of poor core recovery (less than 75% core recovery). Grades are comprised of 16% eU data, derived from a calibrated downhole gamma probe, and 84% chemical assay data. Sample data were composited to one metre length.

Similar to Midwest A, two attributes, density and GxD, were calculated into each block using ordinary kriging, and the uranium grade was then calculated by dividing the estimated GxD by the estimated density. A block size of 5 by 5 by 2 metres was selected. Search radii were based on variogram analyses with a relatively flat ellipsoid used aligned roughly to the unconformity surface. Capping was not performed, however, higher grade composites were limited to a 5-cubic-metre neighbourhood of influence. This was applied to all zones, with high grade thresholds varying by zone. Classification is based on estimation passes, with blocks classified as Indicated only in the Unconformity zone and in regions of tight borehole spacing up to a nominal spacing of 17.5 metres. All other blocks are classified as inferred mineral resources.

### Development and Production

In early 2007, Orano Canada completed an internal study evaluating the feasibility of mining the Midwest Main deposit via open pit mining methods and processing the resulting ore at the McClean Lake mill. In November 2007, the Midwest Joint Venture partners made a formal production decision to proceed with the development of the Midwest Main deposit. Subsequently, in November 2008, the Midwest Joint Venture partners announced that the development of the Midwest Main project would be delayed for an indefinite period due to delays and uncertainties associated with the regulatory approval process, increasing capital and operating cost estimates and the depressed state of the uranium market at the time.

Despite this decision, the MWJV partners advanced the environmental assessment process and, after several years of work, the final version of the Midwest Project Environmental Impact Statement was submitted to provincial and federal governments in September 2011. A Comprehensive Study Report was drafted by the CNSC and circulated for federal, provincial and Indigenous review, and in September 2012, the Midwest EIS was approved.

A concept study for ISR application at Midwest was prepared by Denison during 2022 and was formally issued to the MWJV in early 2023. Based on the positive results of the concept study, the MWJV provided Denison with approval to complete additional ISR-related evaluation work for Midwest in 2023 and 2024 in support of the potential preparation of a PEA. The 2024 budget for the MWJV anticipates a hybrid ISR/SABRE field test and resource delineation program at Midwest, including the planned completion of a multi-well ISR tracer test.

## Other Exploration Properties

Denison's Athabasca projects range in exploration maturity and present numerous exploration opportunities. Denison continuously reviews its significant land package with a view to generating new exploration targets or creating spin-out opportunities. The table below provides a list of Denison's other directly-owned Athabasca projects as at the date hereof.

Projects	Denison Ownership	# Claims	Hectares
Bachman Lake	100%	5	11,419
Bell Lake	100%	6	22,988
Blackwing	100%	3	12,627
Brown Lake	100%	3	1,755
Candle Lake	75.18% <sup>1</sup>	1	2,595
CLK	100%	2	10,422
Crawford Lake	100%	5	11,800
Darby	100%	12	18,069
Epp Lake	100%	2	865
Ford Lake	100%	5	9,649
GR	100%	16	78,585
Hatchet Lake	70.15%	9	10,212
Hook-Carter	80%	11	25,115
Johnston Lake	100%	9	28,647
Lynx Lake	100%	1	1,274
Mann Lake	30%	2	3,407
Marten	100%	2	5,008
Moon Lake	100%	2	4,309
Moon Lake North	100%	10	1,068
Moon Lake South	75%	1	2,716
Murphy Lake	100%	8	8,686
Packrat	100%	1	1,621
Park Creek	49%	8	7,798
Russell Lake	37.82%	1	355
Torwalt Lake	100%	1	812
Turkey Lake	100%	1	3,789
Waterfound	11.78% <sup>1</sup>	25	11,670
Waterfound North	100%	4	4,124
Wolly	20.77% <sup>1</sup>	17	23,700
Wolverine	100%	3	5,036
<b>TOTAL:</b>		<b>176</b>	<b>330,121</b>

### Notes:

(1) Denison also owns an additional indirect interest, through its 50% ownership of JCU. See table below.

Denison is indirectly involved in eleven uranium projects located in the Athabasca Basin of Saskatchewan through its 50% ownership of JCU. The table below provides a list of JCU's Athabasca Basin project interests at December 31, 2023.

Projects	JCU Ownership	JV Partner <sup>(1)</sup>
Beatty River	21.4253%	Orano Canada; UEX
Candle Lake	24.82%	Denison
Christie Lake	34.4508%	UEX
Close Lake	10.3128%	Orano Canada; Cameco
Cree Extension	30.0990%	Cameco; Orano Canada
Millennium	30.0990%	Cameco
Moon Lake <sup>(2)</sup>	20.1494%	Cameco; Orano Canada
Moore Tomblin	13.5947%	Orano Canada; Cameco
Waterfound	25.801%	Orano Canada; Denison
Wheeler River	10%	Denison
Wolly	12.4335%	Orano Canada; Denison

### Notes:

(1) The first company listed is the project operator.

(2) This property shares a name with, but is distinct from, Denison's Moon Lake property listed in the prior table.

Additionally, Denison is indirectly involved in the Kiggavik project in Nunavut through its 50% ownership of JCU:

Projects	JCU Ownership	JV Partner
Kiggavik	33.8118%	Orano Canada; Urangesellschaft Canada Ltd.

### 2023 Exploration Pipeline Activities

The following table summarizes the 2023 exploration activities completed at Denison's pipeline properties. Exploration drilling programs were conducted at Wheeler River, Moon Lake South, Moon Lake, Johnston Lake, and at Waterfound, which is one of the Company's non-operated properties.

Property	EXPLORATION ACTIVITIES		
	Denison's ownership	Drilling in metres (m) <sup>(1)</sup>	Other activities
Bell Lake	100.00%	-	Geophysical Survey
Johnston Lake	100.00%	6,202 (8 holes)	Geophysical Survey
Moon Lake	100.00%	627 (1 hole)	-
Moon Lake South	75.00%	8,098 (14 holes)	Geophysical Survey
Waterfound	24.68% <sup>(2)</sup>	9,789 (17 holes)	-
Wheeler River	95.00% <sup>(3)</sup>	4,368 (7 holes)	Geophysical Survey
<b>Total</b>		<b>29,084 (47 holes)</b>	

(1) The Company reports total exploration metres drilled and the number of holes that were successfully completed to their target depth.

(2) Denison's effective ownership interest as at December 31, 2023, including an indirect 12.90% ownership interest held through Denison's 50% ownership of JCU.

(3) Denison's effective ownership interest as at December 31, 2023, including the indirect 5.0% ownership interest held through Denison's 50% ownership of JCU.

## **Athabasca Exploration: Sampling, Analysis and Data Verification**

Unless otherwise specifically disclosed herein, the following describes the procedures and protocols for all Athabasca exploration programs operated by Denison in reference to drill hole surveying, downhole radiometric surveying, core logging, core sampling, sample preparation methods, analytical procedures, Quality Assurance and Quality Control ("QAQC") and data verification. For Sampling, Analysis and Data Verification procedures employed by other operators, past or present, on projects in which Denison holds an ownership interest, refer to those project sections within the AIF, specifically for McClean Lake, Midwest and Waterbury Lake.

### **Drill Hole Surveying**

Drill collars are typically sited and surveyed in the field using a Differential Global Positioning System ("DGPS") to determine accurate coordinates and elevation. The drill rig azimuth and dip are aligned using a field compass (set to the appropriate magnetic declination) or a rig alignment tool. The trajectory of all drill holes is determined with a Reflex survey instrument in single shot mode, which measures the azimuth and inclination of the drill hole. Measurements are collected at approximately 50 metre intervals down the hole.

### **Downhole Radiometric Probe Surveying**

When possible, all drill holes are surveyed immediately after drilling with a downhole radiometric probe to measure natural gamma radiation. Each survey consists of either a HPL2375 single

sodium iodide (NaI) scintillation crystal tool or a 2GHF-1000 triple gamma tool (one sodium iodide crystal and two ZP1320 high flux Geiger-Mueller (“GM”) tubes) attached to a MX-Series winch with a MGX data recorder connected to a portable computer.

Downhole logging measurements are completed within the drill rods for both down and up survey runs using MSLog software provided by Mt Sopris. Logging speeds are maintained at approximately 10 metres/minute. Individual data recordings are stored separately for each run on a portable laptop computer.

Total count measurements from each survey are converted to radiometric equivalent grade  $U_3O_8$  % (“e $U_3O_8$ ”) values using conversion coefficients derived from calibration facilities at the SRC test pits located in Saskatoon, Saskatchewan. The calibration facilities allow for regular checks on both probes and probing equipment and to monitor or identify maintenance issues before field operations begin. The site consists of four mineralized holes, with isolated uranium concentrations of 1.4, 1.6, 1.6 and 0.21 metres wide with U grades varying from 0.063, 0.29, 1.25 and 4.07%, respectively. Individual probes are calibrated using the NaI crystal measurements a minimum of two times per year, normally before and after the winter and summer field seasons. Survey results are also corrected for attenuation of signal in water and for the thickness of steel pipe in the hole. GM tubes are checked for drift at the site; however, calibration factors for these probes were derived separately using direct comparisons of total count values with assay core results as high as 80%  $U_3O_8$ . The “in-situ” nature of this calibration procedure allows for a wider spectrum of predicted results than using the SRC calibration facilities.

A deposit-specific radiometric-grade correlation has been developed for the Company’s Phoenix deposit, where the gamma signature obtained from the high flux GM tubes of the triple gamma probe can be used to estimate in-situ uranium grade. The radiometric-grade correlation was developed by an independent 3<sup>rd</sup> party by comparing geochemical sample assays collected from the Phoenix deposit to their corresponding probe data. Only intervals with high core recovery were selected for the correlation process to ensure a representative comparison between the data sets. Raw gamma probe data is first converted to adjusted counts per second (cps) by correcting raw gamma counts per second for fluid absorption, casing absorption, and dead-time. Adjusted cps are then calibrated into an equivalent grade based on the correlation between the grade-thickness product of the adjusted cps and assay data from representative mineralized intercepts. A total of 50 mineralized intercepts were used to develop the radiometric-grade correlation for Phoenix.

The Company typically reports e $U_3O_8$ , derived from a calibrated downhole total gamma probe, as preliminary during its exploration programs and subsequently reports definitive assay grades following sampling and chemical analysis of the mineralized drill core.

### **Core Logging**

Denison employs suitably qualified persons to log all drill core in detail at dedicated, custom-built core logging facilities proximal to drilling operations. Routine logs completed for each drill hole include lithology, sandstone texture, paleoweathering, mineralization, alteration, structure (interval and point), geotechnical and gamma (handheld scintillometer). Where deemed necessary, additional logs may be collected to assist in constraining geophysical survey results. These logs may include magnetic susceptibility or other physical property measurements. For advanced projects where mining studies may be applicable geotechnical logs are expanded and may also include point load testing. All logging data, together with collar and survey information and a drill hole summary, are uploaded to a DHLogger database with central storage on Denison’s

server at the Saskatoon office. In addition, the drill core is photographed, both wet and dry, before it is stored at project sites either in racks or as cross-stacks. Drill core handling and sampling protocols are in accordance with industry best practices.

## **Core Sampling, Sample Preparation and Assaying**

### Assay Samples

Denison has routinely used Saskatchewan Research Council (“**SRC**”) Geoanalytical Laboratories (“**SRC Geoanalytical**”) in Saskatoon, Saskatchewan for their geochemical analyses. Check assays are sent to SRC’s Delayed Neutron Counting laboratory (“**SRC DNC**”). SRC Geoanalytical’s management system operates in accordance with ISO/IEC 17025:2017 (CAN-P-4E), General Requirements for the Competence of Mineral Testing and Calibration Laboratories, is compliant with CAN-P-1579 Guidelines for Mineral Analysis Testing Laboratories and is also accredited ISO/IEC 17025:2005 for the analysis of U<sub>3</sub>O<sub>8</sub>. SRC DNC follows ISO/IES17025:2017. SRC and its affiliated laboratories are independent of Denison.

Denison submits drill core samples for chemical U<sub>3</sub>O<sub>8</sub> assay for all mineralized intervals, where core recovery permits. Mineralized intervals are identified by handheld scintillometer and confirmed by downhole gamma probe logs. All mineralized core is broken into approximately 10-centimetre pieces and measured with a handheld scintillometer (RS-120 or RS-125) by removing each piece of drill core from the ambient background, noting the most pertinent reproducible result in counts per second (“**cps**”), and carefully returning it to its correct place in the core box. Any core registering over 500 cps is marked for sampling, typically over 50-centimetre intervals. A threshold of 300 cps has been used at Wheeler River’s Gryphon deposit since the beginning of 2017. Additional non-mineralized ‘shoulder’ samples are marked over 50-centimetre intervals to flank both ends of the mineralized intervals. In areas of strong mineralization, more than one sample on either end is sometimes required. All core samples are split in half with a hand splitter according to the sample intervals marked on the core. One-half of the core is returned to the core box for future reference, and the other half is tagged and sealed in a plastic bag. Bags containing mineralized samples are sealed for shipping in metal or plastic pails, depending on the radioactivity level.

Because the mineralized drill cores are classified as hazardous materials and are regulated under requirements governing the transport of dangerous goods, Denison staff have been trained in the proper handling and transport of the cores and deliver them from the core facility directly to the laboratory without outside contact.

The assay sample preparation and analytical procedures are as follows:

- Drill core samples are received by the analytical laboratory from Denison in sealed five-gallon plastic or metal pails. Each sample is contained in a sealed plastic bag with a sample tag. A packing slip is enclosed that contains instructions and a sample number list. Samples are verified against the packing slip. Any extra samples or missing samples are noted and Denison is informed.
- Samples are sorted and processed according to lithology (sandstone or basement) and level of radioactivity.
- Sample preparation includes drying, jaw crushing to 60% passing -2 millimetres and pulverizing to 90% passing -106 microns.

- The resultant pulp is split and digested using a two-acid partial digest (HNO<sub>3</sub>:HCl) and a three-acid 'total' digest (HF: HNO<sub>3</sub>:HClO<sub>4</sub>) and the respective solutions analyzed for multi-elements, including uranium, using ICP-OES (SRC analytical method ICP1). Boron values are obtained through NaO<sub>2</sub>/NaCO<sub>3</sub> fusion followed by ICP-OES.
- When uranium partial values, as obtained above, are ≥1,000 ppm, sample pulps are re-assayed for U<sub>3</sub>O<sub>8</sub> using SRC's ISO/IEC 17025:2005 accredited method for the determination of U<sub>3</sub>O<sub>8</sub> wt%. A split of the sample pulp is digested using aqua-regia (HCl:HNO<sub>3</sub> in the ratio 3:1), and the solution analyzed for U<sub>3</sub>O<sub>8</sub> wt% using ICP-OES.

### Bulk Dry Density Sampling

Samples are routinely collected from mineralized intersections for bulk dry density determination as required for mineral resource estimation. Density samples are typically collected at a frequency of one density sample per 10 assay samples, also ensuring the density samples are representative of the uranium grade range and the different domains of the deposit. The density samples comprise half-split core over 10-centimeter intervals, and for each sample, the depth, rock type and scintillometer reading is recorded. Density samples are sent to SRC for analysis, along with the mineralized core samples for assay. At SRC, the density samples are first weighed as received and then submerged in de-ionized water and re-weighed. The samples are then dried until a constant weight is obtained. The sample is then coated with an impermeable layer of wax and weighed again while submersed in de-ionized water. Weights are entered into a database and the bulk density of each sample is calculated. Water temperature at the time of weighing was also recorded and used in the bulk density calculation. Following bulk density determination, the samples are sent for uranium assay using SRC's ISO/IEC 17025:2005 accredited method for the determination of U<sub>3</sub>O<sub>8</sub> wt% in order to ensure a direct correlation can be made between density and assay values.

### Permeameter Analysis

Denison has performed onsite permeameter analyses since 2019 using a portable gas probe permeameter where the permeability of the rock matrix is measured from the pressure decay rate of nitrogen gas. Prior to 2021, QA/QC checks were performed by the University of Kyoto, Japan using a pressure decay permeameter and a TEMCO model MP-401 steady-flow gas permeameter. Results were consistent between the datasets. Samples were also sent to SNC Lavalin Geoscience and Materials laboratory in Saskatoon for permeability analysis using water, the results of which were within one order of magnitude of pressure decay tests.

Since 2021, Denison has introduced QA tests before every set of permeameter tests based on the laboratory tests performed on previous years. A blank metal plate is measured as a leak check, and two reference materials are measured to ensure accuracy. The probe's lower permeability detection limit is 10 -13 m/s.

### Exploration Samples

Three other types of drill core samples are collected during routine exploration, the results of which are used to prioritize drill holes for follow-up exploration or determine geochemical and/or alteration vectors toward mineralization, as follows:

1. Composite geochemical samples are collected over approximately 10-metre intervals in the upper Athabasca sandstone and in fresh lithologies beneath the unconformity

(basement) and over 5-metre intervals in the basal sandstone and altered basement units. The samples consist of 1 to 2 centimetre thick disks of core collected from the top or bottom of each row of core in the box over the specified interval. Care is taken not to cross lithological contacts or stratigraphic boundaries. These samples are submitted to SRC for sample preparation and multi-element analysis. The same sample preparation procedures are used as described above for U<sub>3</sub>O<sub>8</sub> assay samples. The pulps are analyzed using the ICPMS Exploration Package, which includes a total digest (HF:HNO<sub>3</sub>:HClO<sub>4</sub>) and partial digest (HNO<sub>3</sub>:HCl) followed by ICP-MS analysis. Boron values are obtained through NaO<sub>2</sub>/NaCO<sub>3</sub> fusion followed by ICP-OES.

2. Representative/systematic core disks (one to five centimetres in width) are collected at regular 5 to 10-metre intervals throughout the entire length of core until basement lithologies become unaltered. These samples are analyzed for clay minerals using reflectance spectroscopy. Samples for reflectance clay analyses are analyzed by Denison using an ArcSpectro FT-NIR ROCKET spectrometer and sent to AusSpec International Ltd. for interpretation.
3. Select spot samples are collected from significant geological features (i.e. radiometric anomalies, structure, alteration etc.). Core disks ranging from 1 to 2 centimetres thick are collected for reflectance spectroscopy, while split core samples are collected for geochemical analysis. The same reflectance spectrometry or geochemical procedures as described above are used.

These sampling types and approaches are typical of uranium exploration and definition drilling programs in the Athabasca Basin.

### Data Handling

After the analyses are completed, analytical data are securely sent using electronic transmission of the results by SRC to Denison. The electronic results are secured using WINZIP encryption and password protection. These results are provided as a series of Adobe PDF files containing the official analytical results ("assay certificates") and a Microsoft Excel spreadsheet file containing only the analytical results. Analytical data received from the lab is imported directly into Denison's DH Logger database. The data is subject to validation using triggers built into the database to identify blank or standard assays that fall outside the accepted limits that require re-analysis. Field duplicates are validated using control charts. The laboratory is immediately notified of any problematic samples or batches, which are re-analyzed. The lab reports assay values that fall below the method detection limit ("MDL") as 'less than' values (<MDL). These values are automatically replaced with a value of half the MDL by the database during import. The database is backed up on- and off-site every day.

### **QAQC**

SRC has an internal QAQC program dedicated to the active evaluation and continual improvement in the internal quality management system. The laboratory is accredited by the Standards Council of Canada as an ISO/IEC 17025 Laboratory for Mineral Analysis Testing and is also accredited ISO/IEC 17025:2005 for the analysis of U<sub>3</sub>O<sub>8</sub>. The laboratory is licensed by the CNSC for possession, transfer, import, export, use, and storage of designated nuclear substances by CNSC Licence Number 01784-5-24.7. As such, the laboratory is closely monitored and inspected by the CNSC for compliance. All analyses are conducted by SRC, which has specialized in the field of uranium research and analysis for over 30 years. SRC is an independent

laboratory, and no associate, employee, officer, or director of Denison is, or ever has been, involved in any aspect of sample preparation or analysis on samples. SRC uses a Laboratory Management System (“LMS”) for Quality Assurance. The LMS operates in accordance with ISO/IEC 17025:2005 (CAN-P-4E) “General Requirements for the Competence of Mineral Testing and Calibration Laboratories” and is also compliant with CAN-P-1579 “Guidelines for Mineral Analysis Testing Laboratories”. The laboratory continues to participate in proficiency testing programs organized by CANMET (CCRMP/PTP-MAL).

