Corporate Update

August 2025

Denison Mines

Uranium Development & Exploration

The Athabasca Basin, Northern Saskatchewan

Mining Journal INTELLIGENCE

Project Pipeline Handbook 2025

#1 Non-Precious Mining Development Project in the World

DML LISTED TSX

DNN LISTED NYSE AMERICAN

Cautionary Statements & References

This presentation and the information contained herein is designed to help you understand management's current views, and may not be appropriate for other purposes. This presentation contains third-party information, such as the uranium market, other issuers, provincial and federal infrastructure and regulations, etc., derived from third-party publications and reports which Denison believes are reliable but have not been independently verified by the Company.

Certain information contained in this presentation constitutes "forward-looking information", within the meaning of the United States Private Securities Litigation Reform Act of 1995 and similar Canadian legislation concerning the business, operations and financial performance and condition of Denison. Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as "plans", "expects", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes", or the negatives and / or variations of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur", "be achieved" or "has the potential to". In particular, this presentation contains forward-looking information pertaining to the results of, and estimates, assumptions and projections provided in, the 2023 Phoenix Feasibility Ftudy ("Phoenix FS"), the 2023 Gryphon PFS Update ("Gryphon PFS Update") and the Waterbury PEA, including future development methods and plans, market prices, costs and capital expenditures; de-risking and project assessment activities, plans and objectives; assumptions regarding Denison's ability to obtain all necessary regulatory approvals to commence development at Wheeler River; Denison's percentage interest in its projects and assumed continuity of its agreements with its joint venture partners and other third parties; production and SABRE development outlook for McClean Lake; and estimates of uranium industry factors, including physical uranium supply and demand. 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.

Forward looking statements are based on the opinions and estimates of management as of the date such statements are made, and they are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of Denison to be materially different from those expressed or implied by such forward-looking statements. Denison faces certain risks, including the proposed use of mining methods which are novel and untested in the Athabasca basin, the inability to permit or develop its projects as currently planned, the inability to secure sufficient financing to pursue its business objectives, the unpredictability of market prices, events that could materially increase costs, changes in the regulatory environment governing the project lands, and unanticipated claims against title and rights to the project. Denison believes that the expectations reflected in this forward-looking information are reasonable but there can be no assurance that such statements will prove to be accurate and may differ materially from those anticipated in this forward looking information. For a discussion in respect of risks and other factors that could influence forward-looking events, please refer to the "Risk Factors" in the Company's Annual Information Form dated March 28, 2025 ("AIF") available on SEDAR+ at www.sedarplus.ca and on EDGAR at www.sec.gov/edgar. These factors are not, and should not be construed as being, exhaustive.

Readers should not place undue reliance on forward-looking statements. The forward-looking information contained in this presentation is expressly qualified by this cautionary statement. Any forward-looking information and the assumptions made with respect thereto speaks only to the effective date of this presentation. Denison does not undertake any obligation to publicly update or revise any forward-looking information after such date to conform such information to actual results or to changes in its expectations except as otherwise required by applicable legislation.

Cautionary Note to United States Investors Concerning Estimates of Mineral Resources and Mineral Reserves: This presentation may use terms such as "measured", "indicated" and/or "inferred" mineral resources and "proven" or "probable" mineral reserves, which are terms defined with reference to the guidelines set out in the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") CIM Definition Standards on Mineral Resources and Mineral Reserves ("CIM Standards"). The Company's descriptions of its projects 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.

Non-IFRS Financial Measures: This presentation includes certain financial measures and ratios that are not defined under IFRS, including but not limited to: working capital. The Company has calculated these measures consistently for all periods presented. The Company believes that, in addition to financial measures and ratios prepared in accordance with IFRS, certain investors use these non-IFRS financial measures and ratios to evaluate the Company's performance. However, the measures do not have a standardized meaning under IFRS and may not be comparable to similar financial measures disclosed by other companies. Accordingly, non-IFRS financial measures should not be considered in isolation or as a substitute for measures and ratios of the Company's performance prepared in accordance with IFRS.

Qualified Persons

The disclosure of a scientific or technical nature within this presentation, including the disclosure of mineral resources, mineral reserves, and the results of the Phoenix FS, Gryphon PFS Update and Waterbury PEA, was reviewed and approved by Chad Sorba, P.Geo, Vice President Technical Services & Project Evaluation, a Qualified Person in accordance with the requirements of NI 43-101.

Technical Reports

- For further details regarding the **Wheeler River project**, please refer to the Company's press release dated June 26, 2023 announcing the results of the Phoenix FS and Gryphon PFS Update and the technical report titled *"NI 43-101 Technical Report on the Wheeler River Project, Athabasca Basin, Saskatchewan, Canada*" with an effective date of June 23, 2023 ("Wheeler River Technical Report").
- For further details regarding the **Waterbury Lake project**, please refer to the Company's press release dated November 17, 2020 and the technical report *titled "Preliminary Economic Assessment for the Tthe Heldeth Túé (J Zone) Deposit, Waterbury Lake Property, Northern Saskatchewan, Canada"* with an effective date of October 30, 2020 ("Waterbury PEA"). **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.** The PEA includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized**. Mineral resources are not mineral reserves and do not have demonstrated economic viability. Scheduled tonnes and grade do not represent an estimate of mineral reserves.**
- For further details regarding the **Midwest project**, please refer to the Company's press release dated August 6, 2025. **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.** The PEA includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized**. Mineral resources are not mineral reserves and do not have demonstrated economic viability. Scheduled tonnes and grade do not represent an estimate of mineral reserves.**

For a description of the data verification, assay procedures and the quality assurance program and quality control measures applied by Denison, please see Denison's AIF. A copy of the foregoing is available on Denison's website and under its profile on SEDAR+ and on EDGAR.

Key Investment Highlights[1]:
Advanced Athabasca Basin uranium developer with unique asset mix

Portfolio of four low-cost uranium development projects
- Phoenix, Gryphon, Midwest and THT/Waterbury all projected within UxC's "First Tier" of global assets[2]

#1

Phoenix combines lowest-cost mining method with Athabasca Basin high-grades
- Ranked #1 non-precious mining development project globally in 2025 by Mining Journal Intelligence
- Flagship In-Situ Recovery ('ISR') project with final federal Environmental Impact Statement accepted by Canadian Nuclear Safety Commission ('CNSC')
- Technical de-risking completed; C$32M invested in detailed design engineering and long-lead procurement[3]
- First production targeted by mid 2028

Ownership interest in strategic regional asset with McClean Lake mill and producing mine
- Excess licensed milling capacity, with approval for expanded tailings management facility
- Announced 2025 mining restart at McClean North deposit by Orano Canada

High-potential exploration portfolio and interests in key mines / projects operated by "majors"
- Large Athabasca Basin exploration portfolio, including Moon Lake South and Johnston Lake properties
- Minority interests in Cameco-JCU's Millennium project and Orano-JCU's Kiggavik project

Strong balance sheet with ~CAD$315M in cash, physical uranium and investments[4]
- Denison's financial and liquid assets on hand, relative to Feasibility Study initial capex for flagship development project (~$CAD400M)[5] puts the company in a strong position

Focused on the infrastructure-rich Eastern Athabasca Basin in Saskatchewan, Canada

Nuclear energy commitments: 30+ nations pledge to triple nuclear energy capacity by 2050[6]

NOTES: (1) See supporting slides for details. (2) UxC's Uranium Production Cost Study dated September 2023. (3) The amount invested in detailed design engineering and long lead procurement is a non-GAAP measure, and reflects spend on items reported in property plant and equipment as of Jun. 30, 2025, as well as evaluation expenditures incurred subsequent to the completion of the Feasibility Study. (4) For additional details see financial statements and MD&A for the period ended June 30, 2025. (5) Based on Denison's effective 95% ownership. (6) World Nuclear News article dated November 13, 2024

Diversified Athabasca Basin asset base with superior development leverage

95%[1]

effective interest in
Flagship
Wheeler River project

Development-stage project (Phoenix + Gryphon deposits)

Largest Mineral Reserves of undeveloped uranium projects in the infrastructure rich eastern Athabasca Basin

2023 Phoenix Feasibility Study[2]

Final Environmental Impact Statement accepted by CNSC and received Provincial EA Approval[3,4]

22.5%

interest in
Strategic McClean Lake Uranium mill & mines

~10% of global uranium production processed through mill[5]

Mining restarted June 2025 using SABRE mining[6]

Excess licensed milling capacity

25.17%

interest in
High-grade Midwest project close to McClean mill

2025 Preliminary Economic Assessment ('PEA') for ISR mining at Midwest Main deposit[7]

High-grades and close proximity to the McClean Lake mill support robust PEA economics

Also being evaluated for potential development with SABRE mining method

70.55%

interest in
Well-situated Waterbury Lake project

PEA stage development project for ISR mining proximal to McClean mill[8]

Tthe Heldeth Túé ('THT') deposit highlights potential for future development project pipeline[8]

Successful completion of 2023 ISR field test[9]

50% ownership of JCU[10], adding portfolio of interests including sizeable share of development-stage assets operated by "majors"

JCU holds various Athabasca Basin exploration project interests, plus 30.099% in Millennium (Cameco) and 33.8118% in Kiggavik (Orano)

~384,000
hectares of exploration ground[11]

NOTES:

(1) Denison's effective interest in Wheeler River includes 90% held directly and 5% held indirectly through its 50% ownership of JCU (Canada) Exploration Company, Limited.

(2) See the Wheeler River Technical Report titled "NI 43-101 Technical Report on the Wheeler River Project, Athabasca Basin, Saskatchewan, Canada" dated June 23, 2023.

(3) See news release dated November 25, 2024 and the Canadian Impact Assessment Registry

(4) See news release dated August 5, 2025.

(5) Derived from UxC's Uranium Market Outlook dated Q2'2025

(6) See news release dated July 17, 2025.

(7) See news release dated August 6, 2025.

