Corporate Update

October 2024

Denison Mines

Uranium Development & Exploration

The Athabasca Basin, Northern Saskatchewan

Mining Journal INTELLIGENCE

Project Pipeline Handbook 2024

#1 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 study ("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, 2024 ("AIF") available on SEDAR+ at www.sedarplus.ca and on EDGAR at www.sec.gov/edgar.shtml. 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.

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, and Andy Yackulic, P.Geo, Vice President Exploration, each of whom is 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 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

Three low-cost uranium development projects operated by Denison
Phoenix, Gryphon, and THT/Waterbury all within UxC's "First Tier" of global assets

Phoenix combines lowest-cost mining method with Athabasca Basin high-grades
#1
Ranked #1 mining project globally in 2024 by Mining Journal Intelligence
Flagship ISR project significantly advanced through permitting process
Technical de-risking completed, with detailed design engineering and long-lead procurement in progress
First production targeted for 2027 or 2028

Interest in strategic regional asset with McClean Lake mill and mine
Excess licensed milling capacity with approval for expanded tailings management facility
2025 mining restart at McClean Lake North deposit with planned initial prod'n of 800,000 lbs U_3O_8 (100%)

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

Strong balance sheet with ~CAD$400M in cash, physical uranium and investments[2]
Denison's financial and liquid assets on hand, relative to flagship development project initial capex (~$CAD400M)[3] is unrivaled and puts the company in an enviable position for project advancement

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

Nuclear renaissance: 20+ nations pledge to triple nuclear energy capacity by 2050

NOTES: (1) See supporting slides for details. (2) As of June 30, 2024, for additional details see financial statements and MD&A for the period ended June 30, 2024. (3) Based on Denison's effective 95% ownership.

Diversified Athabasca Basin asset base with superior development leverage

95%[1]

effective interest in

Flagship Wheeler River project

Development-stage project

Largest undeveloped uranium project in the infrastructure rich eastern Athabasca Basin

2023 Phoenix Feasibility Study[2]

Draft Environmental Impact Statement ("EIS") submitted[3]

22.5%

interest in

Strategic McClean Lake Uranium Mill & Mines

11% of global uranium production processed through mill

Mining restart approved using SABRE mining with planned **2025 production** of ~800,000 lbs. U_3O_8[4]

Excess licensed milling capacity

69.44%

interest in

Emerging Waterbury Lake project

PEA stage development project[5]

Tthe Heldeth Túé ("THT") deposit highlights potential for future development project pipeline

Successful 2023 ISR field test[6]

Participating interests in key development-stage assets operated by uranium "majors"

Includes 22.5% in McClean Lake (Orano), 25.17% in Midwest (Orano), and an effective 15% in Millennium (Cameco) through 50% ownership of JCU[7]

~384,000

hectares of exploration ground[8]

Denison

PHOTO:

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

NOTES:

(1) 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.

(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 October 26, 2022.

(4) See news release dated January 24, 2024.