SRC routinely inserts standard reference materials and blanks into batches of the Company’s samples as an internal check on accuracy and contamination. Quality control samples (reference materials, blanks, and duplicates) are included with each analytical run, based on the rack sizes associated with the method. Before the results leave the laboratory, the standards, blanks, and split replicates are checked for accuracy and issued, provided the senior scientist is fully satisfied. If, for any reason, there is a failure in an analysis, the sub-group affected will be re-analyzed and checked again. A Corrective Action Report will be issued, and the problem is investigated fully to ensure that any measures to prevent the re-occurrence can and will be taken. All human and analytical errors are, where possible, eliminated. If the laboratory suspects any bias, the samples are re-analyzed, and corrective measures are taken.

Denison has developed several QAQC procedures and protocols for all exploration projects to independently monitor laboratory performance, which includes the analysis of uranium standards, blanks, field duplicates and exploration standards, as follows:

Uranium Standards - Due to the radioactive nature of the standard material, insertion of the standard materials is preferable at SRC instead of in the field. During sample processing, the appropriate standard grade is determined, and an aliquot of the appropriate standard is inserted into the analytical stream for each batch of materials assayed. Uranium standards are typically inserted at a minimum rate of 1 in every 40 samples. For the Wheeler River project up until the end of 2018, Denison used standards provided by Joint Venture partner Cameco for uranium assays. Six Cameco uranium assay standards were prepared for use in monitoring the accuracy of uranium assays received from the laboratory. For Wheeler River from 2019 and onward, and for other Denison projects, a suitable matrix-matched Certified Reference Material (“CRM”) is used as a standard.

Blanks - Denison employs a lithological blank composed of quartzite to monitor the potential for contamination during sampling, processing, and analysis. The selected blank consists of a material that contains lower contents of  $U_3O_8$  than the sample material but is still above the detection limit of the analytical process. Due to the sorting of the samples submitted for assay by SRC based on radioactivity, the blanks employed must be inserted by SRC after this sorting takes place in order to ensure that these materials are ubiquitous throughout the range of analytical grades. In effect, if the individual geologists were to submit these samples anonymously, they would invariably be relegated to the minimum radioactive grade level, preventing their inclusion in the higher radioactive grade analyses performed by SRC. Blanks are typically inserted at a minimum rate of 1 in every 40 samples. For the Wheeler River project up until the end of 2018, Denison used blanks provided by Joint Venture partner Cameco. For Wheeler River from 2019 and onward, and for other Denison projects, another suitable blank material is used, as provided by SRC.

Field Duplicates - The Company inserts duplicate samples in the sample stream as a check on the precision of SRC. Core duplicates are prepared by collecting a second sample of the same interval, through splitting the original sample, or other similar techniques, and are submitted as

an independent sample. Duplicates are typically submitted at a minimum rate of one per 25 samples. The collection may be further tailored to reflect field variation in specific rock types or horizons.

Exploration Standards - Denison has prepared three in-house ‘exploration standards’ to independently monitor laboratory performance during the processing of routine drill core exploration samples. These standards aim to test laboratory accuracy and precision for a variety of trace metals at low levels, as required for Athabasca uranium exploration.

Assay Checks - In addition to the QAQC described above, up until the end of 2018, Denison sent one in every 25  $U_3O_8$  assay samples to SRC’s Delayed Neutron Counting laboratory, a separate umpire facility located at SRC in Saskatoon, to compare the uranium values using two different methods, by two separate laboratories. After 2019, assay samples were sent to the SRC’s X-ray fluorescence (“XRF”) lab for umpire analyses. All radioactive samples are monitored and recorded as per CNSC licence 01784-5-24.7. Furthermore, downhole radiometric probe results provide  $eU_3O_8$  data, used by the Company for comparisons with SRC  $U_3O_8$  results.

### **Data Verification**

Denison engages with independent consultants for estimation of mineral resources on its mineral properties, in accordance with CIM Standards and NI 43-101, as well as other studies, including the 2018 PFS and ISR field testing and engineering studies. In this regard, the independent consultants undertake rigorous data verification, including, but not limited to, Denison’s field procedures, databases and assay results.

Prior to public disclosure of drilling results, including preliminary radiometric ( $eU_3O_8$ ) and chemical assay grades ( $U_3O_8$ ), the results are subject to data verification by Qualified Persons employed by Denison. This includes checks of 10 to 20% of the results (typically as composited intervals) against non-composited  $eU_3O_8$  determinations and laboratory assay certificates.

## **Denison’s Operations**

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### **McClellan Lake Mill & Cigar Lake Toll Milling**

The MLJV owns a state-of-the-art uranium processing facility located on the eastern edge of the Athabasca Basin in northern Saskatchewan, approximately 750 kilometres north of Saskatoon. Orano Canada is the operator/manager of the facility.

The McClellan Lake mill is specially designed and constructed to process high grade uranium ores in a safe and environmentally responsible manner. The mill uses sulphuric acid and hydrogen peroxide leaching and a solvent extraction recovery process to extract and recover the uranium product from the ore. In addition to the mill facility, other infrastructure on the site includes a sulphuric acid plant, a ferric sulphate plant, an oxygen plant, an electricity transmission line tied into the provincial power grid, a 14 megawatt back-up diesel power plant, warehouses, shops, offices and living accommodations for site personnel.

In 2016, an expansion of the mill was completed and an increase to the licensed capacity of the mill was approved – resulting in an increase to the licensed production capacity of the mill to 24 million pounds  $U_3O_8$  per year. This increased licensed capacity allowed for the processing of 100% of ore production from the Cigar Lake mine, up to 18 million pounds  $U_3O_8$  per year, and provides the flexibility for the mill to process ore from other sources in the future.

## Operations

The McClean Lake mill began production of uranium concentrates in 1999, with the first ore fed to the mill on June 22, 1999 and commercial production achieved on November 1, 1999. The mill operated until the end of June 2010, producing approximately 50 million pounds U<sub>3</sub>O<sub>8</sub>, when it was placed on stand-by due to a lack of ore.

In 2011, the CLJV and the MLJV agreed to a new toll milling arrangement, pursuant to which the McClean Lake operation is to process and package 100% of the uranium produced from the Cigar Lake mine, owned by the CLJV and operated by Cameco.

In 2014, the McClean Lake mill re-commenced operations with the delivery of ore shipments from the Cigar Lake Mine. In 2014, the mill processed over 456,800 pounds of U<sub>3</sub>O<sub>8</sub> with a 97.5% recovery rate. Mill feed consisted of a blend of Cigar Lake ores and stockpiled Sue B and McClean Lake North ores (mined via SABRE). In 2015, production ramped up and the mill produced approximately 11.3 million pounds of U<sub>3</sub>O<sub>8</sub> with a 98.9% recovery rate. In 2016, the mill produced 17.3 million pounds of U<sub>3</sub>O<sub>8</sub> with a 99% recovery, and mill feed was all Cigar Lake ore. From 2017 to 2019, the mill has produced just over 18.0 million pounds of U<sub>3</sub>O<sub>8</sub> per year, processing 100% mill feed from Cigar Lake with recoveries at approximately 99%.

In response to the COVID-19 pandemic, the CLJV, operated by Cameco, temporarily suspended production at the Cigar Lake mine from the end of March 2020 until September 2020, and then again from the end of December 2020 until April 2021. Coordinated therewith, the MLJV suspended operations at the McClean Mill for the duration of the CLJV's suspended production.

The table below shows the operating statistics for McClean Lake over the last five years.

<b>McClean Lake Operations</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>
Ore Milled (thousand tonnes)	51,866	54,301	35,409	27,773	45,456
MLJV Production (thousand pounds U <sub>3</sub> O <sub>8</sub> )	-	0	176	-	-
Denison's share MLJV Production (thousand pounds U <sub>3</sub> O <sub>8</sub> )	-	0	40	-	-
Toll Mill Production (thousand pounds U <sub>3</sub> O <sub>8</sub> )	15,098	18,010	12,335	10,069	18,012

For information pertaining to taxes and royalties, see “Government Regulation – Saskatchewan Royalties” and “Government Regulation – Canadian Income and Other Taxes.”

## Mill Licence

The McClean Lake site is operated under various permits, licences, leases and claims granted and renewed from time to time, all of which are currently in good standing. In 2016, the CNSC authorized an increase in the mill's licensed annual production from 13 million pounds U<sub>3</sub>O<sub>8</sub> to 24.0 million pounds U<sub>3</sub>O<sub>8</sub>, to accommodate an annual production rate of 18.0 million pounds U<sub>3</sub>O<sub>8</sub> from the CLJV. All costs for the expansion of the McClean Lake mill were paid by the CLJV.

In 2017, several key regulatory achievements were completed for McClean Lake: (a) the issuance by the CNSC of a 10 year licence for operation of both McClean and Midwest projects; (b) the receipt of renewal of provincial approvals to operate for a 6 year term, expiring on October 31, 2023; and (c) CNSC approval to expand the existing tailings facility up to an elevation of 448 metres above sea level (“**m ASL**”). Historically CNSC issued Mine Operating Licences were granted for a 5-year term, but in 2009 the McClean Lake operations received an 8 year term and in 2017 was granted a further 10 year term: UMOL-MINEMILL-McLEAN.00/2017 (the “**Mine Operating Licence**”) which is valid for the period July 1, 2017 to June 30, 2027. In addition to

renewal of all previously licensed activities, the current licence authorizes mining of the McClean North deposits using hydraulic borehole mining methods (SABRE) and includes the care and maintenance activities at the Midwest site.

In January 2022, the CNSC approved an amendment to the Mine Operating Licence, to allow for TMF Expansion phase 2 (see below), along with the associated revised PDP and cost estimate for the McClean Lake and Midwest Operations.

### Tailings Disposal

The disposal of mill tailings in an environmentally acceptable manner has led to advances in the design and construction of new tailings management facilities. In the McClean tailings management facility (“**TMF**”), tailings are deposited sub-aqueously from a barge. This procedure minimizes tailings segregation, reduces concerns of freezing and dust generation, and controls radiation and radon emissions from the pond. This facility has been designed to receive tailings from processing high grade Midwest and Cigar Lake ores in addition to tailings from the McClean Lake deposits.

Under the regulatory approved “**TMF Optimization**” project, the tailings capacity of the TMF was increased in two stages during the period 2013 to 2018. The TMF Optimization project involved the sloping of the TMF walls and the placement of a bentonite liner to increase the TMF capacity up to an elevation of 443 m ASL.

A second project, called “**TMF Expansion**”, entails adding additional tailings capacity over and above that created through the TMF Optimization project. The first phase of the project entails increasing the consolidated tailings elevation of the TMF up to 448 m ASL. On April 19, 2017, the MLJV received regulatory approvals for the TMF Expansion project. Following such receipt, construction activities were initiated in 2018 with re-sloping of the pit walls, installation of a new tailings pipe bench, decommissioning of 12 dewatering wells and the relocation of the contaminated landfill from the TMF to the Sue C site.

In 2019, phase one construction activities continued and work on placing additional bentonite liner commenced. By the end of September 2019, the first phase of the TMF Expansion was completed with the bentonite liner reaching a level of ~447.4 m ASL. The regulatory costs associated with the TMF Expansion Phase 1 work was funded by the MLJV while the CLJV funded predominantly all the construction costs.

With the first phase of the TMF Expansion, the TMF was expected to reach its capacity in 2027. In January 2022, the CNSC approved the amendment to the Mine Operating Licence for the McClean Lake operation to further extend the capacity and life of the TMF, with plans for the second phase of the project to raise the TMF capacity to 468 m ASL.

The TMF Optimization and TMF Expansion projects allow for the continued use of an existing disturbed area for increased tailings capacity while avoiding impacts to any new environment.

### **Cigar Lake Toll Milling – Ecora Transaction**

Pursuant to the Ecora Transaction in February 2017, certain of Denison’s interests in the Cigar Lake toll milling proceeds have been sold to Ecora and its subsidiary Centaurus Royalties Ltd. (“**Centaurus**”) for aggregate gross proceeds to Denison of \$43,500,000. The Ecora Transaction is comprised of the following elements: (1) a 13 year limited recourse lending arrangement

involving a loan from Ecora to 9373721 Canada Inc. (“**SPV**”) (the “**Ecora Loan**”) and a further loan from SPV to DMI (the “**SPV Loan**”) each for \$40,800,000 (collectively, the “**Lending Arrangement**”); and (2) \$2,700,000 in proceeds from the sale, to Centaurus, of a stream equal to Denison’s 22.5% share of proceeds from the toll milling of Cigar Lake ore by the McClean Lake mill for specified Cigar Lake toll milling throughput in excess of 215 million pounds U<sub>3</sub>O<sub>8</sub> after July 1, 2016 (the “**Stream Arrangement**”).

Additional details of the Ecora Transaction are as follows:

- No Warranty of the Future Rate of Production - No warranty is provided by Denison (including DMI and SPV) to Ecora (including Centaurus), under the terms of the Lending Arrangement or the Stream Arrangement, regarding: the future rate of production at the Cigar Lake mine and / or the McClean Lake mill; or the amount or collectability of proceeds to be received by the MLJV in respect of toll milling of Cigar Lake ore.
- Ecora Loan Details - The Ecora Loan will accrue interest at a rate of 10% per annum and does not have a predetermined principal repayment schedule. The Ecora Loan is secured by a first priority interest in the assets of SPV which will essentially consist of the SPV Loan to DMI.
- SPV Loan Details - The SPV Loan will accrue interest at a rate of approximately 10% per annum and does not have a predetermined principal repayment schedule. The SPV Loan is limited in its recourse against DMI such that it is generally repayable only to the extent of Denison’s share of the toll milling revenues earned by the MLJV from the processing of the first 215 million pounds of U<sub>3</sub>O<sub>8</sub> from Cigar Lake ore on or after July 1, 2016. Denison will guarantee the limited recourse loan repayments and will grant a second ranking pledge of its share of DMI to secure performance by DMI of its obligations to pay the SPV Loan. The share pledge is second ranking to Denison’s existing pledge of its shares of DMI to the Bank of Nova Scotia under the terms of the Credit Facility.

As discussed above, the McClean Lake mill had temporary suspensions of operations in connection with the COVID-19 pandemic. As a result of the Ecora Transaction, Denison has sold the toll milling revenue to be earned from the processing of the Cigar Lake ore and the reduction toll milling revenue as a result of the suspensions of operations has no economic impact on Denison due to the limited recourse nature of the SPV Loan. The suspensions resulted in a non-cash decrease in revenue recognized by Denison, limited to a reduction in the drawdown of the Company’s deferred revenue balance.

### **Surface Access Borehole Resource Extraction (SABRE) Mining Program**

The SABRE program is focused on developing a viable alternate mining method combining surface drilling and borehole mining technology. Benefits of the method may include a reduced time to production, reduced or deferred capital costs, as well as minimized safety and environmental risks.

Hydraulic borehole mining is a technique used to extract materials through a small access borehole, typically less than one-half of a metre in diameter, resulting in a very small disturbance to the surface. A mining tool containing a high-pressure water jet nozzle is lowered through the access borehole in the overburden and sandstone to the mineralized horizon. The high-pressure water jet is used to cut or erode the mineral-bearing ore and to create a cavity up to four metres in diameter. The cuttings are transported to surface in a slurry form and sent through a series of

screens and settling ponds to separate the ore from the jetting water. Jetting water is filtered further and re-used in the process. Each mined out cavity is backfilled after completion with a cemented mixture in the mineralized horizon.

Between 2007 and 2012, approximately 2,100 tonnes of ore was recovered through various SABRE test mining programs, a portion of which has been fed to the mill between 2007 and 2014. After the completion of several significant milestones in 2012 and 2013, a decision was made in late 2013 to suspend the SABRE program in 2014 in response to the low uranium price environment. In 2015, SABRE activities were limited to patent applications and upgrading down-hole sonar capabilities with the objective of improving surveying of cavity dimensions and mining performance. In 2016, an expanded program was evaluated for SABRE including the re-tooling of the program to allow for larger volumes and jetting pressures designed to increase the production rate. In addition, the purchase, installation and testing of a new solid / liquid separation system was completed to assess the improvement in recovery of small uranium particles from the production slurry created during the SABRE mining process.

In 2017 and 2018, development of the re-tooled SABRE program continued with engineering of larger diameter mining pipes, procurement of high-pressure pumps and a tendering process to contract drilling equipment and labour for a further mining test. In addition, in 2018 four access holes were drilled and cased from surface to just above the McClean North orebody elevation. At the time, it was expected that these access holes would be used in 2020 as part of planned mining tests using the re-tooled equipment. In 2019, engineering and procurement activities for the re-tooled mining equipment continued and various equipment acceptance testing activities were completed. Due in part to COVID-19 pandemic related operational disruptions, work at SABRE in 2020 focused on further de-risking various elements of the SABRE equipment and the SABRE mining process.

In 2021, the MLJV completed the SABRE test mining program at McClean North, using the access holes drilled in 2018. The SABRE field test ran safely from May to September 2021 with four cavities mined and the recovery of approximately 1,500 tonnes of high-value ore ranging in grade from 4% to 11%  $U_3O_8$ . The program was concluded successfully with no safety, environmental or radiological incidents. Importantly, key operating objectives associated with the test program – including targets for cavity diameter, rates of recovery, and mine production rates – were all achieved during the field test.

The majority of the ore recovered from the 2021 test mining program was processed at the McClean Lake mill in late 2021. Denison's share of production was 40,000 pounds of  $U_3O_8$ .

In January 2024, Denison and Orano Canada announced that the MLJV has approved a restart of uranium mining operations using the joint venture's patented SABRE mining method. Mining is planned to commence at the McClean North deposit in 2025, with 2024 activities expected to focus on preparations necessary to ready the existing SABRE mining site and equipment for continuous commercial operations, as well as the installation of pilot holes for the first mining cavities planned for excavation.

## Denison Legacy Mines

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Denison formed its Denison Environmental Services division ("**DES**") in 1997 to provide mine decommissioning and mine care and maintenance services to industry and government, as well as to manage Denison's post mine closure environmental obligations on its landholdings in the Elliot Lake region of Ontario. In 2019, driven by a new strategic vision for Denison as an

integrated mining company with expertise across the full mining life cycle, Denison discontinued the use of the DES name. In 2023, Denison ceased providing third-party care and maintenance services. See “Environmental, Health, Safety and Sustainability – Reclamation and Decommissioning Plans” for further details.

## **Environmental, Health, Safety and Sustainability Matters**

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The Company has an Environmental, Health, Safety & Sustainability Policy (the “**EHSS Policy**”) that affirms Denison’s commitment to prioritize the safety of its workers, its contractors, its community and the environment as well as the principles of sustainable development. Under the EHSS Policy, the Company has committed to run its operations in compliance with applicable legislation, in a manner that minimizes the impact on local ecosystems. The EHSS Policy mandates the use of regular monitoring programs to identify risks to the environment, to the public, Indigenous Rights holders, and to Denison’s employees and contractors and to ensure compliance with regulatory requirements. The EHSS Policy also sets out Denison’s requirement to train its employees on environmental, health and safety compliance and sustainability best practices.

The EHSS Policy requires regular reporting to the Board regarding the Company’s compliance and the results of the Company’s monitoring. To assist the Board with its responsibilities in overseeing environmental, health and safety matters, the Board has established the Environment, Health, Safety & Sustainability Committee, which works with management to discuss matters affecting the environment, health and safety and its stakeholders and reporting and making recommendations to the Board.