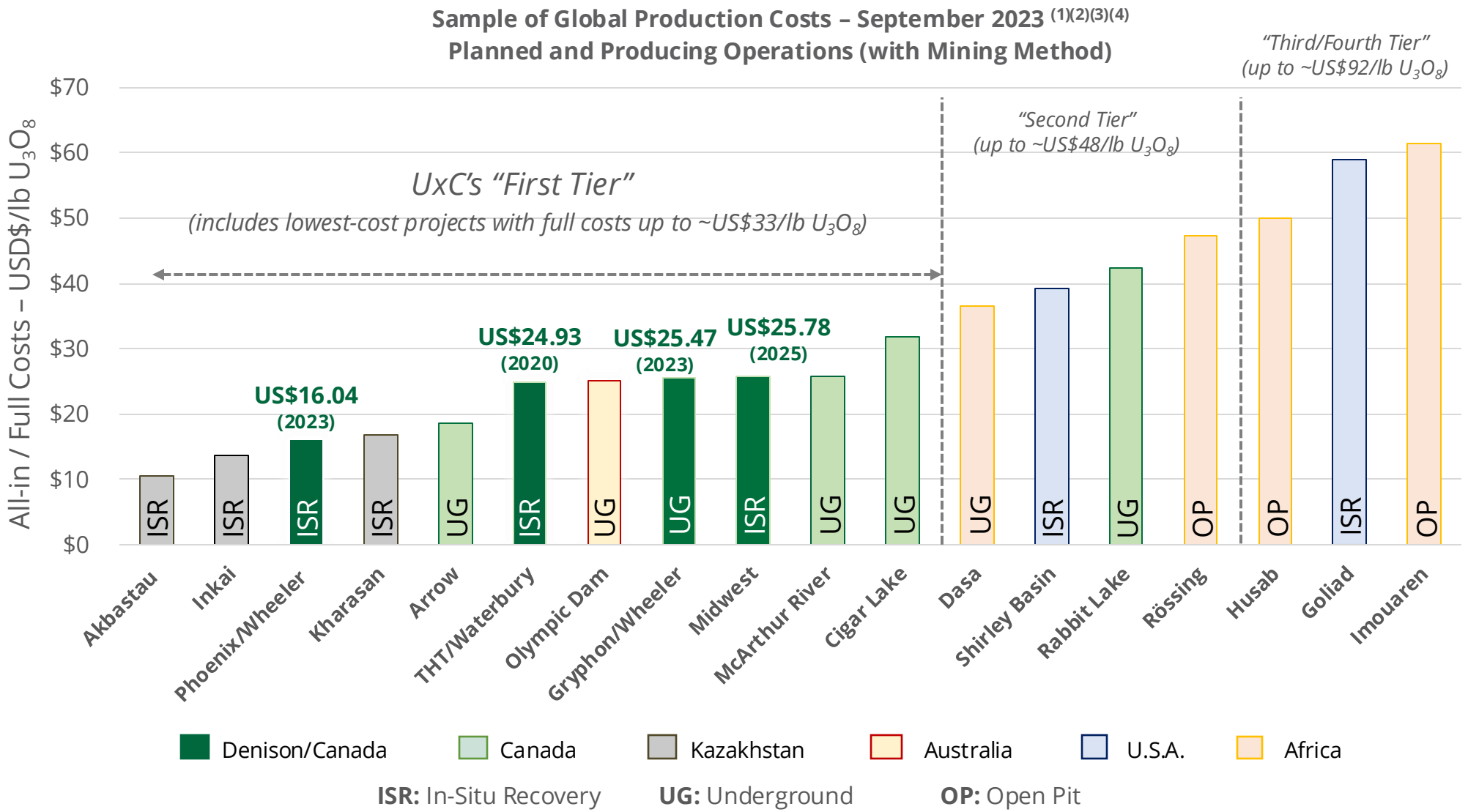
(8) Refer to the Waterbury Lake Technical Report titled "Preliminary Economic Assessment for the Tthe Heldeth Túé (J Zone) Deposit, Waterbury Lake Property, Northern Saskatchewan, Canada" dated October 30, 2020.

(9) See news release dated November 6, 2023.

(10) See news release dated August 3, 2021.

(11) Denison direct land position shown as of June 30, 2025; excludes the land positions held by JCU.

Denison's development portfolio projects:
Four assets amongst the lowest all-in cost assets of UxC's First Tier



NOTES:

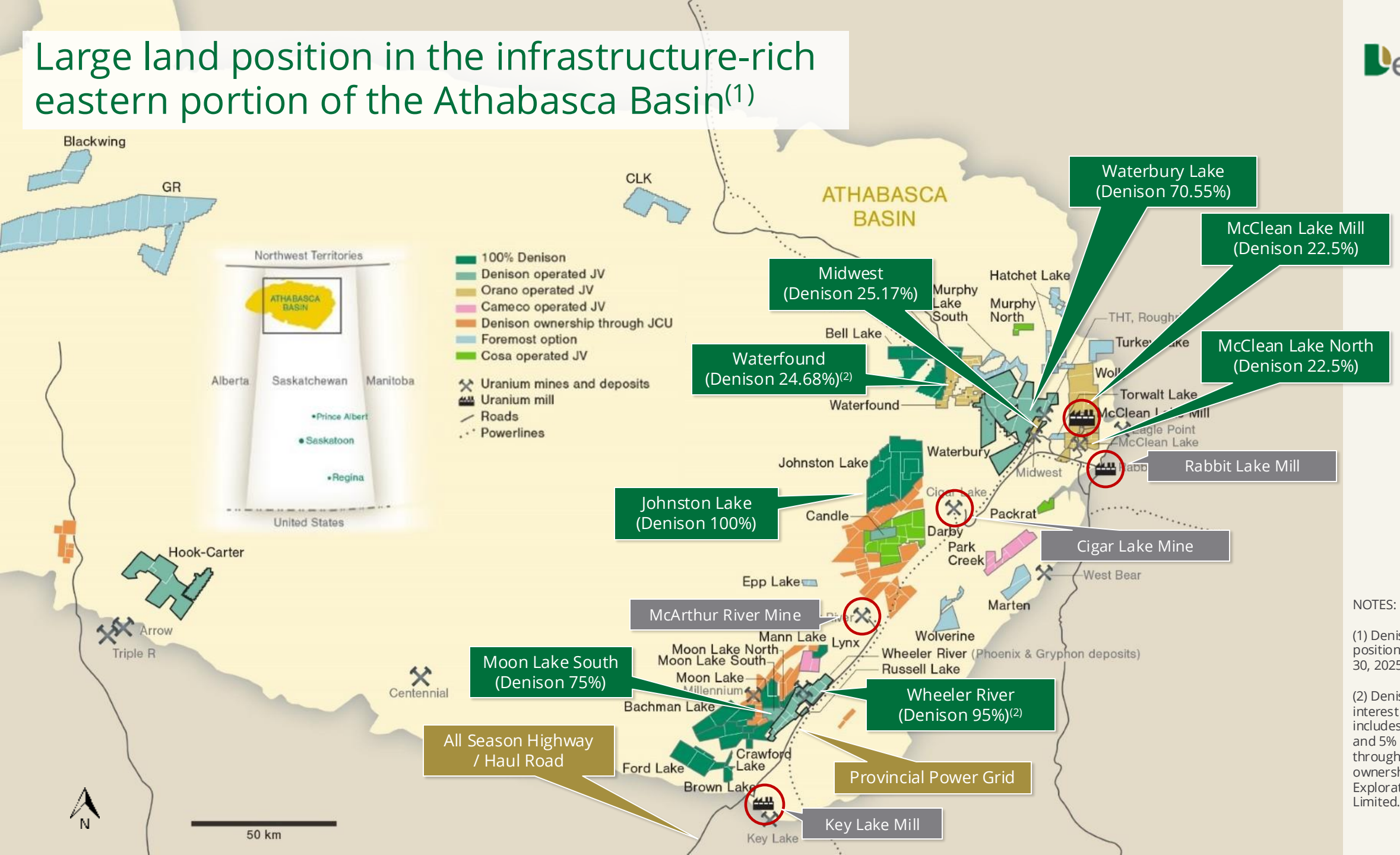
(1) Chart data, including "full costs" and UxC's categorization of production cost "tiers", have been derived from UxC's estimates of worldwide production costs from the Uranium Production Cost Study dated September 2023.

(2) For Phoenix and Gryphon, see the Wheeler River Technical Report titled "NI 43-101 Technical Report on the Wheeler River Project, Athabasca Basin, Saskatchewan, Canada" dated June 23, 2023 and Denison's news release on June 26, 2023.

(3) For THT/Waterbury, refer to the Waterbury Lake Technical Report titled "Preliminary Economic Assessment for the Tthe Heldeth Túé (THT) (J Zone) Deposit, Waterbury Lake Property, Northern Saskatchewan, Canada" dated October 30, 2020 and Denison's news release on November 17, 2020.

(4) For Midwest, refer to Denison's news release dated August 6, 2025.

Large land position in the infrastructure-rich eastern portion of the Athabasca Basin(1)



NOTES:

(1) Denison direct land position shown as of June 30, 2025.

(2) Denison's effective interest in Wheeler River includes 90% held directly and 5% held indirectly through its 50% ownership of JCU (Canada) Exploration Company, Limited.

Robust Balance Sheet with ~CAD$315M[1] in cash, physical uranium and investments

2.2M lbs U_3O_8
in holdings of
physical uranium at June 30, 2025

Market value **~CAD$236M** (US$78.50/lb U_3O_8)[1]

Acquired at average cost of **USD$29.66/lb U_3O_8**[1]

Long-term holding expected to enhance access to future project financing for flagship Wheeler River Project[2]

All material received and held in licenced North American storage facilities (Cameco + ConverDyn)

CAD$55M
in
cash and cash equivalents[1]

CAD$25M
investments in
uranium equities and convertibles[3]

No Debt[4]

Balance sheet position, relative to initial project capex for flagship development asset (Phoenix), is strong among uranium development-stage peers

NOTES:

(1) As of Jun. 30, 2025. For additional details see financial statements and MD&A for the period ended Jun. 30, 2025.

(2) See Denison's news releases dated March 15, 2021, March 22, 2021, and April 1, 2021.

(3) As of Jun. 30, 2025, for additional details see financial statements and MD&A for the period ended Jun. 30, 2025; includes investments in uranium equities and convertible debentures.

(4) The company has no debt drawn as of Jun. 30, 2025; however, the company has a letters of credit facility in place that is used to secure reclamation letters of credit, as more fully described in the financial statements and MD&A.

95% owned flagship Wheeler River project[1][2]

Potential to Deliver Meaningful Production When the Market Needs It

Two

premier and viable development assets

Phoenix – In-Situ Recovery ("ISR") operation with on-site processing to finished U_3O_8

Gryphon – contributes additional production via conventional underground mining with assumed toll milling at 22.5% Denison owned McClean Lake mill

~16.5 years

Aggregate operating
Mine life[3]

CAD$419M

Estimated (100% basis)
Initial CAPEX (Phoenix)

Phoenix advancing towards final investment decision

- Provincial EA approved[6]
- EIS accepted as final by CNSC[4]
- CNSC Hearing dates set for late 2025[5]
- Total engineering ~80% complete[7]
- Rigorous multi-year technical de-risking
- 2022 Feasibility Field Test successfully recovered uranium bearing solution[8]

Gryphon expected to be funded from internal cash flows

- Phoenix cash flow expected to fund Gryphon CAPEX
- Project benefits from existing or planned Denison-owned infrastructure

106.4M lbs U_3O_8

(combined, 100% basis)[1]
Proven & Probable Reserves

2-year Construction

Planned construction period for Phoenix prior to first production

Mid-2028

Planned Production Start-up for Phoenix

NOTES:

(1) Refer to the Wheeler River Technical Report titled "NI 43-101 Technical Report on the Wheeler River Project, Athabasca Basin, Saskatchewan, Canada" dated June 23, 2023.

(2) Denison increased its effective interest in Wheeler River as part of the acquisition of 50% of JCU (Canada) Exploration Company, Limited. See Denison's news release dated August 3, 2021.

(3) Reflects 10-year mine life estimated for Phoenix and 6.5-year mine life estimated for Gryphon.

(4) See news release dated November 25, 2024 and Canadian Impact Assessment Registry

(5) See news release dated February 27, 2025 and Canadian Impact Assessment Registry

(6) See news release dated August 5, 2025.

(7) As of June 30, 2025. For additional details see financial statements and MD&A for the period ended June 30, 2025.

(8) See news releases dated October 17, 2022 and November 22, 2022..

Phoenix In-Situ Recovery ("ISR") Feasibility Study (2023)[1]:

Reflects rigour of multi-year technical de-risking and delivers impressive economic results

70.5M
lbs U_3O_8
@
11.4%
U_3O_8
Measured & Indicated Mineral Resources
(280,200 tonnes, 100% basis)

One of the highest-grade undeveloped uranium deposits globally

C$1.56B
estimated
Base-case post-tax $NPV_{8\%}$ (100% basis)[3]

C$419M
estimated
Initial CAPEX
(100% basis)

90.0%
estimated
Base-case post-tax IRR[3]

3.7 to 1
Base-case post-tax NPV to initial capital cost ratio

Including...
56.3M
lbs U_3O_8
@ 46.0% U_3O_8
M&I mineral resources for **Zone A high-grade domain**

US$6.28
/ lbs U_3O_8
average
Cash Operating Costs

(C$8.51/lb U_3O_8)

US$16.04
/ lbs U_3O_8
average
All-in Cost[4]

(C$21.73/lb U_3O_8)

PHOTOS:

Phoenix Feasibility Field Test (FFT) facilities during operations in 2022.

NOTES:

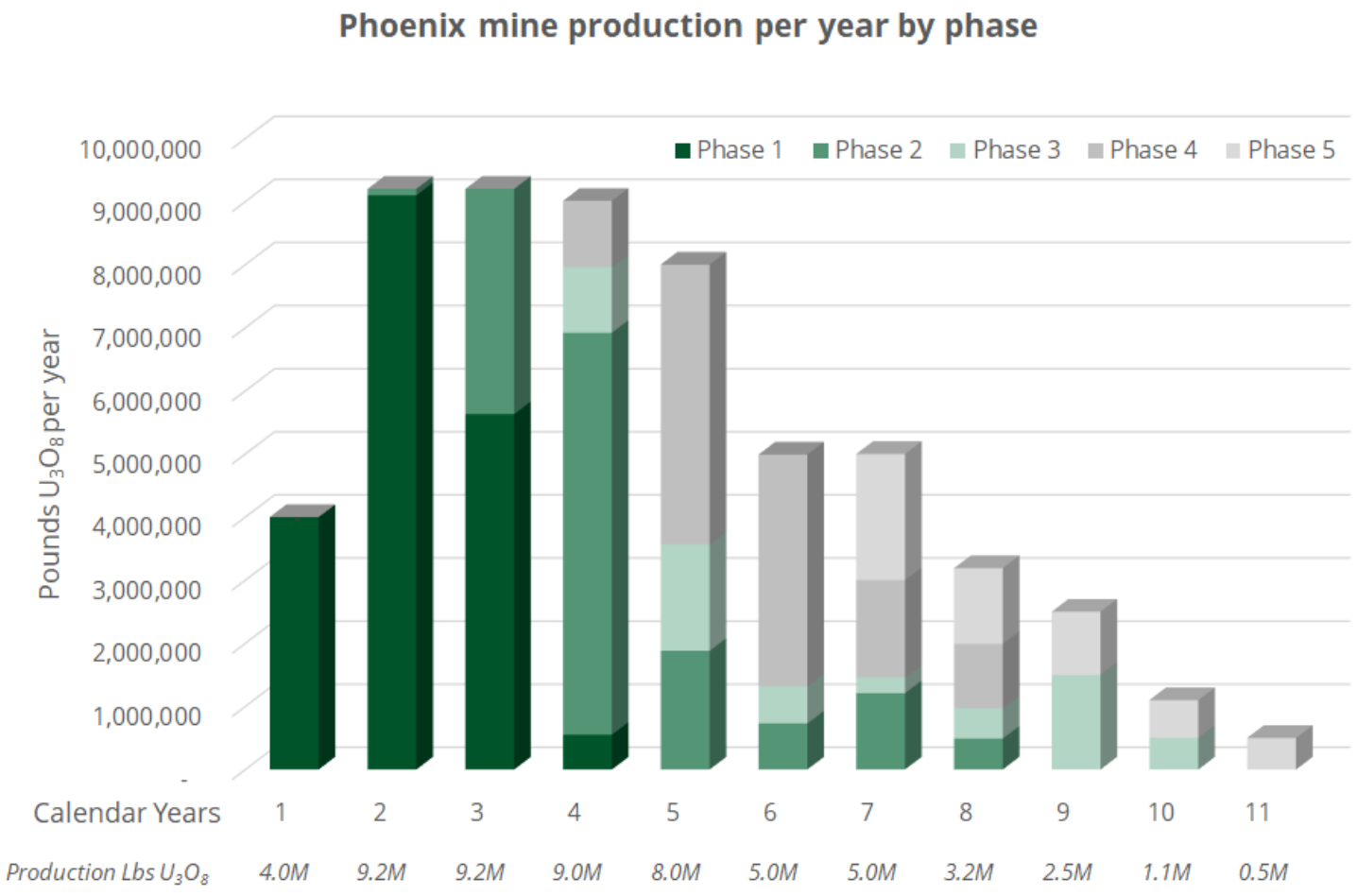
(1) See the Wheeler River Technical Report titled "NI 43-101 Technical Report on the Wheeler River Project, Athabasca Basin, Saskatchewan, Canada" dated June 23, 2023.

(2)Mining Journal Project Pipeline Handbook 2025

(3) NPV and IRR are calculated to the start of construction activities for the Phoenix operation and excludes $67.4 million in pre-FID expenditures. Post-tax NPV, IRR and payback period are based on the "adjusted Post-tax" scenario, which includes the benefit of entity level tax attributes which are expected to be available and used to reduce taxable income from the Phoenix operation. See Wheeler River Technical Report for details.

(4) All-in cost is estimated on a pre-tax basis and includes all project operating costs, capital costs post-FID, and decommissioning costs divided by the estimated number of pounds U_3O_8 to be produced. See Wheeler River Technical Report and Denison's news release dated June 26, 2023 for details.

Phoenix ISR Feasibility Study (2023)[1]:
Optimized production profile based on detailed ISR mine planning efforts



Robust economics

Expected to absorb cost inflation + adjustments from detailed design

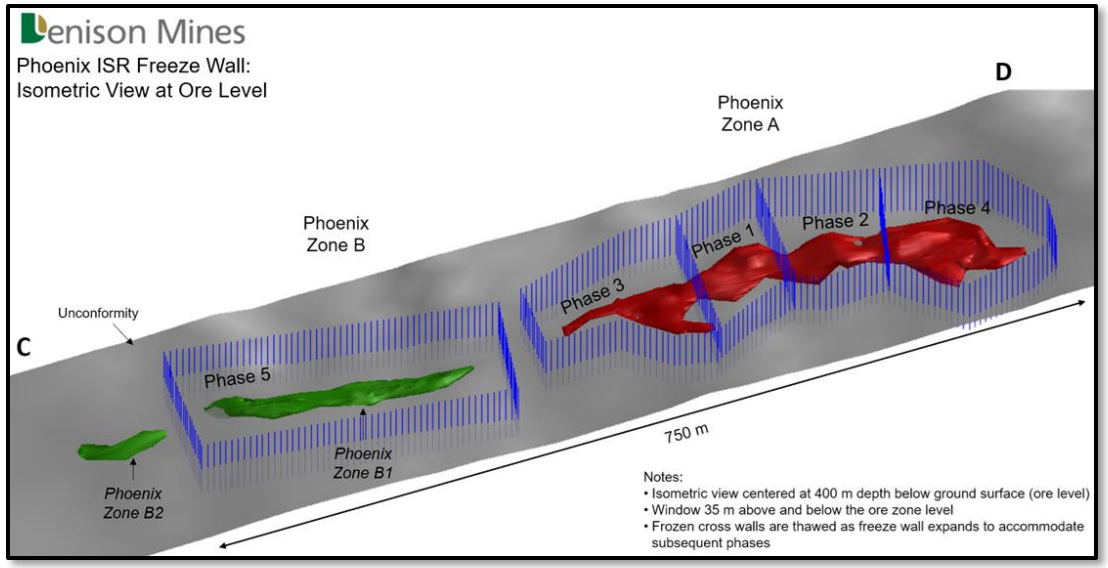
First production targeted by the first half of 2028