### **Indigenous Peoples Policy and Reconciliation Action Plan**

In 2021, Denison announced that its Board of Directors approved the adoption of an Indigenous Peoples Policy (the “**IPP**”), which reflects the Company’s recognition of the important role of Canadian business in the process of reconciliation with Indigenous peoples in Canada and outlines the Company’s commitment to take action towards advancing reconciliation.

The IPP was developed based on Denison’s experiences with, as well as feedback and guidance received from, Indigenous communities with whom the Company is actively engaged. This approach was designed to ensure the IPP appropriately captures a mutual vision for reconciliation.

Denison’s IPP reflects the Company’s belief that reconciliation is advanced through collaboration with Indigenous peoples and communities to build long-lasting, respectful, trusting and mutually beneficial relationships while aspiring to avoid adverse impacts of Denison’s activities and operations.

The IPP identifies 5 key areas of action that will support the ongoing development of a continuously evolving Reconciliation Action Plan: Engagement; Empowerment; Environment; Employment; and Education. Through the Reconciliation Action Plan, Denison is striving to interweave the principles of reconciliation throughout all areas of the company’s operations. In expressing the Company’s intentions in the IPP, Denison carefully considered the standards and principles articulated by The United Nations Declaration on the Rights of Indigenous Peoples and Call to Action 92 (Business and Reconciliation) from Canada’s Truth and Reconciliation Commission.

As of 2023, Denison has made notable progress in relation to the key areas identified in its Reconciliation Action Plan, including the following highlights:

**Engagement**

Denison’s engagement practices with northern Saskatchewan Indigenous communities continue to evolve and reflect the mutually agreed frameworks for information sharing and project permitting set out in each of the ERFN Exploration Agreement, KML Exploration Agreement and YNLRO Exploration Agreement. Key outcomes of the agreements for the ERFN, KML, the Athabasca Nations, and the Athabasca Communities are predictable information-sharing processes, in which matters of importance can be shared in a respectful and solution-oriented manner.

In 2023, Denison undertook comprehensive site tours of the Phoenix site at Wheeler River for almost 50 representatives of local rights bearing communities and other interested parties.

Denison’s engagement practices have been identified as ‘best in class’ by the Province of Saskatchewan.

**Empowerment**

In Saskatchewan, Denison has strong procurement processes in place that ensure decision-making includes consideration of Indigenous-owned businesses. In 2023, Denison continued to expend a significant portion of Saskatchewan evaluation and exploration expenditures with Indigenous or Northern Saskatchewan vendors.

The impact of Denison’s empowerment of, and negotiations with, northern Saskatchewan Indigenous communities goes beyond Denison’s operations, with the exploration agreements acting as a catalyst for the communities to sign agreements with other companies. Denison has also entered into funding agreements that support the full and meaningful participation of Indigenous groups to negotiate Impact Benefit type agreements for Wheeler River.

In 2023, Denison entered into the Shared Prosperity Agreement with ERFN, considered to be a landmark agreement by ERFN. The SPA provides a framework for matters considered important to ERFN, including meaningful benefits sharing, environmental protection and employment and training opportunities. Through this process, Denison has also obtained ERFN’s consent to the advancement of Wheeler River. Denison continues to actively negotiate Impact Benefit type agreements and similar arrangements with additional groups that have a meaningful connection to the Wheeler River project.

**Environment**

Denison continues to maintain high standards of environmental compliance across all of its operations and ensures transparency with local communities.

Denison has entered into funding agreements with each of ERFN, the KML, the YNLRO (with and for the Athabasca Nations and Athabasca Communities), and the Métis Nation – Saskatchewan, to support significantly enhanced participation in the environmental assessment process for the Wheeler River project.

**Employment**

In Saskatchewan, Denison has developed hiring practices and processes that provide early notice to Indigenous communities as part of Denison’s commitment to employment of Indigenous People.

In 2023, 80% of operations staff for the FFT conducted at Phoenix on the Wheeler River project self-identified as Indigenous.

### **Education**

Denison has created an environment which encourages participation, and provides supporting resources, with respect to Indigenous educational initiatives.

Over the course of the year, Denison has created opportunities for staff to undergo immersive learning in partnership with Indigenous communities, such as the Pinehouse Polar Bear plunge, Pinehouse Elders Gathering, Back to Batoche, Treaty Days at Patuanak with English River First Nation, and others. In June and September 2023, Denison provided curated resources, focused on learning about and reflecting on the significance of the National Day for Truth and Reconciliation.

### *Early Commitments:*

To formalize Denison's early commitment to work together, Memoranda of Understanding were signed with several groups in 2018. More recently, various funding agreements have been reached with Indigenous communities and organizations to provide capacity for Interested Parties to actively participate in the environmental assessment process. Through these engagement commitments and processes, Denison is able to identify key concerns from Interested Parties and develop plans to respond to and/or to resolve them.

### *Exploration Agreements:*

A foundational element of Denison's Indigenous relations strategy is the execution of the ERFN Exploration Agreement, KML Exploration Agreement and YNLRO Exploration Agreement. These agreements are related to Denison's exploration and evaluation activities that occur within the traditional territory and/or designated land and occupancy area of each group. Denison was the first corporate party to enter into agreements of this kind with each of these parties, and the agreements are considered to be first-of-a-kind in Saskatchewan. At a high-level, the agreements establish a framework for a cooperative and mutually beneficial relationship between the parties, which respects and is informed by the rights and interests of ERFN, KML and YNLRO, the Athabasca Nations and Athabasca Communities, respectively, while supporting Denison's exploration and evaluation activities in the applicable areas. The exploration agreements each provide a basis for predictable information-sharing and permitting, with an emphasis on environmental protection and monitoring, support for community development initiatives and the sharing of benefits. These agreements demonstrate Denison's desire to conduct and advance its exploration activities in a progressive and sustainable manner that advances reconciliation with Indigenous peoples and provides economic opportunities and other benefits to the communities near where it operates in an authentic, cooperative and respectful way.

### *Impact-Benefit Type Agreements:*

Denison has been working towards the finalization of impact-benefit type agreements with certain Indigenous groups to further formalize support for the planned activities at site. These agreements focus on a number of areas, such as financial arrangements, business and procurement, environmental considerations, future regulatory processes, and employment considerations.

The signing of the SPA with ERFN follows years of active engagement, including a four-month-long ERFN-led community consultation process ahead of the ratification vote, and represents a

significant milestone in the history of both Denison's relationship with ERFN and the Wheeler River project.

The SPA acknowledges that Wheeler River is located within ERFN's Ancestral Lands and provides Denison with ERFN's consent to advance Wheeler River. Additionally, the SPA outlines a shared recognition that ERFN is the Knowledge Keeper of the culture, ways, customs, and values of ERFN in relation to the environment and its Members and reflects ERFN's desire to prioritize sustainability. Amongst other key commitments, the SPA provides ERFN and its Members with (i) an important role in environmental monitoring and management, and (ii) benefits from community investment, business opportunities, employment and training opportunities, and financial compensation. Overall, the SPA describes a mutual commitment to maintain an open, respectful, and cooperative relationship between Denison and ERFN to ensure mutual prosperity as the development and operation of Wheeler River progresses.

### Operational Performance

Safety and environmental incidents are tracked and reported quarterly to the Company's Environment, Health, Safety and Sustainability Committee.

#### *Evaluation and Exploration*

In 2023, Denison's project evaluation and exploration groups (and its contractors engaged to support those teams) had zero lost time injuries, zero recordable medical aids and 16 first aid incidents. There were 5 equipment/property damage/motor vehicle incidents in the year. There were 2 reportable environmental incidents; where applicable, required remediation activities have been completed and no environmental impact of such incidents has been detected. There were no issues of environmental non-compliance by the evaluation and exploration groups in 2023.

#### *Closed Mines*

The Closed Mines group has continued its excellent safety performance and, as at December 31, 2023, the team had worked a total of 895,389 cumulative hours without a lost time injury, representing over 14 years of continuous service without a lost time injury. There was 1 recordable medical incident, 4 first aid incidents and 6 equipment/property damage/motor vehicle incidents in the year. There were no environmental incidents nor issues of environmental non-compliance by the Closed Mines group in 2023.

### Reclamation and Decommissioning Plans

#### *Elliot Lake*

Denison's uranium mine at Elliot Lake, Ontario, which started operations in 1957, was permanently closed upon completion of deliveries of U<sub>3</sub>O<sub>8</sub> to Ontario Hydro in May 1992. During its 35 years of continuous operation, the facility produced 147 million pounds of U<sub>3</sub>O<sub>8</sub> in concentrates from the milling of 70 million tons of ore. By 1998, all significant capital reclamation activities at Denison's two closed Elliot Lake mines had been completed and, for the most part, decommissioning has progressed to the long-term monitoring phase (see "Government Regulation – Canadian Uranium Industry").

During 2023, the water treatment plants operated as planned and all environmental targets were met. Monitoring and other remediation related expenses were \$1,017,000 for the year.

Reclamation expenses for 2024 are budgeted to be \$1,097,000. All expenditures are funded from the Reclamation Trust described below. It is estimated that sufficient funds are in the Reclamation Trust to meet all monitoring costs through 2029.

All activities and monitoring results are reviewed regularly by the CNSC and the Elliot Lake Joint Regulatory Group, which consists of federal and provincial regulators. Pursuant to a Reclamation Funding Agreement, effective June 30, 1994, with the Governments of Canada and Ontario, Denison has established a Reclamation Trust from which all spending on its Elliot Lake reclamation activities is funded. When the Reclamation Trust was first established in 1994, Denison was required to deposit 90% of its cash receipts after deducting permitted expenses, as defined in such agreement, into the Reclamation Trust. In 1997, the Governments of Canada and Ontario agreed to suspend the 90% funding requirement provided Denison maintained four years of cash requirements in the Reclamation Trust. Early in 1999, the Governments of Canada and Ontario agreed to further amend the Reclamation Funding Agreement, effective when Denison received an amended site decommissioning licence, which was obtained on April 22, 1999. Pursuant to that amendment, Denison is required to maintain sufficient funds in the Reclamation Trust to meet six years of cash requirements.

The decommissioned Denison mine site contains two flooded tailings management areas (Denison TMA 1 and Denison TMA 2) and two effluent treatment plants (“ETP”). Water cover is used to inhibit oxidation and acidification of the tailings and reduce gamma and radon exposure. Pond water, which passively flows to the ETP when levels are high enough, is treated to remove radium-226 at the ETPs prior to being discharged into the watershed. In 2023, Denison TMA-1 ETP treated 759 megalitres (“ML”) of water and Denison TMA-2 ETP treated 224 ML of water.

The Stanrock mine site tailings management area has a vegetated cover. Surface water runoff and seepage are collected in a holding pond and treated for pH adjustment at the ETP prior to discharge to the watershed. In 2023, the Stanrock ETP treated 1024 ML of runoff and seepage.

Effluent quality at all ETPs met provincial and federal limits included in the site licences and guidelines prior to release.

#### *McClellan Lake and Midwest*

The McClellan Lake and Midwest projects are combined under a single Mine Operating Licence issued by the CNSC. The most recent combined PDP was prepared by Orano Canada and approved by the CNSC in January 2022, concurrently with its approval of an amendment to the operating licence for phase 2 of the TMF Expansion.

The updated PDP estimates the total decommissioning and reclamation costs for both projects to be \$102,098,000 (a reduction from the previously approved 2016 plan, which estimated \$107,241,000). Denison’s share of the financial assurances required to be provided to the Province of Saskatchewan has decreased from \$24,135,000 to \$22,972,000.

#### *Other Projects*

Denison’s exploration and evaluation activities are subject to Saskatchewan environmental regulations. In 2023, the Company recorded a reclamation obligation of \$2,766,000, which represents Denison’s best estimate of the present value of its estimated future decommissioning and reclamation costs.

## Government Regulation

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### Saskatchewan Exploration and Land Tenure

In Canada, natural resource exploration and land tenure activity fall under provincial legislative jurisdiction. In Saskatchewan, the management of mineral resources and the granting of exploration and mining rights for mineral substances and their use are regulated by the *Crown Minerals Act* (Saskatchewan) and *The Mineral Tenure Registry Regulations, 2012*, that are administered by the Saskatchewan Ministry of Energy and Resources.

The right to explore for minerals in Saskatchewan is acquired under a mineral claim from the province. The initial term of a mineral claim is two years, renewable for successive one-year periods, provided the mineral claim is in good standing. To maintain a mineral claim in good standing, generally, the holder of a mineral claim must expend a prescribed amount on exploration. Excess expenditures (also known as assessment credits) can be applied to satisfy expenditure requirements for future claim years. Except for exploration purposes, a mineral claim does not grant the holder the right to mine minerals. A holder of a mineral claim in good standing has the right to convert a mineral claim into a mineral lease. Surface exploration work on a mineral claim requires additional governmental approvals.

The right to mine minerals in Saskatchewan is acquired under a mineral lease from the province. A mineral lease is for a term of 10 years, with a right to renew for successive 10-year terms in the absence of default by the lessee. The lessee is required to spend certain amounts for work during each year of a mineral lease. A mineral lease cannot be terminated except in the event of default and for certain environmental concerns, as prescribed in *The Crown Minerals Act* (Saskatchewan). However, mineral leases may be amended unilaterally by the lessor by amendment to *The Crown Minerals Act* (Saskatchewan) or *The Crown Mineral Royalty Regulations, 2013* (Saskatchewan).

Mineral rights, held through mineral claims and mineral leases, are distinct from surface rights. The surface facilities and mine workings are located on lands owned by the province of Saskatchewan. The right to use and occupy lands is acquired under a surface lease from the province of Saskatchewan. A surface lease is for a period of time, up to a maximum of 33 years, as is necessary to allow the lessee to operate its mine and plant and thereafter carry out the reclamation of the lands involved. Surface leases are also used by the province of Saskatchewan as a mechanism to achieve certain environmental, radiation protection and socio-economic objectives, and contain certain undertakings in this regard.

### Environmental Assessments

An EA is a planning and decision-making tool, which involves predicting potential environmental effects through each phase of the project (construction, operation, decommissioning and post-decommissioning) at the site, and within the local and regional assessment areas.

The assessment of a proposed uranium project in Saskatchewan involves both provincial and federal regulatory oversight. In Saskatchewan, the assessment of a project with joint federal and provincial jurisdiction is coordinated through established protocols in order to align with the “one project-one assessment” model for the proponent and the public without compromising any statutory requirements of the legislation of either jurisdiction.

The Saskatchewan *Environmental Assessment Act* is administered by the Ministry of Environment (“**SKMOE**”). The level of assessment for mining projects is dependent on the specific characteristics of each individual project. A proponent is required to conduct an EA for a project that is considered to be a “development” pursuant to the Saskatchewan *Environmental Assessment Act* and subsequently prepare and submit an environmental impact statement (“**EIS**”) to the SKMOE for approval.

Federally, the *Canadian Environmental Assessment Act, 2012* (“**CEAA 2012**”) includes the *Regulations Designating Physical Activities* to clarify when a federal EA is required and which federal agency will act as the “responsible authority” for the conduct of the EA. For uranium projects, the CNSC is designated as the “responsible authority” under the CEAA 2012 and carries full authority to complete the federal screening of the proposed project and any subsequent environmental assessments.

Under CEAA 2012, an EA’s scope focuses on potential adverse environmental effects that are within federal jurisdiction including: (a) fish and fish habitat and other aquatic species; (b) migratory birds; (c) federal lands; (d) effects that cross provincial or international boundaries; (e) effects that impact on Indigenous peoples, such as their use of lands and resources for traditional purposes, and (f) changes to the environment that are directly linked to or necessarily incidental to any federal decisions about a project, including how nuclear facilities or uranium mines and mills interact with the environment and human health.

The Government of Canada implemented a new *Impact Assessment Act* (the “**IAA**”), to replace the CEAA 2012 on August 28, 2019. The transitional provision (section 182 of the IAA) provides that a CNSC designated project EA, which commenced under the CEAA 2012, is to be continued under the CEAA 2012. This means that the Wheeler River EA for Phoenix will continue the assessment process under CEAA 2012.

For other Denison projects, any future uranium mines and mills proposed to produce less than 2500/tonnes per day would not generally be subject to a federal assessment under IAA. The project would still be required to obtain a federal license (discussed below), which would not be issued until the provincial EA has been completed and the CNSC has reached a decision as to whether the project may proceed.

## Wheeler River

### *Project Description and Environmental Assessment*

In 2019, Denison executed on its decision to advance the Wheeler River Project through the EA regulatory process following the release of the 2018 PFS. Activities completed in 2019 included the submission of two key documents to provincial and federal regulators, with respect to the proposed ISR mining operation: 1) the Saskatchewan Provincial Technical Proposal and the Federal Project Description (together, the “**EA Project Description**”) and 2) the Terms of Reference. Acceptance of these documents was announced by both the SKMOE and the CNSC on June 1, 2019. Following a public review and comment period, final confirmation of the scope and guidelines for the Project EA was received from the CNSC on December 20, 2019. The Company identified the EA process as a key element of the Project’s critical path.

In early 2020, shortly after the initiation of the EA technical assessments, Denison suspended all EA related studies in connection with the onset of the global COVID-19 pandemic. Formal

correspondence was sent to the Project regulatory agencies (CNSC and SKMOE) as well as the local communities and Indigenous groups to inform them of the suspension.

In November 2020, Denison announced a plan to restart the EA in early 2021. In keeping with the requirements of the CNSC to post all EA related documents on the federal project registry website, a formal notification was submitted to the CNSC and the SKMOE to inform them of the recommencement of the EA.

Also in 2020, Denison presented the CNSC and the SKMOE with the possible change in freeze containment design for the Project. The discussion of the freeze design was originally outlined in the EA Project Description as a design feature intended to protect the regional ground water through complete encapsulation of the mining chamber by means of a freeze dome. Based on the results of the 2020 freeze wall trade-off study (see “Wheeler River – Mining Methods”), Denison identified the potential to reduce operational and environmental risks with a vertical freeze wall. Denison, under the direction of the CNSC, updated the EA Project Description to reflect the change, which was submitted and accepted by the regulators in December 2020.

In October 2022, Denison announced a significant regulatory milestone for Wheeler River with the submission of the draft EIS to the SKMOE and the CNSC. The EIS submission outlines the Company’s assessment of the potential effects, including applicable mitigation measures, of the proposed ISR uranium mine and processing plant planned for Wheeler River, and reflects several years of baseline environmental data collection, technical assessments, plus extensive engagement and consultation with Indigenous and non-Indigenous interested parties. Assessment components, including the ecological risk assessment and hydrogeological modelling, were of significant focus of technical studies undertaken in 2021 and 2022 in order to support the engineering design and mitigation measures for the Wheeler River Project. In addition, the Company’s consultants completed assessments on air quality, the terrestrial environment, hydrology and worker health and safety.

The Company has worked closely with the primary regulatory agencies involved in the Project, the CNSC and the SKMOE, in order to ensure that the Company’s methodology for the EA assessment components is in line with regulatory requirements and expectations.

Following the submission of the draft Environmental Impact Statement to the CNSC and the SKMOE, the CNSC conducted a conformity review of the document in relation to the CNSC’s Guidelines for the Preparation of an EIS pursuant to CEAA 2012. In November 2022, the CNSC concluded that the draft EIS met all requirements and commenced a 90-day period for public and federal technical review. In the first quarter of 2023, the Company received technical comments and information requests from both regulatory agencies and the Company has provided technical responses to both the Provincial and Federal regulators. In connection therewith, Denison met with various technical review sub committees to provide information and answer questions on technical assessment details described in the EIS.

In August 2023, reflective of the extensive efforts undertaken by and for the Company, the CNSC deemed complete the Company’s responses to approximately 250 EIS information requests from the FIRT. In November 2023, a subsequent round of information requests was received from the CNSC, seeking additional details for responses not fully accepted by the FIRT. Following the successful resolution of the outstanding information requests, the Company expects to be in position to submit a final version of EIS for consideration at a future hearing of the CNSC.