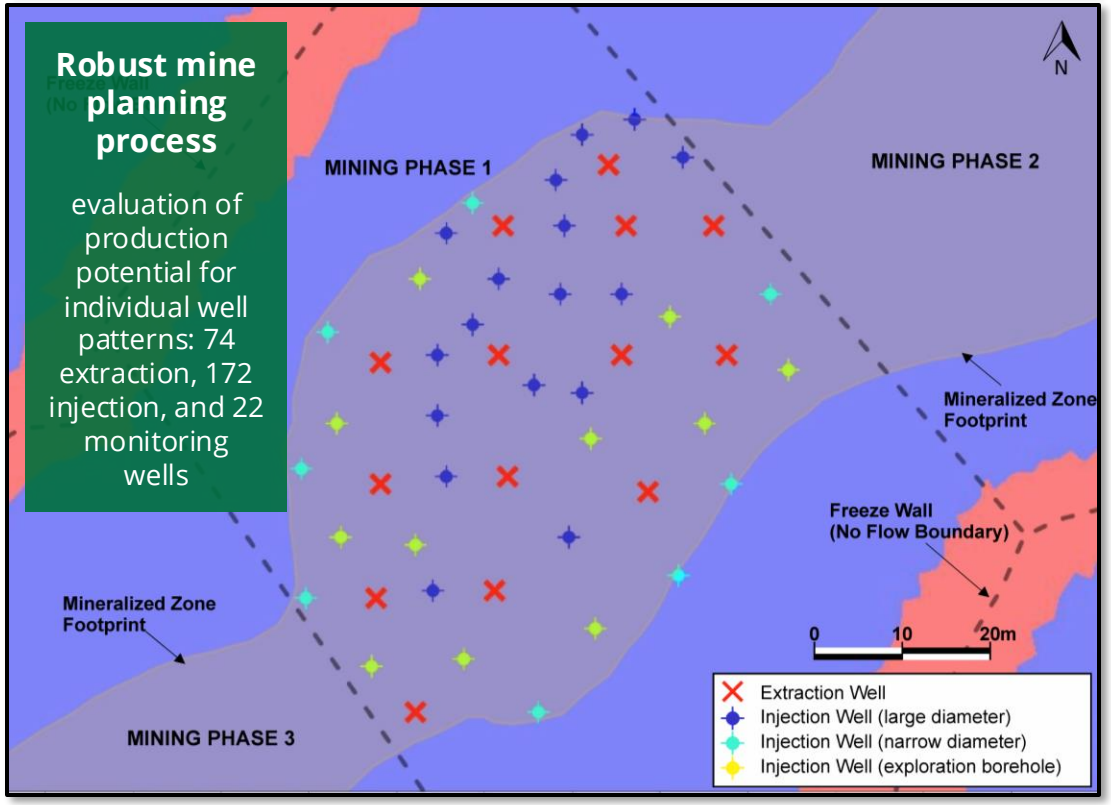
Planned 2-year construction period

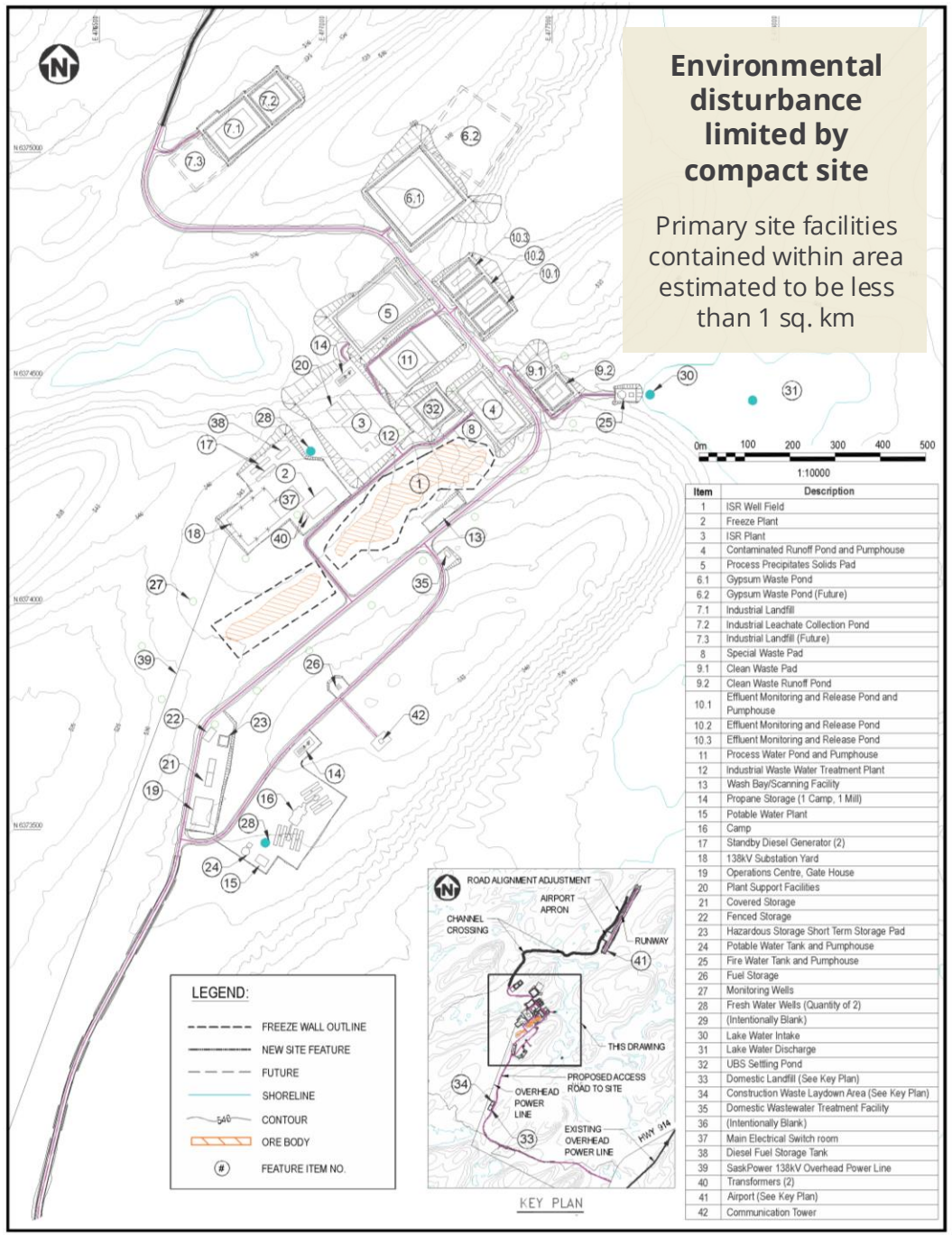
56.7 million lbs U_3O_8 in proven and probable reserves (219,000 tonnes at 11.7% U_3O_8)

Assumptions / Results[1]	Base Case
Selling price / lb U_3O_8	US$66-US$70
USD:CAD FX Rate	1.35
Pre-tax $NPV_{8\%}$[2][4] (100%)	**$2.34 billion**
Change from 2018 PFS	+150%
Pre-tax payback period[3][5]	**~10 months**
Pre-tax IRR[2][6]	**106%**

NOTES: (1) Refer to the Wheeler River Technical Report titled "NI 43-101 Technical Report on the Wheeler River Project, Athabasca Basin, Saskatchewan, Canada" dated June 23, 2023; (2) NPV and IRR are calculated to the start of construction activities for the Phoenix operation, and excludes $67.4 million in pre-FID expenditures; (3) Payback period is stated as number of months to payback from the start of uranium production; (4) Post-tax NPV is estimated to be $1.43 billion ($1.56 billion adjusted) in the base-case; (5) Post-tax payback period is estimated to be 11 months (10 months adjusted) in the Base-Case; (6) Post-tax IRR is estimated to be 82.3% (90.0% adjusted) in the Base-Case.







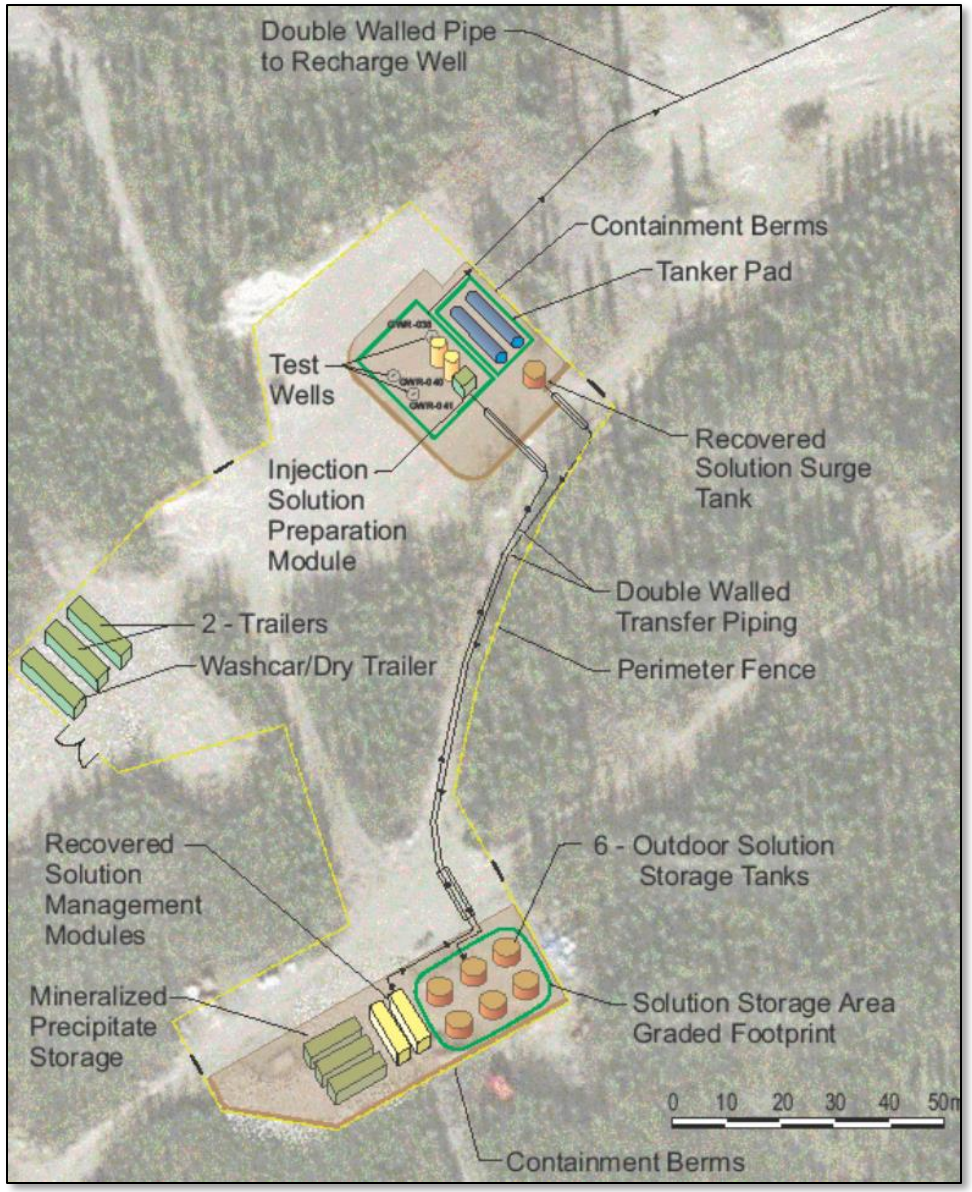
2023 Phoenix Feasibility Study

Provides excellent basis for detailed engineering design efforts to support a future final investment decision

NOTES:

(1) Refer to the Wheeler River Technical Report titled "NI 43-101 Technical Report on the Wheeler River Project, Athabasca Basin, Saskatchewan, Canada" dated June 23, 2023.

In-Situ Recovery Feasibility Field Test (FFT):
Successful first-of-its-kind ISR field test in the Athabasca Basin[1, 2]



The Phoenix FFT was designed to validate and inform various Feasibility Study (FS) elements for use of **In-Situ Recovery (ISR)** mining, including production and remediation profiles, and is planned to occur in three phases. The first two phases supported the 2023 Phoenix FS.

Leaching ✓
Completed successful injection of acidic solution and recovery of uranium bearing solution using a portion of the test pattern installed at Phoenix in 2021[3].

Neutralization ✓
Completed successful injection of mild alkaline solution to reverse the leaching process and return test area to protective conditions[4].

Recovered Solution Management ✓
Completed compliance phase to separate recovered solution into mineralized precipitates (temporarily stored on site) and neutralized treated solution (injected into sub-surface)[5].

PHOTO:

Inside FFT coverall structure during commissioning – including view of commercial scale test wells, monitoring wells, and injection solution preparation module (left) and plan map of Phoenix FFT site (right).

NOTES:

(1) See Denison's news release dated July 12, 2022.

(2) See Denison's news release dated August 8, 2022.

(3) See Denison's news release dated October 17, 2022.

(4) See Denison's news release dated December 12, 2022.

(5) See Denison's news release dated November 2, 2023.

Phoenix De-Risking and Operational Readiness

Progressing the high-grade, low-cost Phoenix ISR project towards a construction decision & execution

Significant de-risking and engineering investment to position for execution

- ✓ **High-grade, low-cost project** justified technical studies and extensive test work, detailed engineering, permitting and team building during period prior to improved uranium market
- ✓ **Total engineering ~80% complete**, including several scopes planned for the first year of construction approaching 100% total engineering[1]

Leading permitting & community engagement

- ✓ **Final stages of permitting,** with CNSC hearings set for License to Construct and EIS approval in Oct. & Dec. 2025[2]
- ✓ **Received Saskatchewan EA approval** for Phoenix, effectively harmonized with federal EA pending CNSC approval[3]
- ✓ **Multiple impact-benefit type agreements** with Indigenous nations and northern communities, plus leading engagement practices[4]

Advanced Procurement & Construction Planning

- ✓ **Long-lead procurement commenced in 2023** and is well progressed, with project benefiting from significant regional infrastructure already in place (power line, roads)[1]
- ✓ **Construction planning** continues to estimate ~2-year timeline with anticipated start in early 2026 and first year of construction focused on civil works, key electrical infrastructure, freeze wells, and concrete slabs and enclosures for the plant[1]

Project Financing Progress

- ✓ **Physical uranium holdings** intended to support future project financing and offer significant financial flexibility[1]
- ✓ Debt-free[5]
- ✓ Ongoing evaluation of various options to finance Phoenix construction
- ✓ **Final investment decision (FID)** to be considered upon receipt of remaining permits and licenses

Commercial Strategy Aligned with Project Financing Objectives and Asset Base

- ✓ Active engagement with future customers for potential commercial contracting
- ✓ Multiple sources of supply is a differentiator: Physical U_3O_8, McClean Lake North, & future Phoenix production

NOTES:

(1) For additional details see financial statements and MD&A for the period ended Jun. 30, 2025.