In October 2023 the Saskatchewan Ministry of Environment confirmed its satisfaction with Denison's comment responses and proposed EIS updates. The confirmation would allow Denison to finalize the EIS for the purpose of obtaining a Provincial EA approval, however this would delink the currently coordinated Provincial – Federal EA process, which is not expected to provide a meaningful schedule advantage for the Phoenix project. Denison plans to submit one version of the final EIS to both authorities once the Federal information requests have been resolved.

### *Corporate Social Responsibility*

Denison has been focused on strengthening many long-term relationships, and building new relationships, with Indigenous and non-Indigenous communities who have a strong connection to the land on which the Wheeler River project is located. Denison supports various community initiatives and activities, as part of its focus on community investment.

The Company has conducted site tours for the Indigenous and municipal leaders for communities of interest and representatives of the CNSC and SKMOE, including two site tours in 2019, one site tour in 2022 and multiple site tours in 2023. Site tours did not take place during 2020 and 2021 due to COVID-19. Tours have generally focused on introducing the community members to the site, providing an overview of the Company's project-related activities and offering an opportunity for collaboration with Denison and the regulators regarding the advancement of the project. During the 2023 site tours, nearly 50 representatives of local rights bearing communities and other interested parties toured the Phoenix FFT site during operation of the recovered solution management phase of the test.

Between 2017 and 2019 the Company executed a series of MOUs in support of the advancement of Wheeler River with certain First Nations and Métis communities who assert the project falls within their traditional territories and/or that traditional land use activities are currently practiced within the local and regional area surrounding the project. These non-binding MOUs formalize the signing parties' intent to work together in the spirit of mutual respect and cooperation, in order to collectively identify practical means by which to avoid, mitigate, or otherwise address potential impacts of the project upon the exercise of Indigenous rights, Treaty rights, and other interests, and facilitate sharing in the benefits that will flow from the project.

Throughout 2020, 2021 and 2022, Denison maintained regular communication with various interested parties to provide timely updates about planned field activities and changes to those plans due to the COVID-19 pandemic. Recognizing that the remote location of communities in northern Saskatchewan pose a unique risk for COVID-19 transmission and treatment, in early April 2020, Denison provided financial support and the procurement of COVID-19 safety supplies, such as hand sanitizer and cleaning products to a number of remote communities in northern Saskatchewan to help build inventory of supplies necessary to respond to a COVID-19 outbreak.

In late April 2020, a number of Indigenous and non-Indigenous communities in the northwest of Saskatchewan experienced COVID-19 outbreaks. In response, a unique collective of Indigenous and non-Indigenous leaders came together to create the Northwest Communities Incident Command Centre, focused on ensuring the communities responded to COVID-19 from a regional perspective. Denison provided financial support for this initiative and invited other exploration companies to do the same. Additionally, Denison worked directly with the Command Centre to get input on the development of a travel protocol for travel through northern Saskatchewan that would be respectful of the deep concern for the potential transmission of COVID-19 in northern Saskatchewan through activities like Denison's exploration and evaluation activities.

Denison's travel protocol was shared with the Saskatchewan Mining Association ("**SMA**") and has been provided as an example of best practice for other SMA members to refer to while travelling to and from remote sites.

In 2021, coordinated with the decision to restart the EA process (discussed above), the Company resumed engagement activities with interested parties in accordance with the requirements and guidelines for a Federal and Provincial EA. The Company met with multiple interested parties to discuss ongoing EA studies and Project components and the incorporation of Indigenous land use studies and knowledge into the draft EIS submission in 2022.

In September 2023, Denison announced the signing of the SPA with ERFN supporting the development and operation of the Wheeler River project. The SPA received support from a substantial majority of ERFN members who participated in a ratification vote on its key terms. The signing of the SPA follows years of active engagement, including a four-month-long ERFN-led community consultation process ahead of the ratification vote, and represents a significant milestone in the history of both Denison's relationship with ERFN and the Wheeler River project. The SPA acknowledges that the project is located within ERFN's Ancestral Lands and provides Denison with ERFN's consent to advance the project. Additionally, the SPA outlines a shared recognition that ERFN is the Knowledge Keeper of the culture, ways, customs, and values of ERFN in relation to the environment and its Members and reflects ERFN's desire to prioritize sustainability. Amongst other key commitments, the SPA provides ERFN and its Members with (i) an important role in environmental monitoring and management, and (ii) benefits from community investment, business opportunities, employment and training opportunities, and financial compensation. Overall, the SPA describes a mutual commitment to maintain an open, respectful, and cooperative relationship between Denison and ERFN to ensure mutual prosperity as the development and operation of the Wheeler River project progresses.

For more information on Denison's engagement and related activities, see "Environmental, Health, Safety and Sustainability Matters" above.

### McClellan and Midwest

Environmental matters related to the McClellan Lake uranium facility and the Midwest project are regulated by the CNSC and the SKMOE. A number of other ministries and departments of the federal and Saskatchewan governments also regulate certain aspects of the operation. Prior to proceeding with development of the McClellan Lake uranium facility and Midwest project, the proponents were required to submit Environmental Impact Statements for review. After completion of that review and receipt of recommendations, the federal and Saskatchewan governments issued the appropriate initial authorizations, subject to the normal licensing renewal process, for the McClellan Lake uranium facility in 1995 and for Midwest in 2012.

### **Licensing and Permitting**

The federal government recognizes that the uranium industry has special importance in relation to the national interest and therefore regulates the mining, extraction, use and export of uranium under the *Nuclear Safety and Control Act* ("**NSCA**"). The NSCA is administered by the CNSC which issues licences pursuant to the regulations under the NSCA.

In the event EA approvals by both the provincial and federal governments are granted, as applicable, a project will be allowed to proceed to the second tier of approvals for licences. The federal (CNSC) licensing process requires the submission of detailed engineering design

packages as well as detailed management plans for all facets of the operation as part of their licensing process. The federal licences are typically the licence (i) to prepare a site and construct, (ii) operate, (iii) decommission, and (iv) abandon. Under provincial jurisdiction, a number of permits and approvals are required prior to construction. Key requirements include the execution of a Surface Lease Agreement with the Province of Saskatchewan and an Approval to Construct and Operate a Pollutant Control Facility as regulated under the Saskatchewan *Environmental Management and Protection Act* (2010).

Activities at McClean Lake and Midwest are currently carried out under a single operating licence issued by the CNSC and are subject to all applicable federal statutes and regulations and to all laws of general application in Saskatchewan, except to the extent that such laws conflict with the terms and conditions of the licences or applicable federal laws.

Decommissioning activities at Elliot Lake are currently carried out under two decommissioning licences issued by the CNSC: for the Stanrock tailings area and the Denison mine site and tailings areas. Decommissioning of the facilities pursuant to the terms of the decommissioning licences has been completed. The CNSC has initiated the actions to combine the Stanrock and Denison sites under one Waste Facility Operating Licence. There are no significant differences between the different forms of licences. After a lengthy period of care, maintenance and monitoring, Denison may apply to the CNSC for permission to cease care of the reclaimed sites.

### **Saskatchewan Royalties**

The province of Saskatchewan imposes royalties on the sale of uranium extracted from ore bodies in the province in accordance with Part III of *The Crown Mineral Royalty Regulations* (the “**Regulations**”) pursuant to *The Crown Minerals Act* (the “**Act**”). Significant revisions to the uranium royalty regime in Saskatchewan became effective on January 1, 2013, with the resulting regime consisting of the following three components:

- (i) **Basic Royalty:** Computed as 5% of gross revenues derived from uranium extracted from ore bodies in the province;
- (ii) **Saskatchewan Resource Credit:** Reduction in the basic royalty equal to 0.75% of gross revenues derived from uranium extracted from ore bodies in the province; and
- (iii) **Profit Royalty:** Two-tier rate structure, computed as 10% or 15% of net profits derived from the mining and processing of uranium extracted from ore bodies in the province.

Gross revenue, for the Basic Royalty, is determined in accordance with the Regulations and allows for reductions based on specified allowances. Net profit, for the Profit Royalty, is calculated based on the recognition of the full dollar value of a royalty payer’s exploration, capital, production, decommissioning and reclamation costs, in most cases, incurred after January 1, 2013. Net profits will be taxed under the profit royalty at a rate of 10% for net profits up to and including \$22.00 per kg (\$10 per pound) of uranium sold, and at 15% for net profits in excess of \$22.00 per kg. The \$22.00 per kg threshold is applicable for 2013 (the base year) and is indexed in subsequent years for inflation. For 2023, the indexed amount is \$28.27 per kg (\$12.82 per pound).

Under this system, each owner or joint venture participant in a uranium mine is a royalty payer. Individual interests are consolidated on a corporate basis for the computation and reporting of royalties due to the province.

Royalty payments are due to the province on or before the last day of the month following the month in which the royalty payer sold, or consumed, the uranium for the purposes of the basic royalty, and quarterly installments are required based on estimates of net profits in respect of the profit royalty.

### **Canadian Income and Other Taxes**

Denison and its Canadian subsidiaries are subject to federal and provincial income taxes. In 2023, taxable income was subject to federal taxes at a rate of 15%, and provincial taxes in Saskatchewan, Ontario, Quebec, British Columbia and the Yukon Territory at rates varying between 11.5% and 12.0%. Taxable income for each entity is allocated between provinces and territories based on a two point average of the proportion of salaries and revenues attributable to each province or territory. Denison expects that it will not be liable for Canadian income taxes on a current tax basis for the financial year ended 2023. As a resource corporation in Saskatchewan, Denison is also subject to a resource surcharge equal to 3% of the value of resource sales from production in Saskatchewan, if any, during the year. For 2023, Denison did not accrue any resource surcharges.

Denison has issued shares eligible for treatment as “flow through shares”, as defined in subsection 66(15) of the *Income Tax Act* (Canada). As a result, a significant portion of Denison’s Canadian Exploration Expenditures were renounced to shareholders and are not available to Denison as a tax deduction in the current year or future years.

### **Audit / Review by Taxing Authorities**

From time to time, Denison is subject to audit / review by taxing authorities. In certain jurisdictions, periodic reviews are carried out by taxing authorities in the ordinary course of business. Denison cooperates with all requests received from taxing authorities, and is not currently engaged in a material dispute with any of the applicable taxing authorities.

## Risk Factors

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Denison's business, the value of the Shares and management's expectations regarding the same 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 than anticipated.

The Board of Directors of Denison have, as part of their mandate, responsibility for the identification of the principal risks of the Company's business and ensuring the implementation of appropriate systems to manage these risks. Where appropriate, they have delegated responsibility for periodic review of certain risks to the Committees of the Board with mandates relevant to such risks.

Audit	Corp Gov & Nominating	Compensation	EHSS	Technical
Financial reporting, internal controls, ethics, and cyber security risks	Compliance, governance and succession risks	Compensation related risks	Health & safety, environment and sustainability risks	Operational performance risks

Management, with input from the Committees, reports to the Board at least semi-annually on the assessment of material risks to the Company.

The following are those risks, uncertainties and other factors pertaining to the outlook and conditions currently known to Denison that have been identified by the Company as having the potential to materially impact Denison's business, financial condition and/or the value of the Shares. Current and prospective security holders of Denison should carefully consider these risk factors. However, the risks set out below are not the only risks Denison faces. Risks and uncertainties not currently known to or foreseen by the Company or that have currently been assessed as immaterial may also materially and adversely affect Denison's business, financial condition, results of operations and prospects.

**There is no assurance that Denison will be successful in generating and/or obtaining sufficient financing to fund its operations.**

The exploration and development of mineral properties and operation of mines and associated facilities requires a substantial amount of capital and the ability of the Company to proceed with any of its plans with respect thereto depends on its ability to obtain financing through joint ventures, equity financing, debt financing or other means. There is no assurance that the Company will be successful in generating and/or obtaining required financing as and when needed on acceptable terms. For example, general market conditions, volatile uranium markets, a claim against the Company, a significant disruption to the Company's business or operations, or other factors may make it difficult to secure the financing necessary to fund the substantial capital that is typically required in order to advance a mineral project, such as the Wheeler River and Waterbury Lake projects, through the testing, feasibility, engineering, and permitting processes necessary to support a production decision, or to place a property into commercial production.

Failure to obtain sufficient financing as and when needed on acceptable terms could result in the delay or indefinite postponement of any or all of the Company's exploration, development or other growth initiatives.

**Denison anticipates having negative operating cash flows in future periods, for which funds will have to be sourced or raised.**

Denison had negative operating cash flow for recent past financial reporting periods. Denison anticipates that it will continue to have periods with negative operating cash flow until such time, if at all, its Wheeler River project goes into production. To the extent that Denison has negative operating cash flow in future periods, Denison may need to allocate a portion of its cash reserves and/or physical uranium holdings to fund such negative cash flow. Denison may also be required to raise additional funds through the issuance of equity or debt securities, or asset sales. There can be no assurance that additional capital or other types of financing will be available when needed or that these financings will be on terms favourable to Denison.

**Denison's access to financing and credit can be negatively impacted by global financial conditions.**

Global financial conditions are subject to volatility arising from international geopolitical and global economic developments, general financial market turbulence, and market expectations of the same. Examples of such are the broad market impacts observed in connection with the COVID-19 pandemic, including market volatility and global inflation, and the Russia-Ukraine war. Access to financing and credit in Canada can be negatively impacted by global financial conditions. Accordingly, the health of the global financing and credit markets may impact the ability of Denison to obtain equity or debt financing in the future and the terms at which financing or credit is available to Denison. Instances of volatility and market turmoil could adversely impact Denison's operations and the trading price of the Shares.

**Mineral exploration and development are inherently speculative, and there is no assurance that the Company's uranium interests are or will be commercially mineable.**

Exploration for minerals and the development of mineral properties are speculative and involve significant uncertainties and financial risks that even a combination of careful evaluation, experience and technical knowledge may not eliminate. While the discovery of an ore body may result in substantial rewards, few properties which are explored result in the discovery of a commercially mineable deposit and/or are ultimately developed into producing mines. As at the date hereof, many of Denison's projects are preliminary in nature and mineral resource estimates include inferred mineral resources, which are considered too speculative geologically to have the economic considerations applied that would enable them to be categorized as mineral reserves. Mineral resources that are not mineral reserves do not have demonstrated economic viability. Major expenses may be required to properly evaluate the prospectivity of an exploration property, to estimate mineral resources, establish mineral reserves and ultimately develop an orebody. There is no assurance that the Company's uranium deposits are commercially mineable.

**The value of an investment in Denison could be materially impacted if the Company is unable to establish technical or economic feasibility for its projects, obtain required regulatory approvals and permitting, or maintain estimated project execution milestones.**

Denison's uranium production is dependent in part on the successful development of its known ore bodies, discovery of new ore bodies and/or revival of previously existing mining operations. The decision as to whether a property contains a commercial mineral deposit and should be brought into production will depend upon market conditions, as well as the results of exploration and evaluation programs and/or feasibility studies, and the recommendations of duly qualified engineers and/or geologists, all of which involves significant expense and risk. It is impossible to

ensure that Denison's current exploration and development programs will result in profitable commercial mining operations.

Projects being considered for development are subject to the completion of successful feasibility studies, engineering studies and environmental assessments, the issuance of necessary governmental permits and the availability of adequate financing, the completion or attainment of which are subject to their own risks and uncertainties. The inability to achieve necessary tasks or obtain required inputs, or any delays in the achievement of any key project tasks or inputs, could cause significant delays in timing, cost or results of the assessment of feasibility and/or the process to advance a project to a development decision. The economic feasibility of development projects is based upon many factors, including, among others: the accuracy of mineral reserve and resource estimates; metallurgical recoveries; capital and operating costs of such projects; government regulations relating to prices, taxes, royalties, infrastructure, land tenure, land use, importing and exporting, and environmental protection; political and economic climate; and uranium prices, which are historically volatile and cyclical.

For Wheeler River, the Company has been able to estimate the existence of mineral resources and mineral reserves and establish the potential for economic feasibility for commercial development, as set forth in, and subject to the estimates and assumptions described in, the Wheeler Report. Substantial expenditures are still required prior to obtaining the required environmental approvals, permits and assets needed to commence commercial operations.

Where a feasibility study is completed by Denison, such as the Phoenix FS, any estimates of mineral reserves and mineral resources, development costs and schedule, operating costs and estimates of future cash flow contained therein, will be based on Denison's interpretation of the information available to-date. Development projects have no operating history upon which to base developmental and operational estimates. Particularly for development projects, economic analyses and feasibility studies contain estimates based upon many factors, including estimates of mineral reserves, the interpretation of geologic and engineering data, anticipated tonnage and grades of ore to be mined and processed, the configuration of the ore body, expected recovery rates of uranium from the ore, estimated operating costs, anticipated climatic conditions and other factors. In addition, results from further studies completed on the project may alter the plans and/or schedule for a project, which in turn may cause potentially significant delays to previous estimates of schedule and/or increases in estimated costs. As a result, it is possible that actual capital and operating costs and economic returns will differ significantly from those estimated for a project prior to production. For example, the plan and schedule, the capital and operating cost projections, and the related economic indicators, in the Wheeler Report may vary significantly from actual expenditures.

It is not unusual in the mining industry for new mining operations to take longer than originally anticipated to bring into a producing phase, and to require more capital than anticipated. Any of the following events, among others, could affect the profitability or economic feasibility of a project or delay or stop its advancement: unavailability of necessary capital, unexpected problems during the start-up phase delaying production, unanticipated changes in grade and tonnes of ore to be mined and processed, unanticipated adverse geological conditions, unanticipated metallurgical recovery problems, incorrect data on which engineering assumptions are made, unavailability of labour, increases in operating costs (including due to inflation), increased costs of mining or processing and refining facilities, unavailability of economic sources of power and water, unanticipated transportation costs, changes in government regulations (including regulations with respect to the environment, prices, royalties, duties, taxes, permitting, restrictions on production, quotas on exportation of minerals, etc.), changes or delays in permitting and regulatory approval

processes or restrictions associated with permitting or regulatory approvals, fluctuations in uranium prices, accidents, labour actions and force majeure events.

The ability to sell and profit from the sale of any eventual mineral production from a property will be subject to contractual commitments and the prevailing conditions in the applicable marketplace at the time of sale and applicable government regulations. The demand for uranium and other minerals is subject to global economic influences and changing attitudes of consumers and demand from end-users.

Many of these factors are beyond the control of a mining company and therefore represent a market risk which could impact the long-term viability of Denison and its operations.

**Selection and use of novel mining methods present significant opportunities, as well as increased execution risk, for Denison.**

As disclosed in the Wheeler Report, Denison has selected the ISR mining method for production at the Phoenix deposit. While industry best practices have been utilized in the development of its estimates and technical studies, and field testing completed to date indicates that ground conditions and the mineral reserves estimated to be contained within the deposit are amenable to extraction by way of ISR to the level of certainty appropriate for a feasibility study, actual conditions could be materially different from those estimated.

The MLJV has developed the patented SABRE mining method and has previously evaluated this innovative mining method via test mining at McClean Lake. While important milestones for the SABRE technology have been achieved to date, actual operations for a full-scale mining operation have not been proven and could be materially different than currently projected or otherwise anticipated.

It is possible that actual costs and economic returns of any mining operations may differ materially from Denison's or the MLJV's best estimates, as applicable.

If these novel mining methods can be advanced, their commercial use beyond the projects for or on which they are being developed could present a significant opportunity for Denison and/or the MLJV to expand upon the benefits of such investments in innovation; however, the ability and process for a joint venture, or either partner thereof, to use the mining method on projects outside of their respective joint ventures has not yet been established.

**Denison's operations are dependent on permitting and licensing.**

The development of mines and related facilities is contingent upon governmental approvals that are complex and time consuming to obtain and which may involve the coordination of multiple governmental agencies. The ability of the Company to obtain and maintain permits and approvals and to successfully explore and evaluate properties and/or develop and operate mines may be adversely affected by real or perceived impacts associated with its activities that impact the environment and human health and safety at its projects and in the surrounding communities.

The real or perceived effects of the activities of other mining companies, locally or globally, may also adversely impact the Company's ability to obtain and maintain permits and approvals. Mining companies are often targets of actions by non-governmental organizations and environmental groups in the jurisdictions in which they operate. Such organizations and groups may take actions in the future to disrupt Denison's operations. They may also apply pressure to local, regional and

national government officials to take actions which are adverse to Denison's operations. Such actions could have an adverse effect on Denison's ability to advance its projects and, as a result, on its financial position and results.

Environmental and regulatory review has become a long, complex and uncertain process that can cause potentially significant delays. Obtaining these government approvals includes among other things, completing environmental assessments and engaging with Indigenous and local communities. See "Environmental, Health, Safety & Sustainability Matters" for more information regarding Denison's community engagement. In addition, future changes in governments, regulations and policies, such as those impacting Denison's mining operations and uranium transport, could materially and adversely affect Denison's results of operations and financial condition in a particular period or its long-term business prospects.

There can be no assurance that the Company will obtain or renew all necessary permits on acceptable terms or in a timely manner. Any significant delays in obtaining or renewing such permits or licences in the future could have a material adverse effect on Denison.

**Denison's operations are subject to extensive regulatory and policy risk.**

Uranium mining and milling operations and exploration activities, as well as the transportation and handling of the products produced, are subject to extensive regulation by federal, provincial, and state governments. Such regulations relate to production, development, exploration, exports, imports, taxes and royalties, labour standards, occupational health, waste disposal, protection and remediation of the environment, mine decommissioning and reclamation, mine safety, toxic substances, transportation safety and emergency response, engagement with Indigenous peoples, and other matters. Compliance with such laws and regulations is currently, and has historically, increased the costs of exploring, drilling, developing, constructing, operating and closing Denison's mines and processing facilities.

Denison expends significant financial and managerial resources to comply with such laws and regulations. Denison anticipates it will have to continue to do so as the trend toward stricter government regulation may continue. Because legal requirements are frequently changing and subject to interpretation, Denison is unable to predict the ultimate cost of compliance with these requirements or their effect on operations. While the Company has taken great care to ensure full compliance with its legal obligations, there can be no assurance that the Company has been or will be in full compliance with all of these laws and regulations, or with all permits and approvals that it is required to have.

It is possible that the costs, delays and other effects associated with such laws and regulations may impact Denison's decisions with respect to exploration and development properties, including whether to proceed with exploration or development. It is also possible that such laws and regulations may result in Denison incurring significant costs due to a material change required to the methods of mining, milling, transportation and other project elements and/or to remediate or decommission properties in accordance with applicable environmental standards beyond those already established and estimated by the Company.

Failure to comply with applicable laws, regulations and permitting requirements, even inadvertently, may result in enforcement actions. These actions may result in orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment or remedial actions. Companies may be required to compensate others who suffer loss or damage

by reason of their exploration or other activities and may have civil or criminal fines or penalties imposed for violations of applicable laws or regulations.

**Denison is subject to risks and uncertainties related to engagement with Canada's First Nations and Métis Peoples.**

First Nations and Métis rights, entitlements and title claims may impact Denison's ability and that of its joint venture partners to pursue exploration, development and mining at its Saskatchewan properties. Pursuant to historical treaties, First Nations in northern Saskatchewan are entitled to pursue hunting, fishing and other activities on their traditional lands and continue to assert title to the minerals within the lands. Métis people have not signed treaties; they assert Indigenous rights throughout Saskatchewan, including Indigenous title over the Company's project lands.

Managing relations with the local First Nations and Métis communities is a matter of paramount importance to Denison. Engagement with, and consideration of other rights of, potentially affected Indigenous peoples may require accommodations, including undertakings regarding funding, contracting, environmental practices, employment and other matters. In the course of engagement, the Company also faces competing interests and demands. This may affect the timetable and costs of exploration, evaluation and development of the Company's projects.

The Company's relationships with communities of interest are critical to ensure the future success of its existing operations and the construction and development of its projects. There is an increasing level of public concern relating to the perceived effect of mining activities on the environment and communities. Adverse publicity relating to the mining industry generated by non-governmental organizations and others could have an adverse effect on the Company's reputation or financial condition and may impact its relationship with the communities in proximity to which it operates. While the Company is committed to operating in a socially responsible manner, there is no guarantee that the Company's efforts in this regard will mitigate this potential risk.

The inability of the Company to maintain positive relationships with local First Nations and Métis communities and other communities of interest may result in additional obstacles to permitting, increased legal challenges, or other disruptions to the Company's exploration, development and production plans, and could have a significant adverse impact on the Company's share price and financial condition.

**Failure to maintain qualified and experienced employees on which Denison depends could result in business interruption.**

Denison's success depends on the efforts and abilities of certain senior officers and key employees. Certain of Denison's employees have significant experience in the uranium industry, and the number of individuals with significant experience in this industry is small. While Denison does not foresee any reason why such officers and key employees will not remain with Denison, if for any reason they do not, Denison could be adversely affected. Denison has not purchased key man life insurance for any of these individuals.

Denison's success also depends on the availability of and its competitiveness for qualified and experienced employees to work in Denison's operations and Denison's ability to attract and retain such employees. Effective staffing is about having the right numbers of the right people, in the right place at the right time, with the suitable knowledge, skill and experience to operate safely and effectively and to maintain compliance with internal controls, procedures and policies. To

meet the Company's objectives, Denison has been and will continue to need to increase its staffing levels to ensure it has suitable and sufficient organizational structures, staffing and competencies in place to effectively and reliably carry out its activities. Failure to adequately address such operational risks could result in breakdowns in internal procedures and systems, which could have a material adverse impact on the Company.

**Disagreements or disputes with Denison's joint venture counterparties could materially adversely impact the Company's operations.**

The Company is party to a number of joint venture arrangements which are material to the Company. The existence or occurrence of one or more of the following circumstances and events could have a material adverse impact on the Company's business prospects, results of operations and financial condition: disagreements with joint venture partners on how to conduct exploration or development activities; inability of joint venture partners to meet their obligations to the joint venture or third parties; and disputes or litigation between joint venture partners regarding budgets, development activities, reporting requirements and other joint venture matters. The Company is, and has been, involved in disputes with its joint venture partners pursuant to the dispute resolution provisions of a joint venture agreement or civil claims. Any such disputes may not be resolved in the Company's favour.

**Public health emergencies could materially impact business and operation plans.**

As in the case of COVID-19, public health emergencies may cause disruptions to the Company's business and operational plans. Such disruptions may result from (i) restrictions that governments and communities impose to address the emergency, (ii) restrictions that the Company and its contractors and subcontractors impose to ensure the safety of employees and others, (iii) shortages of employees and/or unavailability of contractors and subcontractors, and/or (iv) interruption of supplies from third parties upon which the Company relies. A disruption may have a material adverse effect on the Company's business, financial condition and results of operations, which could be rapid and unexpected.

**Compliance costs and risks of non-compliance with environmental, health, safety and other regulations could have a material adverse impact on Denison's financial condition or results of operations.**

Denison has expended significant financial and managerial resources to comply with environmental protection laws, regulations and permitting requirements in each jurisdiction where it operates, and anticipates that it will be required to continue to do so in the future as the historical trend toward stricter regulation may continue. The possibility of more stringent regulations exists in the areas of worker health and safety, the disposition of wastes, the decommissioning and reclamation of mining and processing sites, and other environmental matters each of which could have a material adverse impact on the costs or the viability of a particular project.

Denison's facilities operate under various operating and environmental permits, licences and approvals that contain health, safety and/or environmental conditions that must be met, and Denison's right to pursue its development plans is dependent upon receipt of, and compliance with, additional permits, licences and approvals. Failure to obtain such permits, licences and approvals and/or meet any conditions set forth therein could have a material adverse effect on Denison's financial condition or results of operations.

Although the Company believes its operations comply, in all material respects, with all relevant permits, licences and regulations involving worker health and safety as well as the environment, there can be no assurance regarding continued compliance or ability of the Company to meet stricter environmental regulation, which may also require the expenditure of significant additional financial and managerial resources.

**Health and safety hazards may pose a risk to employees, contractors and operations.**

Exploration and mining development and operating activities represent inherent safety hazards and maintaining the health and safety of the Company's employees and contractors is of paramount importance to Denison. The Company has policies, procedures and controls in place intended to maintain the health and safety of its operations. Notwithstanding such efforts, safety incidents may still occur. Significant potential risks include, but are not limited to, vehicle accidents, unsafe road conditions or events and contact with energized sources.

Operations in the uranium industry are subject to risks uniquely associated with uranium mining and processing. For example, the risk of over-exposure to radiological materials by the Company's employees, contractors, or others is inherent in Denison's operations, as they involve the treatment, monitoring, possession, handling, storage and/or transportation of radioactive materials (uranium, radon, etc.).

Employees involved in activities in remote areas may also be exposed to additional hazards as a result of equipment failure, such as risk of failure of heating equipment or damage to camp facilities; risk of being stranded due to breakdown or damage to mobile equipment, or risk of attacks on employees by wildlife. The impact of such hazards could be exacerbated by limited access to first aid or other medical care and/or delayed emergency response time.

Any incident resulting in serious injury or death could have profound impacts on the Company, its employees and others, as well as result in litigation and/or regulatory action (including, but not limited to suspension of development activities, fines or penalties), or otherwise adversely affect the Company's reputation and ability to meet its objectives.

**Mineral reserve and resource estimates may prove inaccurate.**

Mineral reserve and resource figures are estimates, and no assurances can be given that the estimated quantities of uranium are in the ground and could be produced, or that Denison will receive the prices assumed in determining its mineral reserves. Such estimates are expressions of judgment based on knowledge, mining experience, analysis of drilling results and industry best practices. Valid estimates made at a given time may significantly change when new information becomes available. While Denison believes that the Company's estimates of mineral reserves and mineral resources are well established and reflect management's best estimates, by their nature, mineral reserve and resource estimates are imprecise and depend, to a certain extent, upon statistical inferences and geological interpretations, which may ultimately prove inaccurate. Furthermore, market price fluctuations, as well as increased capital or production costs or reduced recovery rates, may render mineral reserves and resources uneconomic and may ultimately result in a restatement of mineral reserves and resources. The evaluation of mineral reserves or resources is always influenced by economic and technological factors, which may change over time.

**Global demand fluctuations and international trade restrictions could adversely affect Denison's outlook and financial condition.**

The international nuclear fuel industry, including the supply of uranium concentrates, is relatively small compared to other minerals, and is generally highly competitive and heavily regulated. Worldwide demand for uranium is directly tied to the demand for electricity produced by the nuclear power industry, which is also subject to extensive government regulation and policies. In addition, the international marketing of uranium is subject to governmental policies and certain trade restrictions. For example, the supply and marketing of uranium from Russia is limited by international trade agreements.

In general, trade agreements, governmental policies and/or trade restrictions are beyond the control of Denison and may affect the supply of uranium available for use in markets like the United States and Europe, which are currently the largest markets for uranium in the world. Similarly, trade restrictions or foreign policy have the potential to impact the ability to supply uranium to developing markets, such as China and India. If substantial changes are made to regulations affecting the global marketing and supply of uranium, the Company's business, financial condition and results of operations may be materially adversely affected.

**The Company's project viability and operational outlook could be negatively impacted by the volatility and sensitivity to fluctuations in uranium market prices.**

The value of the Company's current physical uranium holdings and its estimates of mineral resources, mineral reserves and viability of future production for its projects are heavily influenced by long and short term market prices of  $U_3O_8$ . Historically, these prices have seen significant fluctuations, and have been and will continue to be affected by numerous factors beyond Denison's control. Such factors include, among others: demand for nuclear power, political, economic and social conditions in uranium producing and consuming countries, public and political response to nuclear incidents, reprocessing of used reactor fuel and the re-enrichment of depleted uranium tails, sales of excess civilian and military inventories (including from the dismantling of nuclear weapons) by governments and industry participants, uranium supplies from other secondary sources, and production levels and costs of production from primary uranium suppliers.

Uranium prices failing to reach or sustain projected levels can impact operations by requiring a reassessment of the Company's financial resources and/or the economic viability of the Company's projects, and such reassessment alone may cause substantial delays and/or interruptions in project development, which could have a material adverse effect on the results of operations and financial condition of Denison.

**Lack of public acceptance of nuclear energy and competition from other energy sources may result in lower demand for uranium.**

Growth of the uranium and nuclear power industry will depend upon continued and increased acceptance of nuclear technology as a clean means of generating electricity. Because of unique political, technological and environmental factors that affect the nuclear industry, including the risk of a nuclear incident, the industry is subject to public opinion risks that could have an adverse impact on the demand for nuclear power and increase the regulation of the nuclear power industry.

Nuclear energy competes with other sources of energy, including oil, natural gas, coal and hydro-electricity. These other energy sources are, to some extent, interchangeable with nuclear energy, particularly over the longer term. Technical advancements in, and government subsidies for, renewable and other alternate forms of energy, such as wind and solar power, could make these forms of energy more commercially viable and put additional pressure on the demand for uranium concentrates. Sustained lower prices of alternate forms of energy may result in lower demand for uranium concentrates.

Market projections for future demand for uranium are based on various assumptions regarding the rate of construction and approval of new nuclear power plants, as well as continued public acceptance of nuclear energy around the world. The rationale for adopting nuclear energy can be varied, but often includes the clean and environmentally friendly operation of nuclear power plants, as well as the affordability and round-the-clock reliability of nuclear power. A change in public sentiment regarding nuclear energy could have a material impact on the number of nuclear power plants under construction, planned or proposed, which could have a material impact on the market's and the Company's expectations for the future demand for uranium and the future price of uranium.

The Russia-Ukraine war has highlighted to many global policymakers the significant geopolitical risk associated with an over reliance on sources of energy from politically unstable jurisdictions. In many cases, this has resulted in increased calls for a renewed focus on energy independence, to which many nations have identified nuclear power as a potentially critical energy alternative that can both improve energy sovereignty and support the achievement of carbon emission reduction climate goals.

#### **Fluctuations in the market price of the Shares are often outside Denison's control.**

The market price of Denison's Shares may experience wide fluctuations which may not necessarily be related to the financial condition, operating performance, underlying asset values or prospects of the Company. These factors include macroeconomic developments in North America and globally, market perceptions of the attractiveness of particular industries – including mining and nuclear energy – and volatile trading due to unpredictable general market or trading sentiments.

The market price of Denison's Shares are likely to increase or decrease in response to a number of events and factors, including: Denison's operating performance and the performance of competitors and other similar companies; the breadth of the public market for the Shares and the attractiveness of alternative investments; volatility in metal prices; the number of Shares to be publicly traded after an offering pursuant to any prospectus or prospectus supplement; the public's reaction to the Company's press releases, material change reports, other public announcements and its filings with the various securities regulatory authorities; the arrival or departure of key personnel; public perception of the nuclear industry and reaction to the developments therein; changes in recommendations by research analysts who track the Shares or the shares of other companies in the sector; developments that affect the market for all resource sector securities; changes in general economic and/or political conditions (including inflation); acquisitions, strategic alliances or joint ventures involving Denison or its competitors; and the other risk factors listed herein.

Many of these factors that could impact the market price of the Company's Shares are not directly related to Denison's results or operations and are, therefore, not within Denison's control.

Accordingly, the market price of the Shares at any given point in time may not accurately reflect the long-term value of Denison.

In recent years, the Company has been affected by the results of a seemingly significant change in investor sentiment towards nuclear energy and uranium in connection with a global trend towards the transition to “clean” energy sources, which is believed to have resulted in increased trading volumes and price volatility of the Shares. Investor sentiment can change quickly, and investors may make investment decisions based on third party media and/or social media discussions that may not accurately reflect the Company’s disclosure or actual results of operations. Such sentiments may cause volatility in the trading price of the Shares and may or may not be reflective of individual investor’s views as to the value of the underlying assets.

Market sentiment and trading in an entity’s shares can also be impacted by its inclusion in, or exclusion from, certain equity benchmarks and/or investable indices. For example, in 2021 Denison’s Shares were added to the S&P/TSX Composite Index, the headline index for the Canadian equity market. This inclusion could impact the Company’s Share price positively, with increased interest in purchasing the Shares. However, a decline in the index could result in investors selling the Shares of the Company for reasons that are unrelated to the Company’s operating results, underlying asset values or prospects. In addition, the removal of the Company from the S&P/TSX Composite could have a negative impact on the market price of Shares, as certain shareholders who link investments to the index could be required to sell the Shares for reasons that are unrelated to the Company’s operating results, underlying asset values or prospects.

Accordingly, the market price of the Shares may decline even if the Company’s operating results, underlying asset values or prospects have not changed. Additionally, these factors, as well as other related factors, may cause decreases in asset values that are deemed to be other than temporary, which may result in impairment losses. There can be no assurance that continuing fluctuations in price and volume will not occur. If such increased levels of volatility and market turmoil continue, the Company’s operations could be adversely impacted, and the trading price of the Shares may be materially adversely affected.

Securities class-action litigation often has been brought against companies following periods of volatility in the market price of their securities. Denison may in the future be the target of similar litigation. Securities litigation could result in substantial costs and damages and divert management’s attention and resources.

**Dilution from further Share issuances could impact the value of a securityholder’s investment in Denison.**

While active in exploring for new uranium discoveries in the Athabasca Basin region, Denison’s present focus is on advancing the Wheeler River project to a development decision, with the potential to become the next large scale uranium producer in Canada. Denison will require additional funds to further such activities.

Denison may sell additional debt or equity securities (including through the sale of securities convertible into Shares) to finance its exploration, evaluation, development, construction and other operations, acquisitions or other projects. Denison is authorized to issue an unlimited number of Shares. Denison cannot predict the size of future sales and issuances of debt or equity securities or the effect, if any, that future sales and issuances of debt or equity securities will have on the market price of the Shares. Sales or issuances of a substantial number of equity securities,

or the perception that such sales could occur, may adversely affect prevailing market prices for the Shares. With any additional sale or issuance of equity securities, investors may suffer dilution of their voting power and it could reduce the value of their investment.

**Lack of liquidity for Shares may negatively impact a securityholder's investment and/or the Company's exchange listings.**

Shareholders of the Company may be unable to sell significant quantities of Shares into the public trading markets without a significant reduction in the price of their Shares, or at all. There can be no assurance that there will be sufficient liquidity of the Company's Shares on the trading market, and that the Company will continue to meet the listing requirements of the TSX or the NYSE American or achieve listing on any other public listing exchange.

**Denison is reliant on other operators for the advancement and maintenance of certain of its joint venture interests.**

For certain of Denison's property interests, Denison is not the operator and therefore is not in control of the applicable activities and operations. As a result, Denison is and will be, to a certain extent, dependent on the operators for the nature and timing of activities related to these interests and may be unable to direct or control such activities.

As an example, Orano Canada is the operator and majority participant in the MLJV and MWJV. The McClean Lake mill employs unionized workers who work under collective agreements. Orano Canada, as the operator, is responsible for most operational and production decisions and all dealings with unionized employees and its decisions drive mill and mining operations. Similarly, Orano Canada is responsible for all licensing and dealings with various regulatory authorities. Orano Canada maintains the regulatory licences for operation of the McClean Lake mill, all of which are subject to renewal from time to time. Any lengthy work stoppages, or disruption to the operation of the mill or mining operations as a result of a licensing matter or regulatory compliance, may have a material adverse impact on the Company's future cash flows, earnings, results of operations and financial condition.

**Denison could be negatively impacted by its reliance on contractors and experts.**

In various aspects of its operations, Denison relies on the services, expertise and recommendations of its service providers and their employees and contractors, whom often are engaged at significant expense to the Company. For example, the decision as to whether a property contains a commercial mineral deposit and should be brought into production will depend in large part upon the results of exploration programs and/or feasibility studies, and the recommendations of duly qualified third-party engineers and/or geologists. In addition, while Denison emphasizes the importance of conducting operations in a technically sound, safe and sustainable manner, it cannot exert absolute control over the actions of these third parties when providing services to Denison or otherwise operating on Denison's properties. Any failure to act, material error, omission, act of negligence or act resulting in a technical failure, environmental pollution, accidents or spills, industrial and transportation accidents, work stoppages or other actions could adversely affect the Company's operations and financial condition.