(2) See Denison's news releases dated February 27, 2025.

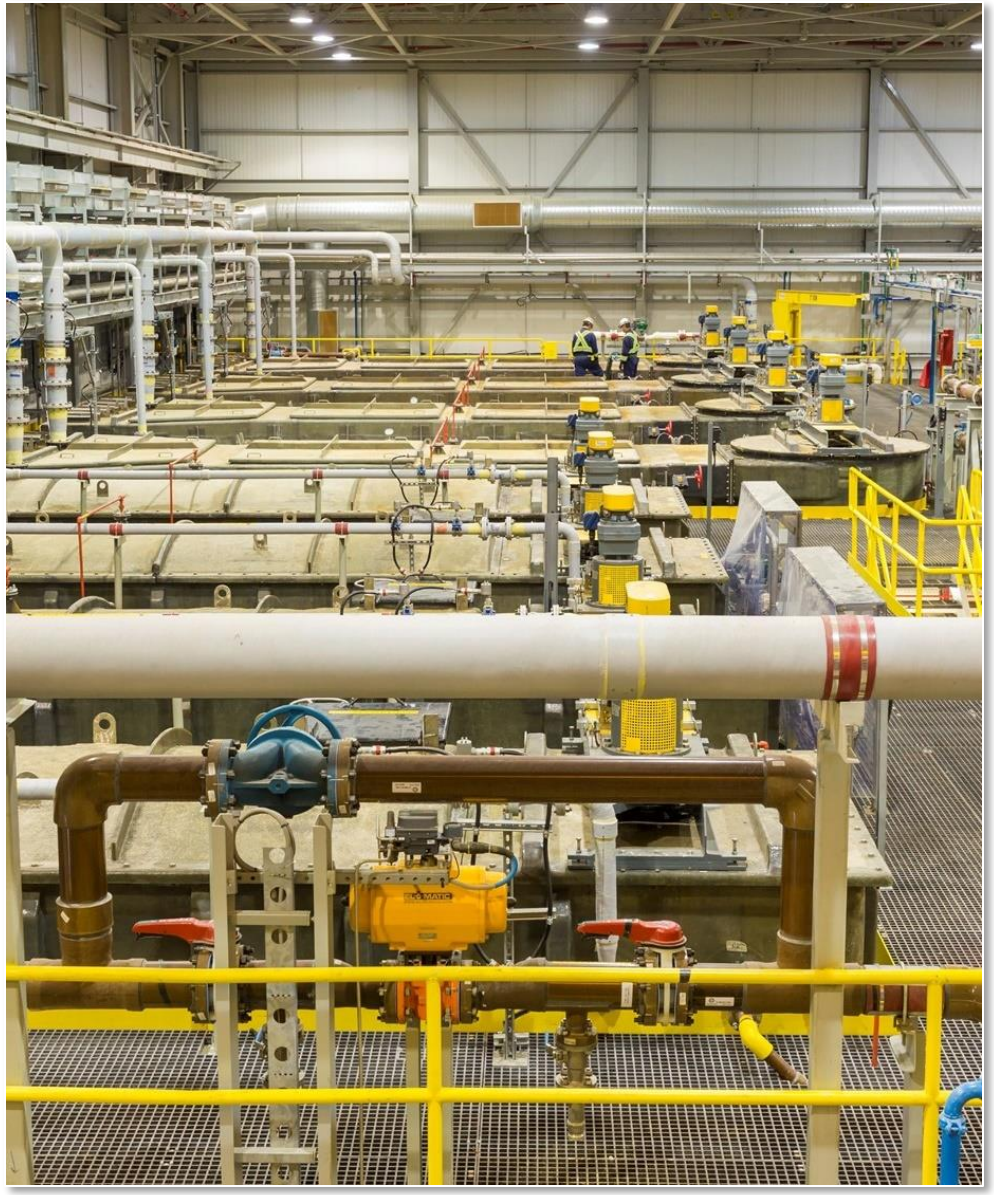
(3) See Denison's news releases dated August 5, 2025.

(4) See news releases dated September 27, 2023, July 11, 2024, and October 20, 2022, and MD&A for the period ended Dec. 31, 2022.

(5) The company has no debt drawn as of Jun. 30, 2025; however, the company has a letters of credit facility in place that is used to secure reclamation letters of credit, as more fully described in the financial statements and MD&A.

Gryphon Underground ("UG") Pre-Feasibility Study Update (2023):

Provides Denison with additional source of low-cost production to reinvest Phoenix cash flows[1]



61.9M
lbs U_3O_8
@
1.7%
U_3O_8

Indicated Mineral Resources
(1,643,000 tonnes, 100% basis)

Moderate grade allows low-cost conventional UG mining approach

Plus...
1.9M
lbs U_3O_8

Inferred mineral resources
(73,000 tonnes @ 1.2% U_3O_8, 100% basis)

C$864M

estimated

Base-case after-tax $NPV_{8\%}$ (100% basis)[2]

37.6%

estimated

Base-case after-tax IRR[2]

US$12.75
/ lbs U_3O_8

average

Cash Operating Costs

(C$17.27/lb U_3O_8)

C$737M

estimated

Initial CAPEX
(100% basis)

2023 PFS Update

Scope limited to cost update and minor schedule optimization

US$25.47
/ lbs U_3O_8

average

All-in Cost[3]

(C$34.50/lb U_3O_8)

PHOTO:

View inside the SX circuit at Denison's 22.5% owned McClean Lake mill, which is assumed to toll mill production from the Gryphon UG operation

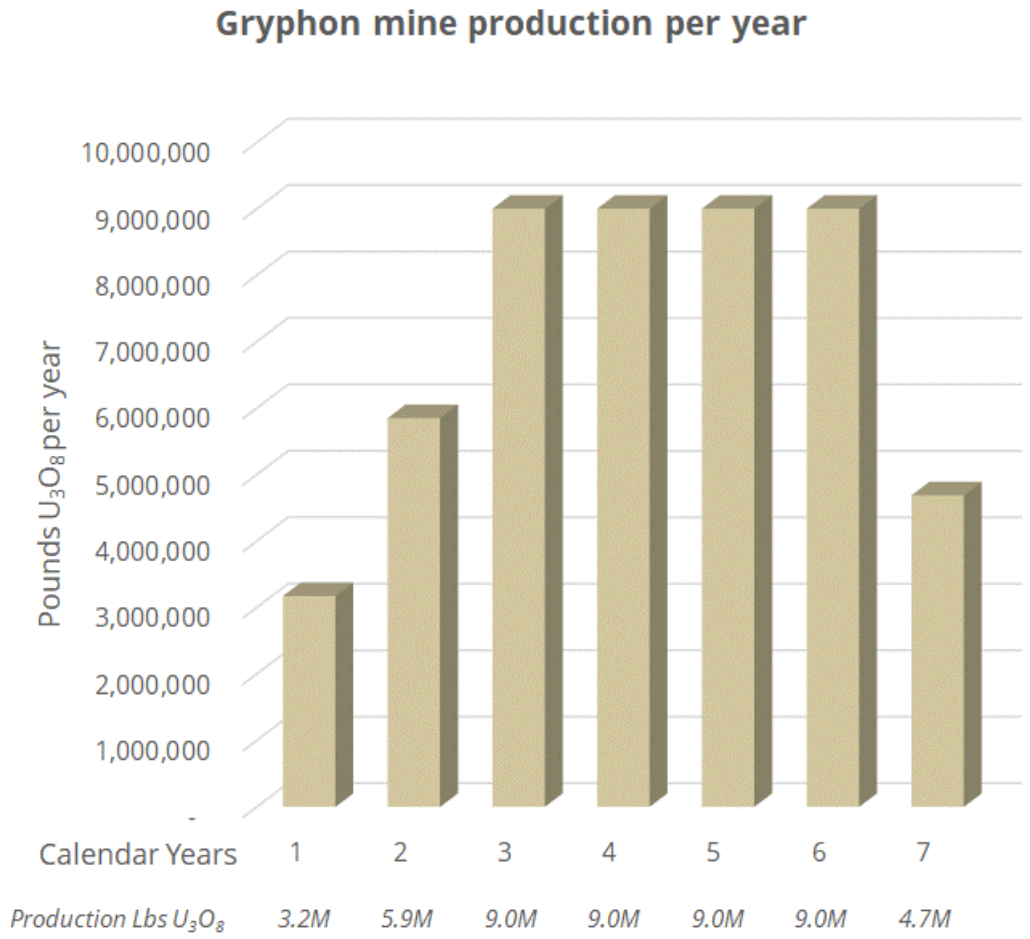
NOTES:

(1) See the Wheeler River Technical Report titled "NI 43-101 Technical Report on the Wheeler River Project, Athabasca Basin, Saskatchewan, Canada" dated June 23, 2023.

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

(3) All-in cost is estimated on a pre-tax basis and includes all project operating costs, capital costs post-FID, and decommissioning costs divided by the estimated number of pounds U_3O_8 to be produced. See Wheeler River Technical Report and Denison's news release dated June 26, 2023 for details.

Gryphon UG Pre-Feasibility Study Update (2023)[1]:
Capital and operating costs updated from 2018 PFS + minor scheduling optimizations



Benefits from existing or planned Denison-owned infrastructure

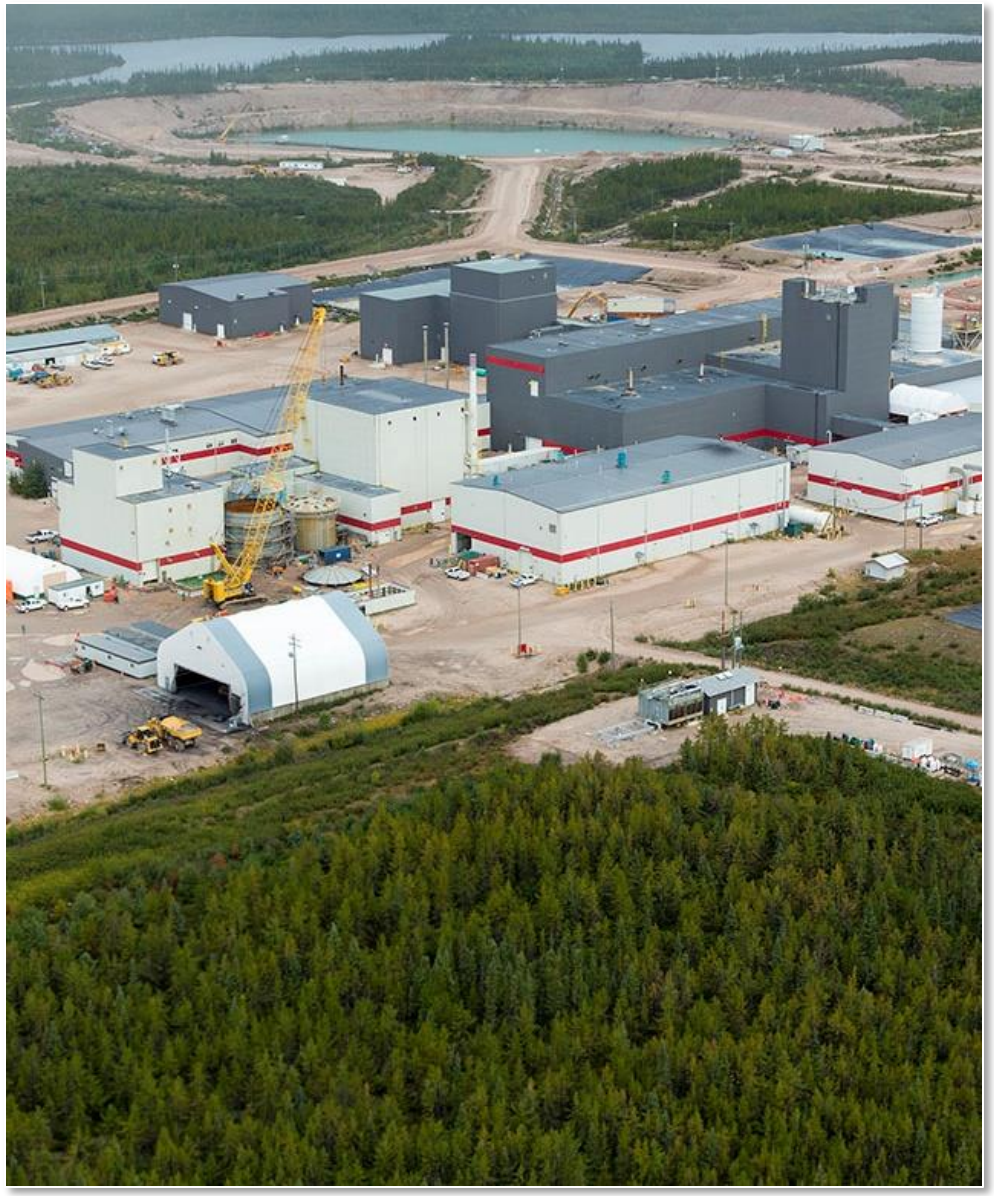
Payback period under 2-years
for pre- and post-tax base-case scenarios