**Denison is reliant on the licensed storage facilities with which it stores its physical uranium.**

Any uranium purchased by the Company will be stored at one or more licensed uranium conversion facilities (“**Facilities**”), each owned by different third-party organizations. As the number of duly licensed Facilities is limited, there can be no assurance that storage arrangements that are commercially beneficial to the Company will remain readily available. Failure to negotiate commercially reasonable storage terms with the Facilities may have a material impact on the Company’s plans with respect to the physical uranium holdings.

By holding its investments in uranium with licensed Facilities, the Company is exposed to the credit risks of any such Facilities and their operators. There is no guarantee that the Company can fully recover all of its investments in uranium held with the Facilities. Failure to recover all uranium holdings could have a material adverse effect on the financial condition of the Company.

Any loss or damage of the uranium may not be fully covered or absolved by contractual arrangements with the Facilities or the Company’s insurance arrangements, and the Company may be financially and legally responsible for losses and/or damages not covered by indemnity provisions or insurance. Any failure to recover all of the uranium holdings could have a material adverse effect on the financial condition of the Company.

**Fluctuations in foreign exchange rates could negatively affect the Company.**

The Company maintains its accounting records and reports its financial position and results in Canadian dollars. Fluctuations in the U.S. currency exchange rate relative to the Canadian currency could significantly impact the Company, including its financial results, operations or the trading value of its securities, as the price of uranium is quoted in U.S. dollars, and a decrease in value of U.S. dollars would result in a relative decrease in the valuation of uranium and the associated market value from a Canadian currency perspective. Exchange rate fluctuations, and any potential negative consequences thereof, are beyond the Company’s control.

**The Company may not realize the intended benefits of its transactions.**

Denison has completed a number of transactions over the last several years, including without limitation the acquisition of physical uranium and investments in JCU, F3 Uranium, and the Kindersley Lithium Project. Despite Denison’s belief that these transactions, and others which may be completed in the future, will be in Denison’s best interest and benefit the Company and Denison’s securityholders, Denison may not realize the anticipated benefits of such transactions or realize the full value of the consideration paid or received to complete the transactions. This could result in significant accounting impairments or write-downs of the carrying values of mineral properties or other assets and could adversely impact the Company and the price of its Shares.

**Denison may be unable to exploit, expand and/or replace mineral reserves and mineral resources.**

Denison’s mineral reserves and resources at its Wheeler River, Waterbury Lake, McClean Lake and Midwest projects are Denison’s material future sources of possible uranium production. Unless other mineral reserves or resources are discovered or acquired, Denison’s sources of future production for uranium concentrates will decrease over time if its current mineral reserves and mineral resources are exploited or otherwise depleted. There can be no assurance that Denison’s future exploration, development and acquisition efforts will be successful in

replenishing its mineral reserves and resources. In addition, while Denison believes that many of its properties demonstrate development potential, there can be no assurance that they can or will be successfully developed and put into production in future years.

**Competition for properties could limit the Company's ability to add to or replace mineral reserves and mineral resources.**

Significant competition exists for the limited supply of mineral lands available for acquisition. Participants in the mining business include large established companies with long operating histories. In certain circumstances, the Company may be at a disadvantage in acquiring new properties as competitors may have incumbency advantages, greater financial resources and more technical staff. Accordingly, there can be no assurance that the Company will be able to compete successfully to acquire new properties or that any such acquired assets would yield resources or reserves or result in commercial mining operations.

**Challenges to Denison's title to or interest in its properties could have a material adverse effect on Denison's operations.**

The Company has investigated its rights to explore and exploit all of its material properties and, to the best of its knowledge, those rights are in good standing. However, no assurance can be given that such rights will not be revoked, or significantly altered, to its detriment. There can also be no assurance that the Company's rights will not be challenged or impugned by third parties, including the federal, provincial and local governments in Canada, as well as by First Nations and Métis.

There is also a risk that Denison's title to, or interest in, its properties may be subject to defects or challenges. If such defects or challenges cover a material portion of Denison's property, they could have a material adverse effect on Denison's results of operations, financial condition, reported mineral reserves and resources and/or long-term business prospects.

**Failure to renew or a default in obligations under the Credit Facility or other debt arrangement, as applicable, could have a material adverse impact on Denison's operations and financial condition.**

The Credit Facility has a term of one year that has been renewed annually and will need to be renewed again on or before January 31, 2025. There is no certainty what terms of any renewal may be, or any assurance that such renewal will be made available to Denison.

Denison is required to satisfy certain financial covenants in order to maintain its good standing under the Credit Facility. Denison is also subject to a number of restrictive covenants under the Credit Facility and the Ecora Transaction, such as restrictions on Denison's ability to incur additional indebtedness and sell, transfer or otherwise dispose of material assets. Denison may from time to time enter into other arrangements to borrow money in order to fund its operations and expansion plans, and such arrangements may include covenants that have similar obligations or that restrict its business in some way.

Events may occur in the future, including events out of Denison's control, which could cause Denison to fail to satisfy its obligations under the Credit Facility, Ecora Transaction or other debt instruments. In such circumstances, the amounts drawn under Denison's debt agreements may become due and payable before the agreed maturity date, and Denison may not have the financial resources to repay such amounts when due. The Credit Facility and Ecora Transaction are

secured by a pledge of the shares of DMI. If Denison were to default on its obligations under the Credit Facility, Ecora Transaction or other secured debt instruments in the future, the lender(s) under such debt instruments could enforce their security and seize significant portions of Denison's assets.

**Restrictions on change of control could delay or disrupt transactions otherwise beneficial to the Company or its securityholders.**

The Ecora Transaction and certain other of Denison's agreements contain provisions that could adversely impact Denison in the case of a transaction that would result in a change of control of Denison or certain of its subsidiaries. If consent is required from a counterparty and the counterparty chooses to withhold its consent, then such transaction opportunity could have to be abandoned or, if such transaction were to proceed, the counterparty could seek to terminate certain agreements with Denison, including certain agreements forming part of the Ecora Transaction, or require Denison to buy the counterparty's rights back from them, which could adversely affect Denison's financial resources and prospects. If applicable, these restrictive contractual provisions could delay or discourage a change in control of the Company that could otherwise be beneficial to Denison or its shareholders.

**Inaccuracy of decommissioning and reclamation estimates and insufficiency of financial assurance could impact the Company's operations and financial condition.**

As owner of the Elliot Lake decommissioned sites and part owner of the McClean Lake mill, McClean Lake mines, the Midwest uranium project and certain exploration properties, and for so long as the Company remains an owner thereof, the Company is obligated to eventually reclaim or participate in the reclamation of such properties. Most, but not all, of the Company's reclamation obligations are secured, and cash and other assets of the Company have been reserved to secure this obligation. Although the Company's financial statements record a liability for the asset retirement obligation, and the security requirements are periodically reviewed by applicable regulatory authorities, there can be no assurance or guarantee that the ultimate cost of such reclamation obligations will not exceed the estimated liability contained on the Company's financial statements.

As Denison's properties approach or go into decommissioning, regulatory review of the Company's decommissioning plans may result in additional decommissioning requirements, associated costs and the requirement to provide additional financial assurances. It is not possible to predict what level of decommissioning and reclamation (and financial assurances relating thereto) may be required from Denison in the future by regulatory authorities.

**Technical innovation and obsolescence could reduce the demand for the Company's uranium.**

Requirements for Denison's products and services may be affected by technological changes impacting the mining and/or nuclear industries. For example, technological changes in nuclear reactors, enrichment and used uranium fuel processing could reduce the demand for uranium. In addition, Denison's competitors may adopt technological advancements that give them an advantage over Denison.

**Denison's insurance coverage may not be sufficient to cover losses from risks inherent in exploration and mining operations resulting in material economic harm to Denison.**

Denison's business is capital intensive and subject to a number of risks and hazards, including environmental pollution, accidents or spills, industrial and transportation accidents, labour disputes, changes in the regulatory environment, natural phenomena (such as inclement weather conditions) and encountering unusual or unexpected geological conditions. Many of the foregoing risks and hazards could result in damage to, or destruction of, Denison's mineral properties or processing facilities in which it has an interest; personal injury or death; environmental damage; delays in or interruption of or cessation of exploration, development, production or processing activities; or costs, monetary losses and potential legal liability and adverse governmental action. In addition, due to the radioactive nature of the materials handled in uranium exploration, mining and processing, as applicable, additional costs and risks are incurred by Denison and its joint venture partners on a regular and ongoing basis.

Although Denison maintains insurance to cover some of these risks and hazards in amounts it believes to be reasonable, such insurance may not provide adequate coverage in the event of certain circumstances. No assurance can be given that such insurance will continue to be available, that it will be available at economically feasible premiums, or that it will provide sufficient coverage for losses related to these or other risks and hazards.

Denison may be subject to liability or sustain loss for certain risks and hazards against which it cannot insure or which it may reasonably elect not to insure because of the cost. This lack of insurance coverage could result in material economic harm to Denison.

**Incidents with respect to Denison's containment management obligations could have a material and adverse effect on its reputation, financial condition and results of operations.**

Denison does not currently have any tailings production. However, the Company's legacy mines operations is engaged in long-term monitoring for Denison's closed mines in Elliot Lake, Ontario for which decommissioning and restoration has been completed. Such monitoring includes the operation of tailings storage facilities, the results of which are reviewed regularly by the CNSC and the Elliot Lake Joint Regulatory Group, which consists of federal and provincial regulators. Denison's other exploration and evaluation activities may also produce waste materials, for which containment procedures and practices are in place, in accordance with applicable regulatory and permit requirements. However, there is a risk of environmental contamination or other adverse effect due to a release of radioactive material or other materials produced by the Company's activities if the infrastructure prepared therefor is not sufficient to achieve appropriate containment. Such an occurrence could have a material and adverse effect on the Company's reputation, financial condition and results of operations.

**The Company could be negatively impacted by any failure to comply with applicable anti-bribery and anti-corruption laws.**

The Company is subject to anti-bribery and anti-corruption laws, including the *Corruption of Foreign Public Officials Act* (Canada) and the United States *Foreign Corrupt Practices Act of 1977*, as amended. Failure to comply with these laws could subject the Company to, among other things, reputational damage, civil or criminal penalties, other remedial measures and legal expenses which could adversely affect the Company's business, results from operations, and financial condition. It may not be possible for the Company to ensure compliance with anti-bribery

and anti-corruption laws in every jurisdiction in which its employees, agents, sub-contractors or joint venture partners are located or may be located in the future.

**Climate change poses unique challenges that could materially impact Denison's operations or financial condition.**

Due to changes in local and global climatic conditions, many analysts and scientists predict an increase in the frequency of extreme weather events such as floods, droughts, forest and brush fires and extreme storms. Such events could materially disrupt the Company's operations, particularly if they affect the Company's sites, impact local infrastructure or threaten the health and safety of the Company's employees, contractors and/or local communities. In addition, reported warming trends could result in later freeze-ups and warmer lake temperatures in the Athabasca Basin region, potentially affecting the Company's winter exploration programs at certain of its material projects. Any such event could result in material economic harm to Denison.

The Company is focused on operating in a manner designed to minimize the environmental impacts of its activities; however, certain environmental impacts from mineral exploration and mining activities may be inevitable. Increased environmental regulation and/or the use of fiscal policy by regulators in response to concerns over climate change and other environmental impacts, such as additional taxes levied on activities deemed harmful to the environment, could have a material adverse effect on Denison's financial condition or results of operations.

**Information systems upon which the Company may rely could be insufficient and/or vulnerable to cyberattack.**

One of the Company's material assets is its operational data and intellectual property and the ability to effectively retain and access that data is a priority for Denison. There is a risk that corporate data management systems are not implemented or utilized effectively to achieve ease of access and retrieval of timely, accurate and meaningful information about the business operations and risks to enable informed decision-making.

The accessibility of the Company's corporate data may also be compromised through information security breaches. Although to date the Company has not experienced any information security breaches or any losses relating to cyber-attacks, there can be no assurance that the Company will not incur such losses in the future.

One of the most important things a company can do to prevent information security breaches is to ensure its people understand the importance of protecting its data and systems. In light of that, the Company has an Information Technology Acceptable Use Policy for its employees, for which it seeks annual review and affirmation of compliance, with procedures and practices in place designed to protect Denison's information technology ("IT") infrastructure. Denison also regularly deploys mandatory company-wide information technology and cyber-security training, to ensure familiarity with the risks and mitigation strategies, with the modules last launched in 2019 and 2022.

The Company's operations depend upon the availability, capacity, reliability and security of its IT infrastructure, and its ability to expand and update this infrastructure as required, to conduct daily operations. Denison relies on various IT systems in all areas of its operations, including financial reporting, contract management, exploration and development data analysis, human resource management, regulatory compliance and communications with employees and third parties.

These IT systems could be subject to network disruptions caused by a variety of sources, including computer viruses, security breaches and cyber-attacks, as well as network and/or hardware disruptions resulting from incidents such as unexpected interruptions or failures, natural disasters, fire, power loss, vandalism and theft. The Company's operations also depend on the timely maintenance, upgrade and replacement of networks, equipment, IT systems and software, as well as pre-emptive expenses to mitigate the risks of failures.

The ability of the IT function to support the Company's business in the event of any such occurrence and the ability to recover key systems from unexpected interruptions cannot be fully tested. There is a risk that, if such an event occurs, the Company's continuity plan may not be adequate to immediately address all repercussions of the disaster. In the event of a disaster affecting a data centre or key office location, key systems may be unavailable for a number of days, leading to inability to perform some business processes in a timely manner. As a result, the failure of Denison's IT systems or a component thereof could, depending on the nature of any such failure, adversely impact the Company's reputation and results of operations.

Unauthorized access to Denison's IT systems by employees or third parties could lead to corruption or exposure of confidential, fiduciary or proprietary information, interruption to communications or operations or disruption to the Company's business activities or its competitive position. Further, disruption of critical IT services, or breaches of information security, could have a negative effect on the Company's operational performance and its reputation. The Company's risk and exposure to these matters cannot be fully mitigated because of, among other things, the evolving nature of these threats. As a result, cyber security and the continued development and enhancement of controls, processes and practices designed to protect systems, computers, software, data and networks from attack, damage or unauthorized access remain a priority.

The Company applies technical and process controls in line with industry-accepted standards to protect information, assets and systems, and is always considering initiatives to enhance its cyber and data security; however, these controls may not adequately prevent cyber-security breaches. There is no assurance that the Company will not suffer losses associated with cyber-security breaches in the future, and may be required to expend significant additional resources to investigate, mitigate and remediate any potential vulnerabilities. As cyber threats continue to evolve, the Company may be required to expend additional resources to continue to modify or enhance protective measures or to investigate and remediate any security vulnerabilities.

**Events could cause the cost and impact of maintenance of key infrastructure and equipment to be significant or unexpected.**

For continued operations and to ensure the health and safety of employees and others, the Company must maintain diverse physical assets and infrastructure. The cost of operation and maintenance and the operating performance of such facilities may be adversely affected by a variety of factors, including regular and unexpected maintenance and replacement expenditures; the aging of facilities which may reduce their operating performance and increase the cost of maintenance; potential breakdown or failure of equipment requiring emergency or temporary response; catastrophic events such as fires, explosions, earthquakes, volcanic eruptions, landslides, floods, releases of hazardous materials, severe storms or similar occurrences; and other factors discussed in these risk factors. Any of these events could significantly increase the expenses incurred by the Company and/or materially and adversely affect its business, financial condition and future results.

**Conflicts of interest with the Company's directors or officers could have a material adverse impact on the Company.**

Some of the directors and officers of Denison are also directors of other companies that are similarly engaged in the business of acquiring, exploring and developing natural resource properties. Such associations may give rise to conflicts of interest from time to time. In particular, one of the consequences would be that corporate opportunities presented to a director or officer of Denison may be offered to another company or companies with which the director or officer is associated, and may not be presented or made available to Denison. The directors and officers of Denison are required by law to act honestly and in good faith with a view to the best interests of Denison, to disclose any interest which they may have in any project or opportunity of Denison, and, where applicable for directors, to abstain from voting on such matter. Conflicts of interest that arise will be subject to and governed by the procedures prescribed in the Company's Code of Ethics and by the OBCA.

**Disclosure and internal control systems provide reasonable assurance, but not absolute assurance, with respect to the reliability of the Company's financial reporting.**

Internal controls over financial reporting are procedures designed to provide reasonable assurance that transactions are properly authorized, assets are safeguarded against unauthorized or improper use, and transactions are properly recorded and reported. Disclosure controls and procedures are designed to ensure that information required to be disclosed by a company in reports filed with securities regulatory agencies is recorded, processed, summarized and reported on a timely basis and is accumulated and communicated to the company's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance with respect to the reliability of reporting, including financial reporting and financial statement preparation.

**Interests of KEPCO and KHNP may not always be consistent with the interests of other securityholders.**

Pursuant to the KHNP SRA, KHNP Canada is contractually entitled to representation on the Company's board of directors (the "Board"). Provided KHNP Canada holds over 5% of the Shares, it is entitled to nominate one director for election to the Board at any shareholder meeting.

KHNP Canada's right to nominate a director may give KHNP Canada influence on decisions made by Denison's Board. Although KHNP Canada's director nominee will be subject to duties under the OBCA to act in the best interests of Denison as a whole, such director nominee is likely to be an employee of KHNP and he or she may give special attention to KHNP's or KEPCO's interests as indirect Shareholders. The interests of KHNP and KEPCO, as indirect Shareholders, may not always be consistent with the interests of other Shareholders.

The KHNP SRA also includes provisions granting KHNP Canada a right of first offer for certain asset sales and the right to be approached to participate in certain potential acquisitions. The right of first offer and participation right of KHNP Canada may negatively affect Denison's ability or willingness to entertain certain business opportunities, or the attractiveness of Denison as a potential party for certain business transactions. KEPCO's large indirect shareholding block may also make Denison less attractive to third parties considering an acquisition of Denison if those third parties are not able to negotiate KEPCO or KHNP Canada's support.

**United States investors may not be able to obtain enforcement of civil liabilities against the Company.**

The enforcement by investors of civil liabilities under the United States federal or state securities laws may be affected adversely by the fact that the Company is governed by the OBCA, that the majority of the Company's officers and directors are residents of Canada, and that all, or a substantial portion, of their assets and the Company's assets are located outside the United States. It may not be possible for investors to effect service of process within the United States on certain of its directors and officers or enforce judgments obtained in the United States courts against the Company or certain of the Company's directors and officers based upon the civil liability provisions of United States federal securities laws or the securities laws of any state of the United States.

There is some doubt as to whether a judgment of a United States court based solely upon the civil liability provisions of United States federal or state securities laws would be enforceable in Canada against the Company or its directors and officers. There is also doubt as to whether an original action could be brought in Canada against the Company or its directors and officers to enforce liabilities based solely upon United States federal or state securities laws.

**If the Company is characterized as a passive foreign investment company, U.S. holders may be subject to adverse U.S. federal income tax consequences.**

U.S. investors should be aware that they could be subject to certain adverse U.S. federal income tax consequences in the event that the Company is classified as a 'passive foreign investment company' ("PFIC") for U.S. federal income tax purposes. The determination of whether the Company is a PFIC for a taxable year depends, in part, on the application of complex U.S. federal income tax rules, which are subject to differing interpretations, and the determination will depend on the composition of the Company's income, expenses and assets from time to time and the nature of the activities performed by the Company's officers and employees. The Company may be a PFIC in one or more prior tax years, in the current tax year and in subsequent tax years. Prospective investors should carefully read the tax discussion in any applicable prospectus supplement for more information and consult their own tax advisors regarding the consequences of the Company being treated as a PFIC for U.S. federal income tax purposes, including the advisability of making certain elections that may mitigate certain possible adverse U.S. federal income tax consequences that may result in an inclusion in gross income without receipt of such income.