49.7 million lbs U_3O_8 in probable reserves
(1,275,000 tonnes at 1.8% U_3O_8)

Assumptions / Results[1]	Base Case
Selling price / lb U_3O_8	US$75
USD:CAD FX Rate	1.35
Pre-tax $NPV_{8\%}$[2][4] (100%)	**$1.43 billion**
Change from 2018 PFS	+148%
Pre-tax payback period[3][5]	**~20 months**
Pre-tax IRR[2][6]	**41.4%**

NOTES: (1) Refer to the Wheeler River Technical Report titled "NI 43-101 Technical Report on the Wheeler River Project, Athabasca Basin, Saskatchewan, Canada" dated June 23, 2023; (2) NPV and IRR are calculated to the start of construction activities for the Gryphon operation, and excludes $56.5 million in pre-FID expenditures; (3) Payback period is stated as number of months to payback from the start of uranium production; (4) Post-tax NPV is estimated to be $864.2 million in the Base Case; (5) Post-tax payback period is estimated to be 23 months in the Base-Case; (6) Post-tax IRR is estimated to be 37.6% in the Base Case.

22.5% Denison-owned McClean Lake Mill:
Strategic asset uniquely positioned to support new sources of supply from JV owners



~10%
of global uranium production(1)

2024 operating production of 16.9M lbs U_3O_8 from Cigar Lake under toll milling agreement(3)

24M
lbs U_3O_8

Licensed annual mill capacity(2)

~7M
lbs U_3O_8

Excess licensed mill capacity

Based on 2024 production from Cigar Lake

10-Year
CNSC Operating License(2)

Renewed in 2017 for operations up to June 30, 2027

Orano
Canada Inc.

French nuclear giant serves as site operator and is owner of 77.5% interest

750km
north of Saskatoon(4)

Accessible by road over all-weather highways and by air via Points North

+50M
lbs U_3O_8

Historic uranium production from mined McClean Lake deposits (JEB + Sue A, B, C, & E)(4)

TMF
Expansion Approved(2)

CNSC approval obtained to increase tailings capacity

PHOTO:

Aerial view of Denison's 22.5% owned McClean Lake mill facility

NOTES:

(1) Per UxC's Q1 2025 Uranium Market Outlook and Cameco's management's discussion and analysis dated February 20, 2025.

(2) See Denison's news release dated January 19, 2022.

(3) Denison monetized its share of tolling revenues from the Cigar Lake toll milling agreement. See Denison's news releases dated February 1, 2017 and February 13, 2017. Please also refer to Denison's current Annual Information Form and Financial Statements and Management, Discussion and Analysis for additional details related to the toll milling agreement.

(4) See Denison's current Annual Information Form for additional details regarding the McClean Lake mill facility.

22.5% Denison-owned McClean Lake Mine:

Mining restart achieved via SABRE mining method at McClean North deposit

SABRE Patented & Operating

Successful 5-year test mining program for "Surface Access Borehole Resource Extraction" (SABRE) mining method

Produced ~1,500 tonnes of high-value ore from McClean Lake North in 2021(1)

SABRE is property of McClean Lake JV with patent issued in 2016

Restarted Mining June 2025

Mining restarted from the McClean North deposit. ~250t of high-grade ore (+10% U_3O_8) estimated to have been recovered from the first mining cavity.(2)

17.8M
lbs U_3O_8
Indicated Mineral Resources(3) (100% basis)

Combined 374,900 tonnes @ 2.2% U_3O_8

7.6M
lbs U_3O_8
Inferred Mineral Resources(3) (100% basis)

Combined 510,900 tonnes @ 0.68% U_3O_8

2025

Activities

Mining activities for 2025 are planned to include eight SABRE cavities(4)

Orano

Canada Inc.

French nuclear giant serves as project operator and is owner of 77.5% interest

8.67% U_3O_8
over 13.5 metres

Discovered "new" mineralization at McClean South(5) in 2021 + expanded footprint in 2022 and 2025(6)

PHOTO:

2021 SABRE test mining program in action, with view of specialized mining pipes in inset photo.

NOTES:

(1) See Denison's news release dated November 3, 2021.

(2) As reported by Orano Canada on January 29, 2024 Orano Canada SABRE announcement and Denison's news release dated July 17, 2025 SABRE Mining Restart.

(3) See Denison's current AIF for additional details regarding the McClean Lake deposits and SABRE mining method.

(4) See Denison's financial statements and MD&A for the three months ended June 30, 2025 for details.

(5) See Denison's current AIF for additional details.

(6) See Denison's news releases dated September 8, 2022 and July 21, 2025.

25.17% Denison-owned Midwest Property:

In-Situ Recovery PEA for Midwest Main leverages high-grades & proximity to McClean mill[1]

38.7M
lbs U_3O_8 @
3.5%
U_3O_8

Indicated Mineral Resources (100% basis, 510,000 tonnes)

Plus...
12.6M
lbs U_3O_8

Inferred mineral resources (100% basis, 905,000 tonnes @ 0.64% U_3O_8)

C$965M

estimated

Base-case after-tax $NPV_{8\%}$ (100% basis)[3]

C$254M

estimated

Initial CAPEX (100% basis)

82.7%

estimated

Base-case after-tax IRR[3]

3.8 to 1

Base-case post-tax NPV to initial capital cost ratio

Approved
EIS as Open Pit

with processing at McClean Lake

CNSC approved final EIS in 2012[2]

US$11.69
/ lbs U_3O_8

average

Cash Operating Costs

(C$15.78/lb U_3O_8)

US$25.78
/ lbs U_3O_8

average

All-in Cost[4]

(C$34.80/lb U_3O_8)

PHOTO:

Aerial view of Midwest Project.

NOTES:

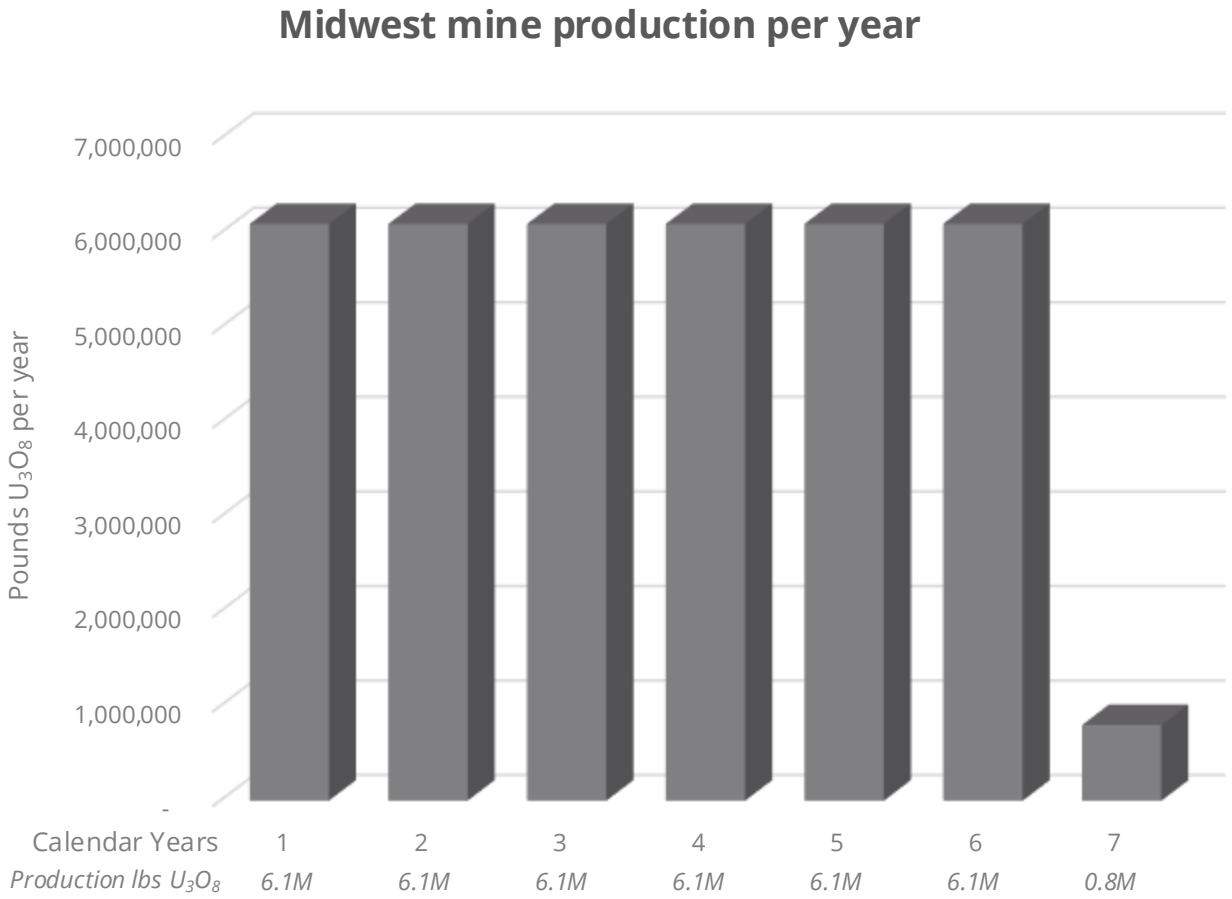
(1) See Denison's news release dated August 6, 2025.

(2) See Denison's current Annual Information Form for additional details regarding the Midwest project.

(3) NPV and IRR are calculated to the start of construction activities for the Midwest project and excludes the C$16.8M in pre-FID expenditures.

(4) All-in cost is estimated on a pre-tax basis and includes all project operating costs, capital costs post-FID, and decommissioning costs divided by the estimated number of pounds U_3O_8 to be produced.