**As a foreign private issuer, the Company is subject to different U.S. securities laws and rules than a U.S. domestic issuer, which may limit the information publicly available to U.S. investors.**

The Company is a foreign private issuer under applicable U.S. federal securities laws and, therefore, is not required to comply with certain of the periodic disclosure and current reporting requirements of the U.S. Exchange Act and related rules and regulations. As a result, the Company does not file the same reports that a U.S. domestic issuer would file with the SEC, although it will be required to file with or furnish to the SEC the continuous disclosure documents that the Company is required to file in Canada under Canadian securities laws. In addition, the Company's officers, directors and principal shareholders are exempt from reporting holdings in the Company's securities and the 'short swing' profit recovery provisions of Section 16 of the U.S. Exchange Act. Therefore, the Company's securityholders may not know on as timely a basis when its officers, directors and principal shareholders purchase or sell securities of the Company as the

reporting periods under the corresponding Canadian insider reporting requirements are longer. The Company is also exempt from Regulation FD, which prohibits issuers from making selective disclosures of material non-public information. In addition, as a foreign private issuer, the Company is exempt from the proxy rules under the U.S. Exchange Act. The Company also has the option to follow certain Canadian corporate governance practices, except to the extent that such laws would be contrary to U.S. securities laws, and provided that the Company discloses the requirements it is not following and describes the Canadian practices it follows instead. The Company may elect to follow home country practices in Canada with regard to certain corporate governance matters. As a result, the Company's shareholders may not have the same protections afforded to shareholders of U.S. domestic companies that are subject to all corporate governance requirements.

**The Company may lose its foreign private issuer status in the future, which could result in significant additional costs and expenses to the Company.**

The Company may lose its foreign private issuer status if a majority of the Shares are owned of record in the United States and the Company fails to meet the additional requirements necessary to avoid loss of foreign private issuer status, which require that the majority of both its directors and executive officers are not U.S. citizens or residents, a majority of the Company's assets are located outside the United States, and that its business be principally administered outside the United States. The regulatory and compliance costs to the Company under U.S. federal securities laws as a U.S. domestic issuer may be significantly more than the costs the Company incurs as a Canadian foreign private issuer eligible to use the multijurisdictional disclosure system. If the Company is not a foreign private issuer, it would not be eligible to use the multijurisdictional disclosure system or other foreign issuer forms and would be required to file periodic and current reports and registration statements on U.S. domestic issuer forms with the SEC, which are more detailed and extensive than the forms available to a foreign private issuer.

## Denison's Securities

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### The Shares

The Company is entitled to issue an unlimited number of Shares. As of December 31, 2023, Denison had an aggregate of 890,970,371 Shares issued and outstanding, and 892,002,706 Shares are issued and outstanding as at the date hereof.

Shareholders are entitled to receive notice of, and to one vote per share at, every meeting of Shareholders and to share equally in the assets of Denison remaining upon the liquidation, dissolution or winding up of Denison after the creditors of Denison have been satisfied.

### ATM Program Activity

During 2023, the Company issued 19,786,160 shares under the 2021 ATM Program pursuant to the 2021 Prospectus. The common shares were issued at an average price of \$1.91 per share for aggregate gross proceeds of \$37,900,000. The Company also recognized costs of \$845,000 related to the maintenance of the 2021 ATM Program and Share issuances, which includes \$757,000 of commissions, for net proceeds after commissions of \$37,042,000.

## Price Range and Trading Volume of Shares

The Shares trade on the TSX under the symbol “DML” and on the NYSE American under the symbol “DNN”. The following table sets forth, for the periods indicated, the reported intra-day high and low sales prices and aggregate volume of trading of the Shares on the TSX and NYSE American during the year ended December 31, 2023.

Month	High (CAD\$) TSX	Low (CAD\$) TSX	Volume TSX	High (US\$) NYSE American	Low (US\$) NYSE American	Volume NYSE American
January	2.03	1.495	46.98 M	1.52	1.11	4.89 M
February	2.04	1.62	28.61 M	1.52	1.195	4.47 M
March	1.77	1.28	33.97 M	1.33	0.93	7.88 M
April	1.495	1.32	22.93 M	1.11	0.98	3.32 M
May	1.56	1.37	18.21 M	1.16	1.01	4.69 M
June	1.74	1.455	25.32 M	1.305	1.08	5.08 M
July	1.74	1.54	23.39 M	1.32	1.16	3.48 M
August	1.96	1.62	30.14 M	1.45	1.215	5.71 M
September	2.41	1.885	53.30 M	1.79	1.385	12.52 M
October	2.25	1.95	42.27 M	1.64	1.43	9.75 M
November	2.57	2.065	44.39 M	1.885	1.50	6.95 M
December	2.53	2.23	35.46 M	1.869	1.665	6.30 M

Source: Bloomberg

The trading of the Shares on the TSX and the NYSE American do not represent all trading in the Shares, and significant volumes of trading may be facilitated through other platforms.

## Prior Sales

During the year ended December 31, 2023, the Company issued the following securities pursuant to the Company’s Option Plan and Share Unit Plan, as applicable:

### Stock Options:

Date of Issuance	Options Issued (#)	Exercise Prices (\$)
March 13, 2023	1,726,000	\$1.49
May 12, 2023	40,000	\$1.48
August 14, 2023	19,000	\$1.85
December 20, 2023	96,000	\$2.31
<b>TOTAL</b>	<b>1,785,000</b>	

### Share Units:

Date of Issuance	Restricted Share Units (#)	Performance Share Units (#)
March 13, 2023	1,377,000	-
May 12, 2023	56,000	-
August 14, 2023	23,000	-
November 10, 2023	18,000	-
December 20, 2023	33,000	-
<b>TOTAL</b>	<b>1,474,000</b>	<b>-</b>

## Dividends

Shareholders are entitled to receive dividends if, as and when declared by the Board of Directors. The Company is restricted under its Credit Facility from paying dividends, and the directors are

focused on dedicating cash flow to reinvestment in the business of the Company. Accordingly, no dividends have been declared to date.

## Denison's Directors & Management

### Denison's Directors

The following table sets out the names and the provinces and countries of residence of each of the directors of Denison as of the date hereof, their respective positions and offices held with Denison and their principal occupations during the five preceding years. The following table also identifies the members of each committee of the Board of Directors.

Name and Province and Country of Residence	Principal Occupation and Employment for Past Five Years	Director Since <sup>(1)</sup>
DAVID CATES Ontario, Canada	President and Chief Executive Officer of the Company since 2015.	2018
BRIAN EDGAR <sup>(3,4)</sup> British Columbia, Canada	Chairman of Silver Bull Resources, Inc., a mineral exploration company listed on both OTCMKTS and the TSX, since 2012, and President and Chief Executive Officer of Dome Ventures Corporation, a subsidiary of Silver Bull Resources Inc., since 2005.	2005
RON HOCHSTEIN <sup>(8,11)</sup> Chair of the Board British Columbia, Canada	President and Chief Executive Officer of Lundin Gold Inc. since 2014.	2000
JONG HO HONG Gyeongsangbuk-do, Korea	General Manager of the Nuclear Fuel Cycle Management section of KHNP; prior: has held various positions at KHNP.	2024
DAVID NEUBURGER <sup>(3,9,10)</sup> Saskatchewan, Canada	Corporate Director since 2019; prior: Vice President, General Manager, Kupol Operations for Kinross Gold Corporation from 2013 to 2018.	2021
LAURIE STERRITT <sup>(5,9)</sup> British Columbia, Canada	CEO and Managing Partner of Pathways Executive Search; prior: Managing Director at Leaders International from 2018 to 2023.	2022
JENNIFER TRAUB <sup>(5,7)</sup> British Columbia, Canada	Partner in the Securities Group at Cassels Brock & Blackwell LLP since 2000 and serves as Co-Chair of the firm's Mining Group.	2021
PATRICIA M. VOLKER <sup>(2,6)</sup> Ontario, Canada	Corporate Director since 2016.	2018

#### Notes:

- (1) The term of office of each of the directors of Denison will expire at the Annual Meeting of the Shareholders currently scheduled to be held on May 9, 2024.
- (2) Chair, Audit Committee
- (3) Member, Audit Committee
- (4) Chair, Corporate Governance and Nominating Committee
- (5) Member, Corporate Governance and Nominating Committee
- (6) Chair, Compensation Committee
- (7) Member, Compensation Committee
- (8) Chair, Environment, Health, Safety & Sustainability Committee
- (9) Member, Environment, Health, Safety & Sustainability Committee
- (10) Chair, Technical Committee
- (11) Member, Technical Committee

## Denison's Executive Officers

The following table sets out the names and the provinces or states and countries of residence of each of the executive officers of Denison as of the date hereof, their respective positions and offices held with Denison and their principal occupations during the five preceding years.

<b>Name and Province and Country of Residence</b>	<b>Position with Denison and Employment for Past Five Years</b>
DAVID CATES Ontario, Canada	President and Chief Executive Officer since 2015.
ELIZABETH SIDLE Ontario, Canada	Vice President Finance and Chief Financial Officer; with Denison in different positions since 2016.
KEVIN HIMBEAULT Saskatchewan, Canada	Vice President Operations; with Denison in different positions since 2022; prior: Operations Manager at the Key Lake mill for Cameco since 2015.
GEOFF SMITH Ontario, Canada	Vice President Corporate Development & Commercial since 2023; prior: President & Chief Operating Officer at Carbon Streaming Corporation and Managing Director in Global Mining & Metals at Scotiabank.
MARY JO SMITH Ontario, Canada	Vice President Human Resources; with Denison in different positions since 2007.
CHAD SORBA Saskatchewan, Canada	Vice President Technical Services & Project Evaluation; with Denison in different positions since 2007.
JANNA SWITZER Saskatchewan, Canada	Vice President Environment, Sustainability & Regulatory, with Denison in different positions since 2020; prior: Senior Advisor with Rio Tinto Exploration.
AMANDA WILLETT British Columbia, Canada	Vice President Legal and Corporate Secretary; with Denison in different positions since 2016.
ANDY YACKULIC Saskatchewan, Canada	Vice President Exploration; with Denison in different positions since 2020; prior: Vice President, Exploration with Axiom Group.

The directors and executive officers of Denison, as a group, beneficially own, or control or direct, directly or indirectly, 4,132,525 Shares, or less than one percent of the Shares as of the date of this AIF. No single director or officer beneficially owns or controls or directs, directly or indirectly, one percent or more of the Shares as of the date of this AIF. The information as to Shares beneficially owned or directed by the directors and officers, not being within the knowledge of the Company, has been furnished by each such individual.

## Cease Trade Orders, Bankruptcies, Penalties or Sanctions

Other than as referred to below, no director or officer of the Company:

- (a) is, as at the date of this AIF, or has, within the previous ten year period, been a director or executive officer of a company (including Denison) that:
  - (i) was subject to a cease trade or similar order or an order that denied the relevant company access to any exemption under securities legislation that was in effect for a period of more than 30 consecutive days that was issued (A) while that person was acting in such capacity or (B) after that person ceased to act in such capacity but which resulted from an event that accrued while that person was acting in that capacity; or

- (ii) became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets (A) while that person was acting in such capacity or (B) within a year of that person ceasing to act in such capacity, or
- (b) has, within the previous ten year period, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold such person's assets; or
- (c) is, or has been, subject to any penalties or sanctions (i) imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority, or (ii) imposed by a court or regulatory body that would likely be considered important to a reasonable security holder in making an investment decision.

Ron Hochstein was a director of Sirocco Mining Inc. ("**Sirocco**"). Pursuant to a plan of arrangement completed on January 31, 2014, Canadian Lithium Corp. amalgamated with Sirocco to form RB Energy Inc. ("**RBI**"). In October 2014, RBI commenced proceedings under the Companies' Creditors Arrangement Act (the "**CCAA**"). CCAA proceedings continued in 2015 and a receiver was appointed in May 2015. The TSX de-listed RBI's common shares in November 24, 2014 for failure to meet the continued listing requirements of the TSX. Ron Hochstein was a director of RBI until October 3, 2014.

### **Conflicts of Interest**

Some of Denison's directors and officers are also directors and/or officers of other natural resource companies and, consequently, there exists the possibility for such directors and officers to be in a position of conflict relating to any future transactions or relationships between the Company and such other companies or common third parties. However, the Company is unaware of any such pending or existing conflicts between these parties. Any decision made by any of such directors and officers involving the Company are made in accordance with their duties and obligations to deal fairly and in good faith with the Company and such other companies and their obligations to act in the best interests of Denison's shareholders. In addition, each of the directors of the Company discloses and refrains from voting on any matter in which such director may have a conflict of interest.

None of the present directors or senior officers of the Company, and no associate or affiliate of any of them, has any material interest in any transaction of the Company or in any proposed transaction which has materially affected or will materially affect the Company.

One of Denison's directors, Mr. Hong, is employed by KHNP, the parent corporation of KHNP Canada. The Company and KHNP Canada are parties to the KHNP SRA, which may present a conflict of interest for Mr. Hong. The KHNP SRA provides KHNP Canada with a right of first offer for certain asset sales and the right to be approached to participate in certain potential acquisitions being considered by Denison. While the Company is not aware of a pending or existing conflict of interest with Mr. Hong as of the date hereof, the interests of KEPCO, KHNP and KHNP Canada as shareholders of Denison and their business relationships with Denison may place Mr. Hong in a position of conflict as a director of the Company in the future.

## Interest of Management and Others in Material Transactions

Other than as disclosed in this AIF, no director or executive officer of Denison, no person or company that beneficially owns, controls or directs, indirectly or directly, more than 10% of the Shares, and no associate or affiliate of any of them, has or has had, within the three most recently completed financial years or during the current financial year, any material interest, direct or indirect, in any transaction which materially affects or is reasonably expected to materially affect Denison.

## Standing Committees of the Board

### The Audit Committee

The Audit Committee of the Company's Board of Directors is principally responsible for:

- recommending to the Company's Board of Directors the external auditor to be nominated for election by the Company's shareholders at each annual general meeting and negotiating the compensation of such external auditor;
- overseeing the work of the external auditor;
- reviewing the Company's annual and interim financial statements, its MD&A in respect thereof and press releases regarding earnings before they are reviewed and approved by the Board of Directors and publicly disseminated by the Company;
- reviewing the Company's financial reporting procedures for the Company's public disclosure of financial information extracted or derived from its financial statements;
- overseeing the Company's practices with respect to the identification and management of financial reporting, financial compliance and related risks; and
- overseeing other areas of risk for the Company, including related-party transactions, conflicts, internal audit and cyber security risks.

The Company's Board of Directors has adopted an Audit Committee mandate/terms of reference (the "**Mandate**") which sets out the Audit Committee's mandate, organization, powers and responsibilities. The complete Mandate is attached as Schedule A to this AIF.

Below are the details of each Audit Committee member, including his or her name, whether she or he is independent and financially literate as such terms are defined under National Instrument 52-110 - *Audit Committees* of the Canadian Securities Administrators ("**NI 52-110**") and his or her education and experience as it relates to the performance of his or her duties as an Audit Committee member. All three Audit Committee members have "financial expertise" within the meaning of the *U.S. Sarbanes-Oxley Act* of 2002, as amended, and are financially literate under NI 52-110. The qualifications and independence of each member is discussed.

Director	Independent	Financially Literate <sup>(1)</sup>	Education & Experience Relevant to Performance of Audit Committee Duties
Patricia Volker, Chair of the Committee	Yes	Yes	<ul style="list-style-type: none"> <li>Chartered Professional Accountant, Chartered Accountant,</li> <li>Certified Management Accountant</li> <li>B.Sc.</li> <li>Served in various capacities in the accounting profession during a 30+ year career</li> <li>Served for over 17 years in various positions at the Chartered Professional Accountants of Ontario, most recently as the Director of Public Accounting and Special Projects</li> <li>Serves on and chairs private and public company audit and/or finance committees</li> <li>Holds the Institute of Corporate Directors, Director designation</li> </ul>
Brian Edgar	Yes	Yes	<ul style="list-style-type: none"> <li>Law degree, with extensive corporate finance experience</li> <li>Held positions of Chairman (since 2011) and President and Chief Executive Officer (2005 to 2011) of a public company</li> <li>Has served on audit committees of a number of public companies</li> </ul>
David Neuburger	Yes	Yes	<ul style="list-style-type: none"> <li>Completed Financial Accounting and Managerial Accounting courses as part of a Masters of Business Administration (MBA) Program</li> <li>Disclosure Committee experience with Cameco, including review of quarterly and annual financial statements and management's discussion &amp; analysis</li> <li>Served on another public company audit committee</li> </ul>

**Notes:**

- (1) To be considered financially literate, a member of the Committee must have the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Company's financial statements.

The following table discloses the fees billed to the Company by its independent auditors during the last two fiscal years.

Financial Year Ending <sup>(1)</sup>	Audit Fees <sup>(2)</sup>	Audit-Related Fees <sup>(3)</sup>	Tax Fees <sup>(4)</sup>	All Other
December 31, 2023	\$531,510	\$33,170	\$39,620	Nil
December 31, 2022	\$472,630	\$27,820	\$46,580	Nil

**Notes:**

- (1) These amounts include accruals for fees billed outside the period to which the services related.
- (2) The aggregate fees billed for audit services of the Company's consolidated financial statements, including services normally provided by an auditor for statutory or regulatory filings or engagements and other services only the auditor can reasonably provide. The Audit Fees in 2023 and 2022 include fees related to reviews of interim consolidated financial statements (2023: \$105,930; 2022: \$95,230) and the extensive work required of the auditor to support, and conduct consent procedures in connection with, the Company's various equity issuances (2023: \$96,300; 2022: \$80,250).
- (3) The aggregate fees billed for specified audit procedures, assurance and related services that are reasonably related to the performance of the audit or review of the Company's financial statements and are not disclosed in the Audit Fees column. Audit-related fees in 2023 and 2022 were billed for certain specified procedures engagements and the audit of certain subsidiary financial statements.

- (4) The aggregate fees billed for tax compliance, tax advice, and tax planning services, such as transfer pricing and tax return preparation.
- (5) The aggregate fees billed for professional services other than those listed in the other three columns.

Since the commencement of the Company's most recently completed financial year, there has not been a recommendation of the Audit Committee to nominate or compensate an auditor which was not adopted by the Company's Board of Directors.

The Audit Committee has adopted specific policies and procedures for the engagement of non-audit services as described in Section D of the Mandate.

### **Other Board Committees**

The Board currently has four standing committees in addition to the Audit Committee, namely the Corporate Governance and Nominating Committee, the Compensation Committee, the Environment, Health, Safety and Sustainability Committee and the Technical Committee. Each standing committee of the Board operates according to its mandate, which is approved by the Board and sets out the committee's duties and responsibilities. A discussion of each committee and its composition can be found in the most recent management information circular prepared in connection with the Company's Shareholder meeting ("**Circular**"), and copies of the standing committee mandates are available at [www.denisonmines.com](http://www.denisonmines.com).

### **Corporate Governance**

As a Canadian reporting issuer with its Shares listed on the TSX, Denison has in place a system of corporate governance practices which is responsive to applicable Canadian requirements, including National Policy 58-201 - Corporate Governance Guidelines of the Canadian Securities Administrators (the "Guidelines"). Denison's corporate governance practices meet or exceed the Guidelines and all other applicable Canadian requirements. Reference is made to the Corporate Governance Practices section of the Circular, which contains a description of the Company's system of corporate governance practices with reference to the Guidelines.

Denison is classified as a foreign private issuer under U.S. securities law and its Shares are also listed on the NYSE American. Pursuant to the rules of the NYSE American, a foreign private issuer is permitted to follow home country practice except with respect to certain rules, with which Denison complies.

## **Legal and Regulatory Proceedings**

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The Company was not a party to, and none of the Company's property was the subject of, any material legal proceedings in 2023 and the Company knows of no such material legal proceedings that are contemplated. However, from time to time, the Company may become party to litigation incidental to its business or other litigation matters deemed by the Company to not be material.