Midwest ISR Preliminary Economic Assessment (2025)[1]:
Demonstrates economic and technical potential at the Midwest Main deposit



Payback period under 1 year

for pre- and post-tax base-case scenarios

Evaluation of MLJV's SABRE mining method also being advanced in parallel

37.4 million lbs U_3O_8 in potentially mineable resources (650,000 tonnes at 2.6% U_3O_8)

Assumptions / Results[1]	Base Case
Selling price / lb U_3O_8	US$80
USD:CAD FX Rate	1.35
Pre-tax $NPV_{8\%}$[2][4] (100%)	**$1.62 billion**
Pre-tax payback period[3][5]	**~6 months**
Pre-tax IRR[2][6]	**111.1%**

NOTES: (1) Refer to Denison's news release dated August 6, 2025; (2) NPV and IRR are calculated to the start of construction activities for the Midwest project and excludes $16.8 million in pre-FID expenditures; (3) Payback period is stated as number of months to payback from the start of uranium production; (4) Post-tax NPV is estimated to be $964.7.2 million in the Base Case; (5) Post-tax payback period is estimated to be ~9 months in the Base-Case; (6) Post-tax IRR is estimated to be 82.7% in the Base Case.

70.55% owned Waterbury Lake project demonstrates potential for ISR to transform portfolio projects[1]

ISR
Mining Method

Tthe Heldeth Túé ("THT") deposit (formerly J Zone) designed as a low-cost In-Situ Recovery ("ISR") operation with freeze wall design

Uranium Bearing Solution ("UBS") to be transported by truck to 22.5% Denison's owned McClean Lake mill for toll processing

Minimal site infrastructure

Successful 2023 ISR field test[3]

6-year
Mine Life

9.7M lbs U_3O_8
projected
Mine Production
(100% basis)

12.8M lbs U_3O_8 @ 2.0% U_3O_8 (291,00 tonnes) in Indicated Mineral Resources estimated for THT (100% basis)

CAD$112M
estimated
Initial CAPEX
(100% basis)

NI 43-101
compliant
Preliminary Economic Assessment ("PEA") completed in 2020[2]

Partnership
with consortium led by state-owned nuclear company Korea Hydro Nuclear Power ("KHNP")

Located within the boundaries of Treaty 10
in Nuhenéné / Athabasca Denesųłiné traditional territory and the homeland of the Métis

40,256
hectares of prospective ground over 13 claims

NOTES:

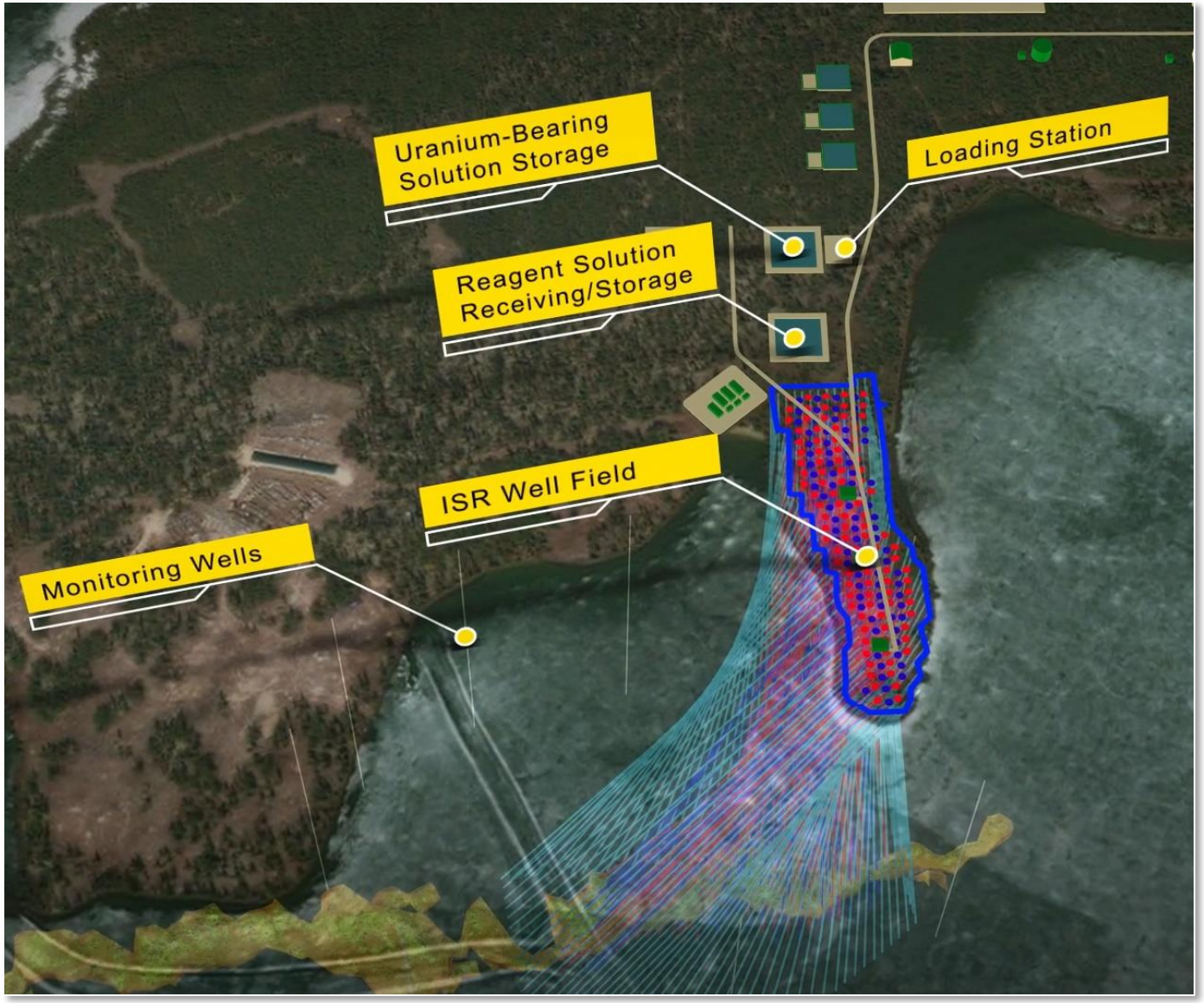
(1) Refer to the Waterbury Lake Technical Report titled "Preliminary Economic Assessment for the Tthe Heldeth Túé (J Zone) Deposit, Waterbury Lake Property, Northern Saskatchewan, Canada" and dated October 30, 2020.

(2) 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.

(3) See Denison's news release dated Nov. 6, 2023

Tthe Heldeth Túé (“THT”) ISR Operation:

PEA (2020) shows potential for ISR to change uranium mining landscape in Canada[1]



1.6M lbs
lbs U_3O_8
Average annual production over 6 years
(100% basis)

C$112M
estimated
Initial CAPEX
(100% basis)

US$12.23
/ lbs U_3O_8
average
Cash Operating Costs

(C$16.27/lb U_3O_8)

US$24.93
/ lbs U_3O_8
average
All-in Cost[2]

(C$33.16/lb U_3O_8)

C$265M
estimated
Pre-Tax $NPV_{8\%}$
(100% basis)

US$65/lb U_3O_8 selling price

(see note 3, 4)

50.0%
estimated
Pre-Tax IRR

US$65/lb U_3O_8 selling price

(see note 3, 5)

PHOTOS:

Aerial rendering of surface facilities for the THT ISR operation

NOTES:

(1) Refer to the Waterbury Lake Technical Report titled “Preliminary Economic Assessment for the Tthe Heldeth Túé (J Zone) Deposit, Waterbury Lake Property, Northern Saskatchewan, Canada” dated October 30, 2020.

(2) All-in cost is estimated on a pre-tax basis and includes all project operating costs and capital costs divided by the estimated number of finished pounds U_3O_8 produced.

(3) NPV and IRR are calculated based on assessed “high-case” uranium price, to the start of pre-production activities.

(4) Post-tax NPV attributable to Denison’s then 66.90% interest is estimated to be between $72 million (base-case) and $109 million ($65/lb high-case).

(5) Post-tax IRR attributable to Denison’s then 66.90% interest is estimated to be between 30.4% (base-case) and 38.9% ($65/lb high-case).

Environmental, Social, Governance & Indigenous (ESG+I)

Fundamental considerations driving Denison's operations

Comprehensive ESG Reporting

Designed to address GRI, SASB, TCFD and other global disclosure frameworks

Board approved Indigenous Peoples Policy

First-in-sector policy reflecting Denison's commitment to take action towards advancing reconciliation with Indigenous peoples in Canada(1)

Top 115 in Canada

Leading Governance Practices & Disclosure

Denison recognized by Globe & Mail "Board Games" as **top uranium developer** for corporate governance practices & disclosure in its assessment of leading companies and trusts included in Canada's benchmark S&P/TSX Composite Index(2, 3)

Multiple Indigenous Agreements

- **Shared Prosperity Agreement** with English River First Nation(4)
- **Mutual Benefits and Community Benefit Agreements** with Kineepik Métis Local #9 and the Village of Pinehouse(5)
- **Participation/Funding and/or Exploration Agreements** Ya'thi Néné Lands & Resources Office(6) and Métis Nation – Saskatchewan(7)

Strong EHS&S Culture & Results

One lost time injury across all operations and no significant environmental events for 2024(8)

Authentic Social Programs

Denison's community / social investment program targets community-based initiatives

PHOTO:
Highlights of the Elders of Sakitawak's market garden in Ile a la Crosse, a community-based initiative sponsored by Denison.

NOTES:
(1) See news release dated December 2, 2021.

(2) For more information: https://www.theglobeandmail.com/business/careers/management/board-games/article-canada-corporate-boards-ranking-2024/

(3) See Denison's news release dated March 15, 2021.

(4) See news release dated September 27, 2023.

(5) See news release dated July 11, 2024.

(6) See news release dated October 20, 2022.

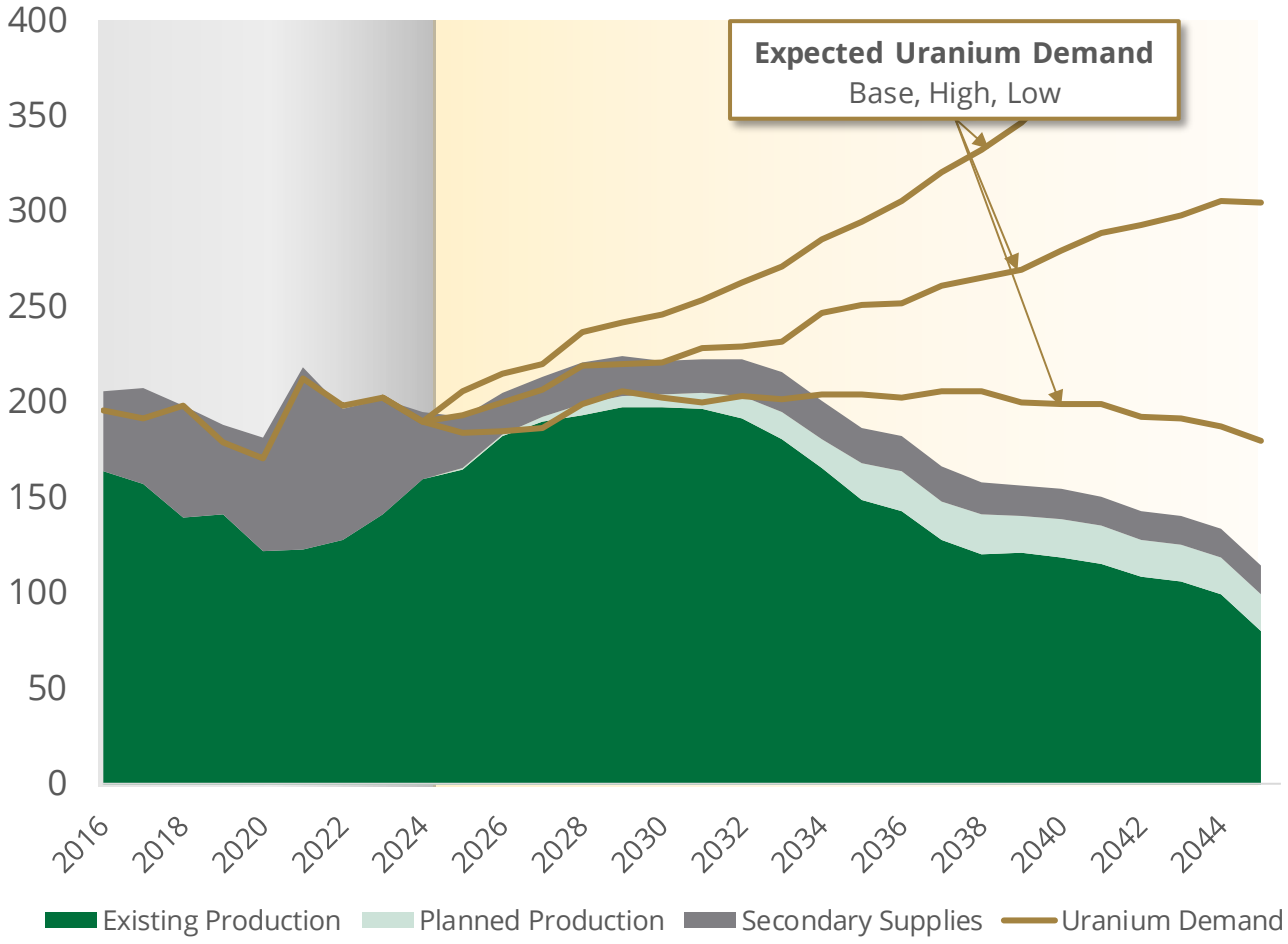
(7) See MD&A for the period ended December 31, 2022.

(8) See Denison's AIF for additional details.

The Uranium Investment Thesis:
Growing supply deficit → higher prices required to incent new supply

Estimated Global Uranium Supply & Demand(1)

(million pounds U_3O_8 - per UxC Q2'2025)



Key Market Themes:

- Draw down of surplus inventories during period of production curtailments led transition to production-cost focused market
- First phase of supply response from incumbent producers insufficient to meet demand projections
- Market expected to enter period of projected sustained structural supply shortage, with mine production deficit in 2024 estimated at ~20% of demand
- Geopolitical events highlighting importance of reliable / Western sources of supply
- Demand yet to factor in significant small modular reactors (SMRs) growth, despite progress towards deployment for the late 2020s(2)
- Anticipated increase in demand growth on the horizon with commitment of 30+ countries at COP29 to triple nuclear power capacity by 2050

NOTES: (1) Data in this slide has been derived from UxC's Uranium Market Outlook dated Q2'2025, including supply & demand estimates and market balance figures.
(2) OPG projects completion of SMR at Darlington by 2028, as stated on corporate website.

Mineral Reserves & Resources as of December 31, 2024

Mineral Reserves (see Notes 1, 2, 3, 4, 8, 9)	100% Basis			Denison Share[6]
Project/Deposit	Tonnes	Grade % U_3O_8	Lbs U_3O_8 (,000)	Lbs U_3O_8 (,000)
McClean - Ore Stockpile (Proven)	90,000	0.37	700	200
Wheeler River - Phoenix (Proven)	6,300	24.5	3,400	3,200
Wheeler River - Phoenix (Probable)	212,700	11.4	53,300	50,600
Wheeler River - Gryphon (Probable)	1,257,000	1.8	49,700	47,200
Total Proven & Probable Reserves	**1,566,000**		**107,100**	**101,200**

Measured & Indicated Mineral Resources (see Notes 1, 5, 8, 9)	100% Basis			Denison Share[6]
Project/Deposit	Tonnes	Grade % U_3O_8	Lbs U_3O_8 (,000)	Lbs U_3O_8 (,000)
Wheeler River - Phoenix[5] (Measured)	64,200	21.8	30,900	29,400
Wheeler River - Phoenix[5] (Indicated)	216,000	8.3	39,700	37,700
Wheeler River - Gryphon[5] (Indicated)	1,643,000	1.7	61,900	58,800
McClean – Sue D (Indicated)	122,800	1.1	2,800	600
McClean – Sue F (Indicated)	47,800	2.6	2,800	600
McClean - McClean North (Indicated)	204,300	2.8	12,200	2,700
Midwest - Midwest Main (Indicated)[10]	510,000	2.9	38,700	9,700
Midwest - Midwest A (Indicated)	566,000	0.87	10,800	2,700
Waterbury – THT (Indicated)	291,000	2.0	12,800	9,000
Total Measured & Indicated Resources	**3,665,100**		**212,600**	**151,200**

Inferred Mineral Resources (see Notes 1, 8, 9)	100% Basis			Denison Share[6]
Project/Deposit	Tonnes	Grade % U_3O_8	Lbs U_3O_8 (,000)	Lbs U_3O_8 (,000)
Wheeler River - Phoenix[5]	5,600	2.6	300	300
Wheeler River - Gryphon[5]	73,000	1.2	1,900	1,800
McClean - Sue D	24,200	0.39	200	0
McClean - Sue E	483,400	0.69	7,300	1,600
McClean - McClean North	3,300	0.79	100	0
Midwest - Midwest Main[10]	905,000	0.64	12,600	3,100
Midwest - Midwest A	53,000	5.8	6,700	1,700
Waterbury - Huskie	268,000	0.96	5,700	4,000
Christie Lake	588,000	1.57	20,400	3,500
Total Inferred Resources	**2,403,500**		**55,200**	**16,000**

Historic Mineral Resources (see Notes 8, 9)	100% Basis			Denison Share[7]
Project/Deposit	Tonnes	Grade % U_3O_8	Lbs U_3O_8 (,000)	Lbs U_3O_8 (,000)
Millennium (Indicated)	1,442,600	2.39	75,900	11,400
Kiggavik (Indicated)	10,418,000	0.55	127,300	21,500
Tot. Historic Indicated Resources	**11,860,600**		**203,200**	**32,900**
Millennium (Inferred)	412,400	3.19	29,000	4,400
Kiggavik (Inferred)	733,000	0.33	5,400	900
Tot. Historic Inferred Resources	**1,145,400**		**34,400**	**5,300**

NOTES: (1) See AIF for details for further details, including cut-off grades used for mineral reserve and mineral resource estimates. 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_3O_8 based on the ISR mining method, using a long-term uranium price of US$50/lb U_3O_8 and a CA$/US$ exchange rate of 1.33. The mineral reserves are based on a mine operating cost of $0.78/lb U_3O_8, process operating cost of $5.20/lb U_3O_8, 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_3O_8 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_3O_8 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) Measured & Indicated mineral resources for Phoenix and Gryphon deposits are inclusive of mineral reserves. (6) As at December 31, 2024, pursuant to the terms of the agreements with its applicable joint venture partners, 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 70.32% interest in the Waterbury Lake property. (7) 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. (8) Numbers may not add due to rounding. **(9) See AIF for all details of mineral reserves and mineral resources, including historical estimates. (10) See Denison news release dated August 6, 2025 for details on mineral resources at Midwest Main deposit.**

Capital Structure & Corporate Information

Market Summary[1]

Exchanges	DML LISTED TSX / DNN LISTED NYSE AMERICAN
Shares Outstanding	896.4 M
Share Purchase Warrants	-
Share Units	8.2 M
Options	7.1 M
Fully Diluted Shares	911.7 M

DML (TSX)	
Market Cap @ C$2.85/share[2]	CAD $2.6B
Daily Trading Volume[3]	6.4M Shares

DNN (NYSE American)	
Market Cap @ US$2.07/share[2]	USD $1.9B
Daily Trading Volume[3]	114M Shares

Management

David Cates (President & CEO, Director)
Elizabeth Sidle (VP Finance & CFO)
Kevin Himbeault (VP Operations)
Geoff Smith (VP Corp. Dev. & Commercial)
Mary Jo Smith (VP Human Resources & Admin.)
Chad Sorba (VP Tech. Services & Project Eval.)
Janna Switzer (VP Env., Sustainability & Regulatory)
Amanda Willett (VP Legal & Corp. Sec.)
David Bronkhorst (Technical Advisor)

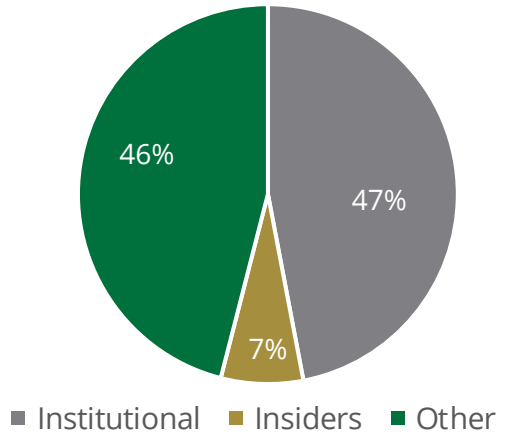
Board of Directors

Jennifer Traub (Non-Executive Chair)
David Cates (President & CEO, Director)
Jinsu Baik (KHNP Nominee)
Wes Carson
Ken Hartwick
David Neuburger
Laurie Sterritt
Patricia Volker
Ron Hochstein (Board Advisor)

Analyst Coverage[4]

BMO (Alexander Pearce)
Canaccord Genuity (Katie Lachapelle)
Cantor Fitzgerald (Mike Kozak)
CIBC (Anita Soni)
Cormark (Nicolas Dion)
Desjardins (Bryce Adams)
Haywood (Marcus Giannini)
National Bank (Mohamed Sidibé)
Paradigm Capital (Gordon Lawson)
Raymond James (Brian MacArthur)
Roth (Joe Reagor)
Scotiabank (Orest Wowkodaw)
TD Cowen (Craig Hutchison)

Shareholders[5]



Denison

Website:
www.denisonmines.com

X (formerly Twitter):
@DenisonMinesCo

Email:
IR@denisonmines.com

NOTES:

(1) Share capital information as of Aug. 7, 2025 (MD&A for the period ended Jun. 30, 2025).

(2) Based on basic shares outstanding at Aug. 7, 2025 (MD&A for the period ended Jun. 30, 2025) and DML/DNN share prices as of the end of July 2025.

(3) Average daily trading volume over previous 3 months as of the end of July 2025. Canadian trading includes all Canadian exchanges.

(4) As of July 31, 2025.

(5) Shareholder information is estimated as of Dec. 31, 2024. Information is provided for indicative purposes only. Institutional holdings are estimated based on information available on Bloomberg. Insider holdings are estimated based on applicable filings and includes estimated holdings from entities entitled to appoint a nominee to the Board of Directors. Other holdings are determined as shares outstanding less those reported as institutional and insider holdings. Share ownership is subject to change.