## Material Contracts

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Reference is made to the material contracts which have been filed by Denison with the Canadian securities regulatory authorities on the SEDAR+ website at [www.sedarplus.ca](http://www.sedarplus.ca).

Below are the particulars of each contract, other than those entered into in the ordinary course of business, that is material to Denison and that was entered into between January 1, 2023 and the date hereof or was entered into before that date but is still in effect:

1. The following agreements executed in connection with the Ecora Transaction:
  - (a) The loan agreement between DMI and SPV dated January 31, 2017 with respect to the Ecora Loan;
  - (b) The loan agreement between SPV and Ecora dated January 31, 2017 with respect to the SPV Loan;
  - (c) The performance guarantee by Denison as guarantor in favour of the SPV as beneficiary and Ecora as permitted assignee, pursuant to which Denison has agreed to guarantee the performance of DMI's obligations to SPV under the SPV Loan, which guarantee has been assigned by SPV in favour of Ecora;
  - (d) The streaming agreement between DMI and Centaurus dated January 31, 2017 with respect to the Stream Arrangement; and
  - (e) The performance guarantee by Denison as guarantor in favour of Centaurus as beneficiary, pursuant to which Denison has agreed to guarantee the performance of DMI's obligations to Centaurus under the Stream Arrangement.
2. The Reclamation Funding Agreement made as of the 21<sup>st</sup> day of December 1995 among Denison Mines Limited ("**DML**"), Her Majesty the Queen in Right of Canada (the "**Government of Canada**") and Her Majesty the Queen in Right of the Province of Ontario (the "**Government of Ontario**") as amended by amending agreements made as of the 11<sup>th</sup> day of April 1997 and the 25<sup>th</sup> day of February 1999 among DML (now DMI), the Government of Canada and the Government of Ontario and further amended by an assignment and novation agreement made as of the 29<sup>th</sup> day of December, 2003 among Denison Energy, DMI, the Government of Canada and the Government of Ontario.

According to the Reclamation Funding Agreement, the Company is required to maintain funds in an Environmental Trust sufficient for the succeeding six years of the estimated reclamation and on-going care and monitoring expenditures for the Company's closed Elliot Lake mining facility.

3. The KHNP SRA dated September 19, 2017 between the Company and KHNP Canada.

The KHNP SRA provides for a long-term collaborative business relationship between the parties, replacing the strategic relationship agreement made as of June 15, 2009 among the Company, KEPCO and KEPCO Canada Uranium Investment Limited Partnership. Under the KHNP SRA, KHNP Canada is entitled to the nomination of one Board representative, provided that KHNP Canada's shareholding percentage stays above 5%.

The KHNP SRA also provides that if Denison intends to sell an interest in certain of its substantial assets, it will first notify KHNP Canada of each such proposed sale and provide KHNP Canada with a 30-day right of first offer to allow KHNP Canada to purchase the interest in the asset that Denison proposes to sell. The KHNP SRA provides that Denison will allow KHNP Canada to participate in potential purchases of certain assets, including a mill facility, a producing mine or a mineral resource for which a production feasibility study has been completed, which Denison plans to pursue with a co-investor. KHNP Canada's ability to purchase will not be available where Denison and KHNP Canada cannot agree on terms within a reasonable time or where their involvement would adversely affect Denison's ability to pursue an investment opportunity.

The right of first offer and co-investment rights are subject to pre-existing contractual commitments and do not apply to certain pre-existing transactions. KHNP Canada is also entitled to subscribe for additional Shares, in order to maintain or increase its shareholding percentage in Denison to thresholds which are relevant to its rights under the KHNP SRA, in circumstances where Denison completes a public offering or broadly distributed private placement to raise proceeds of greater than \$10 million.

Denison is entitled to terminate the KHNP SRA if KHNP Canada's shareholding percentage in Denison drops below 5% and stays below 5% for 60 days following delivery of a notice to that effect by Denison to KHNP Canada or if Denison completes an Extraordinary Transaction, as defined in the KHNP SRA.

4. The Fourth Amended and Restated Credit Facility dated January 30, 2015, and all subsequent amendments including the Eleventh Amending Agreement dated December 21, 2023.

## **Names and Interests of Experts**

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The Company's Independent Registered Public Accounting Firm is KPMG LLP, Chartered Professional Accountants, Licensed Public Accountants, who have issued an independent auditor's report dated February 29, 2024 in respect of Denison's consolidated financial statements as at December 31, 2023 and 2022, and for the two years then ended, and an independent auditor's report dated February 29, 2023 on the effectiveness of the Company's internal control over financial reporting as at December 31, 2023. KPMG have confirmed that they are independent with respect to the Company within the meaning of the relevant rules and related interpretations prescribed by the relevant professional bodies in Canada and any applicable legislation or regulations, and also that they are independent accountants with respect to the Company under all relevant US professional and regulatory standards.

Chad Sorba, P.Ge., Denison's Vice President Technical Services and Project Evaluation, who is a "Qualified Person" within the meaning of this term in NI 43-101, has prepared sections of this AIF that are of a scientific or technical nature pertaining to the Wheeler River project and has verified the data disclosed therein. To the knowledge of Denison, Chad Sorba is the registered or beneficial owner, directly or indirectly, of less than one percent of the outstanding Shares.

Andy Yackulic, P.Ge., Denison's Vice President Exploration, who is a "Qualified Person" within the meaning of this term in NI 43-101, has prepared sections of this AIF that are of a scientific or technical nature pertaining to the Company's mineral projects and has verified the data disclosed therein. To the knowledge of Denison, Andy Yackulic is the registered or beneficial owner, directly or indirectly, of less than one percent of the outstanding Shares.

Wood was retained as the lead consulting firm for the preparation of the Wheeler Report dated June 23, 2023. Wood and its team were independent in accordance with the requirements of NI 43-101.

EngComp was retained as the lead qualified person for the preparation of the Waterbury PEA Report dated October 30, 2020, the principal author of which was Gordon Graham, P.Eng. EngComp and its team were independent in accordance with the requirements of NI 43-101.

SLR (then Scott Wilson RPA) was retained to independently review and audit the mineral reserves and mineral resources in accordance with the requirements of NI 43-101 and prepared the following technical reports: (a) McClean Technical Report dated November 21, 2005 as amended on February 16, 2006 by Richard E. Routledge, M.Sc., P.Geo. and James W. Hendry, P.Eng.; (b) McClean North Technical Report dated January 31, 2007 by Richard E. Routledge, M.Sc., P.Geo.; and (c) Sue D Report dated March 31, 2006 by Richard E. Routledge, M.Sc., P.Geo. and James W. Hendry, P.Eng.

The Midwest Technical Report dated March 26, 2018 was authored by Dale Verran, MSc, P.Geo, Pr.Sci.Nat., formerly of the Company, Chad Sorba, P.Geo of the Company, and independent authors provided by SRK, G. David Keller, PGeo, formerly of SRK, and Oy Leuangthong, PEng, of SRK. SRK and its team are independent in accordance with the requirements of NI 43-101.

To the knowledge of Denison as of the date hereof, each of Wood, EngComp, SLR and SRK and each of their respective partners, employees and consultants who participated in the preparation of the aforementioned reports, or who were in a position to influence the outcome of such reports, are the registered or beneficial owner, directly or indirectly, of less than one percent of the outstanding Shares.

## **Additional Information**

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Additional information regarding the Company is available on the SEDAR+ website at [www.sedarplus.ca](http://www.sedarplus.ca). Further information concerning the Company, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities, options to purchase securities and interests of insiders in material transactions, where applicable, is contained in the management information circular for the Company's most recent meeting of shareholders. Additional financial information is provided in the Company's audited consolidated financial statements and MD&A for the financial year ended December 31, 2023.

A copy of this AIF, as well as the Circular and such other information and documentation that the Company makes available via SEDAR+, can be found at [www.sedarplus.ca](http://www.sedarplus.ca). In addition, certain of this information is distributed to shareholders in connection with Denison's Annual General Meeting of Shareholders. The Company will provide any of the foregoing documents subject to its rights to require people who are not security holders of the Company to pay a reasonable charge. Copies of these documents may be obtained by writing to:

Denison Mines Corp.  
1100 – 40 University Avenue  
Toronto, Ontario, M5J 1T1

Telephone: (416) 979-1991  
Facsimile: (416) 979-5893  
Email: [info@denisonmines.com](mailto:info@denisonmines.com)



### **Audit Committee Mandate and Charter**

#### **A. Composition of the Committee**

- (1) The Board shall appoint annually from among its members at the first meeting of the Board following the annual meeting of the shareholders a committee to be known as the Audit Committee (the "Committee") to be composed of three (3) directors or such other number not less than three (3) as the Board may from time to time determine.
- (2) Any member of the Committee may be removed or replaced at any time by the Board. Any member of the Committee ceasing to be a director or ceasing to qualify under A(3) below shall cease to be a member of the Committee. Subject to the foregoing, each member of the Committee shall hold office as such until the next annual appointment of members to the Committee after his or her election. Any vacancy occurring in the Committee shall be filled at the next meeting of the Board.
- (3) Each member of the Committee shall:
  - (a) be a member of the Board;
  - (b) not be an officer or employee of the Company or any of its affiliates;
  - (c) be an unrelated director as defined in the Toronto Stock Exchange (the "TSX") Corporate Governance Guidelines ("TSX Guidelines") as the same may be amended from time to time;
  - (d) satisfy the independence requirements applicable to members of audit committees under each of Multilateral Instrument 52-110 – Audit Committees of the Canadian Securities Administrators ("M1 52-110"), Rule 10A-3(b)(1)(ii) of the United States Securities and Exchange Commission, and any other applicable laws and regulations, as the same may be amended from time to time (with the TSX Guidelines, "Applicable Laws"); and
  - (e) satisfy the financial literacy requirements prescribed by Applicable Laws.
- (4) A majority of the Committee shall constitute a quorum.
- (5) The Committee shall elect annually a chairperson from among its members.

#### **B. Purpose**

- (1) The Committee's purpose is to assist the Board in its supervision of the management of the business and affairs of the Company through oversight of:
  - (a) the integrity of the Company's financial statements, Management's Discussion and Analysis ("MD&A") and other financial reporting;
  - (b) the integrity of the Company's internal control and management information systems;

- (c) the Company's compliance with all applicable laws, rules, regulations, policies and other requirements of governments, regulatory agencies and stock exchanges relating to accounting matters and financial disclosure;
- (d) the Company's practices with respect to the identification and management of financial reporting, financial compliance and related risks;
- (e) the auditor's qualifications and activities;
- (f) communication among the auditor, management and the Board; and
- (g) such other matters as are determined by the Board from time to time.

### **C. Committee Resources**

- (1) The Committee shall have direct channels of communication with the Company's auditor to discuss and review specific issues as appropriate.
- (2) The Committee, or any member of the Committee with the approval of the Committee, may retain at the expense of the Company such independent legal, accounting (other than the auditor) or other advisors on such terms as the Committee may consider appropriate and shall not be required to obtain the approval of the Board in order to retain or compensate any such advisors.
- (3) The Committee shall have unrestricted access to Company personnel and documents and shall be provided with all necessary funding and other resources to carry out its responsibilities.

### **D. Committee Responsibilities**

- (1) The responsibilities of the Committee shall be to:
  - (a) with respect to financial accounting matters:
    - (i) review with management and the external auditors the annual consolidated financial statements, MD&A and press release announcing annual financial results of operations before making recommendations to the Board relating to approval of such documents;
    - (ii) review with management and the external auditors interim financial statements, MD&A and press release announcing interim financial results of operations before making recommendations to the Board relating to approval of such documents;
    - (iii) review and discuss with management and the external auditors all public disclosure documents containing audited or unaudited financial information including: any Prospectus; the Annual Report; interim unaudited reports; and any material change report pertaining to the Company's financial matters. The Committee will review the consistency of the foregoing documents with facts, estimates or judgments contained in the audited or unaudited financial statements;
    - (iv) satisfy itself that adequate procedures are in place for the review of the Company's disclosure of financial information extracted or derived from the Company's financial statements, other than the Company's financial statements, MD&A and earnings press releases, and shall periodically assess the adequacy of those procedures;

- (v) prior to the completion of the annual audit, and at any other time deemed advisable by the Committee, review and discuss with management and the auditor the quality of the Company's accounting policies and financial statement presentation, including, without limitation, the following:
    - 1. all critical accounting policies and practices to be used, including, without limitation, the reasons why certain estimates or policies are or are not considered critical and how current and anticipated future events may impact those determinations as well as an assessment of any proposed modifications by the auditors that were not made;
    - 2. all alternative accounting treatments for policies and practices that have been discussed by management and the auditors; and
    - 3. other material written communications between the auditor and management, including, without limitation, any management letter, schedule of unadjusted differences, the management representation letter, report on internal controls, as well as the engagement letter and the independence letter;
  - (vi) review annually the accounting principles and practices followed by the Company and any changes in the same as they occur;
  - (vii) review new accounting principles of the Chartered Professional Accountants of Canada and the International Accounting Standards Board which would have a significant impact on the Company's financial reporting as reported to the Committee by management;
  - (viii) review the status of material contingent liabilities as reported to the Committee by management;
  - (ix) review potentially significant tax problems as reported to the Committee by management; and
  - (x) review any errors or omissions in the current or prior year's financial statements which appear material as reported to the Committee by management;
- (b) with respect to the external auditors:
- (i) be directly responsible for recommending the appointment of the auditor, the auditor's compensation, retention and termination and for oversight of the work of the auditor (including, without limitation, resolution of disagreements between management and the auditor regarding financial reporting) for the purpose of preparing or issuing an audit report or performing other audit, review or services for the Company;
  - (ii) approve, prior to the auditor's audit, the auditor's audit plan (including, without limitation, staffing), the scope of the auditor's review and all related fees;
  - (iii) satisfy itself as to the independence of the auditor. The Committee shall pre-approve any non-audit services (including, without limitation, fees therefor) provided to the Company or its subsidiaries by the auditor or any auditor of any such subsidiary and shall consider whether these services are compatible with the auditor's independence, including, without limitation, the nature and scope of the specific non-audit services to be

- performed and whether the audit process would require the auditor to review any advice rendered by the auditor in connection with the provision of non-audit services. The Committee shall not allow the auditor to render any non-audit services to the Company or its subsidiaries that are prohibited by Applicable Law; and
- (iv) review and approve the Company's policies concerning the hiring of employees and former employees of the Company's auditor or former auditor.
- (c) with respect to internal controls:
- (i) oversee management's design, testing and implementation of the Company's internal controls and management information systems and review the adequacy and effectiveness thereof.
- (d) with respect to concerns and complaints:
- (i) establish procedures for:
    1. the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters; and
    2. the confidential, anonymous submission by employees of the Company of concern regarding questionable accounting or auditing matters.
- (e) with respect to ethics:
- (i) be responsible for oversight and enforcement of the Code of Ethics for the Chief Executive Officer, Senior Financial Officers and Other Officers of the Company, subject to the supervision of the Board.
- (f) with respect to general audit matters:
- (i) inquire of management and the external auditors as to any activities that may or may not appear to be illegal or unethical;
  - (ii) review with management, the operations analyst and the external auditors any frauds reported to the Audit Committee;
  - (iii) review with the external auditors the adequacy of staffing for accounting and financial responsibilities; and
  - (iv) report and make recommendations to the Board as the Committee considers appropriate.
- (g) with respect to general risk matters:
- (i) review and monitor all related party transactions which may be entered into by the Company;
  - (ii) approve, or disapprove, material contracts where the Board determines it has a conflict;
  - (iii) review, at least annually, the management of the Company's privacy and cyber security risk exposure and the policies, procedures and mitigation plans in place to protect the security and integrity of the Company's information systems and data

- (iv) receive reports from the Disclosure Committee pursuant to the Company's Disclosure Policy, and review and recommend to the Board of Directors the members of the Disclosure Committee from time to time and where a vacancy occurs at any time in the membership of the Disclosure Committee; and
- (v) review with management, at least annually, the Company's policies and practices respecting insurance.

(2) In addition, the Board may refer to the Committee such matters and questions relating to the Company as the Board may from time to time see fit.

(3) Any member of the Committee may require the auditors to attend any or every meeting of the Committee.

#### **E. Meetings**

(1) The times of and the places where meetings of the Audit Committee shall be held and the calling of and procedure at such meetings shall be determined from time to time by the Committee, provided however that the Committee shall meet at least quarterly, and the Committee shall maintain minutes or other records of its meetings and activities. Notice of every such meeting to be given in writing not less than five (5) days prior to the date fixed for the meeting, and shall be given to the auditors of the Company, that the auditors shall be entitled to attend and be heard thereat. Meetings shall be convened whenever requested by the auditors, the operations analyst or any member of the Audit Committee in accordance with the Ontario Business Corporations Act.

(2) As part of each meeting of the Committee at which it recommends that the Board approve the financial statements of the Company, and at such other times as the Committee deems appropriate, the Committee shall meet separately with the auditor to discuss and review specific issues as appropriate.

#### **F. Evaluation of Charter and Mandate**

(1) On at least an annual basis, the Committee shall review and assess the adequacy of this Charter and Mandate and recommend any proposed changes to the Board of Directors.

(2) All prior resolutions of the Board relating to the constitution and responsibilities of the Audit Committee are hereby repealed.

## Schedule B

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### Glossary of Technical Terms

Note: The terms related to Mineral resources and mineral reserves presented herein are as defined in “CIM DEFINITION STANDARDS on Mineral Resources and Mineral Reserves” prepared by the CIM Standing Committee on Reserve Definitions, adapted by CIM Council, May 10, 2014.

#### **eU<sub>3</sub>O<sub>8</sub> or eU**

This term refers to equivalent U<sub>3</sub>O<sub>8</sub> grade derived from the downhole logging of drill holes using a calibrated total gamma probe.

#### **Feasibility Study**

A Feasibility Study is a comprehensive technical and economic study of the selected development option for a mineral project that includes appropriately detailed assessments of applicable Modifying Factors together with any other relevant operational factors and detailed financial analysis that are necessary to demonstrate, at the time of reporting, that extraction is reasonably justified (economically mineable). The results of the study may reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project. The confidence level of the study will be higher than that of a Pre-Feasibility Study.

#### **Historical Estimate**

A historical estimate means an estimate of the quantity, grade or metal or mineral content of a deposit that an issuer has not verified as a current mineral resource or mineral reserve, and which was prepared before the issuer acquiring, or entering into an agreement to acquire, an interest in the property that contains the deposit.

#### **Indicated Mineral Resource**

An indicated mineral resource is that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

#### **Inferred Mineral Resource**

An inferred mineral resource is that part of a mineral resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

## **Measured Mineral Resource**

A measured mineral resource is that part of a mineral resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

## **Mineral Reserve**

A mineral reserve is the economically mineable part of a measured or indicated mineral resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A mineral reserve includes diluting materials and allowances for losses that may occur when the material is mined.

## **Mineral Resource**

A mineral resource is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial materials in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge.

## **Modifying Factors**

Modifying Factors are considerations used to convert Mineral Resources to Mineral Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.

## **Preliminary Feasibility Study or Pre-Feasibility Study**

A Pre-Feasibility Study is a comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where a preferred mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, is established and an effective method of mineral processing is determined. It includes a financial analysis based on reasonable assumptions on the Modifying Factors and the evaluation of any other relevant factors which are sufficient for a Qualified Person, acting reasonably, to determine if all or part of the Mineral Resource may be converted to a Mineral Reserve at the time of reporting. A Pre-Feasibility Study is at a lower confidence level than a Feasibility Study.

## **Probable Mineral Reserve**

A 'probable mineral reserve' is the economically mineable part of an indicated, and in some circumstances, a measured mineral resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical,

economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

### **Proven Mineral Reserve**

A 'proven mineral reserve' is the economically mineable part of a measured mineral resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.

### **Qualified Person**

A 'Qualified Person' means an individual who is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these; has experience relevant to the subject matter of the mineral project and the technical report and is a member or licensee in good standing of a professional association of geoscientists and/or engineers meeting the criteria set out in NI 43-101.