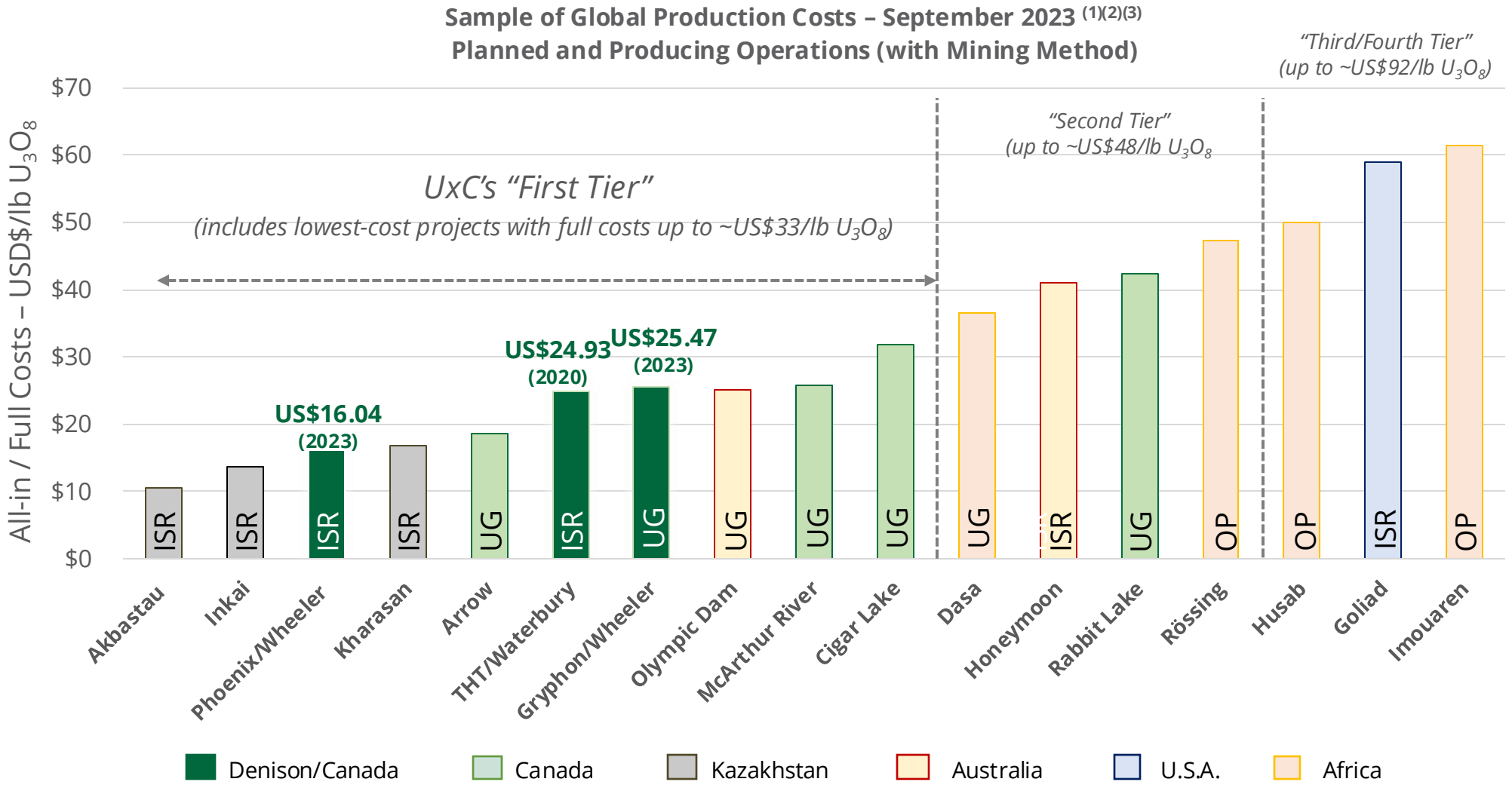
(5) Refer to the Waterbury Lake Technical Report titled "Preliminary Economic Assessment for the Tthe Heldeth Túé (J Zone) Deposit, Waterbury Lake Property, Northern Saskatchewan, Canada" dated October 30, 2020.

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

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

(8) Denison direct land position shown as of June 30, 2024; excludes the land positions held by JCU.

Denison's development portfolio projects:
Positioned 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.

(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.

Robust Balance Sheet with ~CAD$400M[1] in cash, physical uranium and investments

2.2M lbs U_3O_8
in holdings of
physical uranium at June 30, 2024

Market value **~CAD$257M** (US$85.50/lb U_3O_8)

+/- ~CAD$30M in change for every US$10/lb U_3O_8 move in spot price

Acquired at average cost of **USD$29.67/lb U_3O_8**

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$121M
in
cash and cash equivalents[1]

Working capital of CAD$120M[1]

CAD$21M
investments in
uranium equities and convertibles[3]

No Debt[4]

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

PHOTO:

Packaged U_3O_8 yellowcake at Denison's 22.5% owned McClean Lake mill.

NOTES:
(1) As of June 30, 2024. For additional details see financial statements and MD&A for the period ended June 30, 2024. Working capital is a non-IFRS financial measure and is calculated as the value of current assets less the value of current liabilities, excluding non-cash current liabilities; also excludes investment in joint venture (JCU).

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

(3) As of June 30, 2024, for additional details see financial statements and MD&A for the period ended June 30, 2024; includes investments in uranium equities and convertible debentures.

(4) The company has no debt drawn as of June 30, 2024; 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.

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** with Ya'thi Néné Lands & Resources Office(6) and Métis Nation – Saskatchewan(7)

Strong EHS&S Culture & Results

Zero lost time injuries across all operations and no significant environmental events for 2023(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.

LINKS:
Denison's ESG Report

ERFN SPA Signing Video

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

(2) For more information: https://www.theglobeandmail.com/business/careers/management/board-games/article-the-globe-and-mails-comprehensive-ranking-of-canadas-corporate-boards-3/

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

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

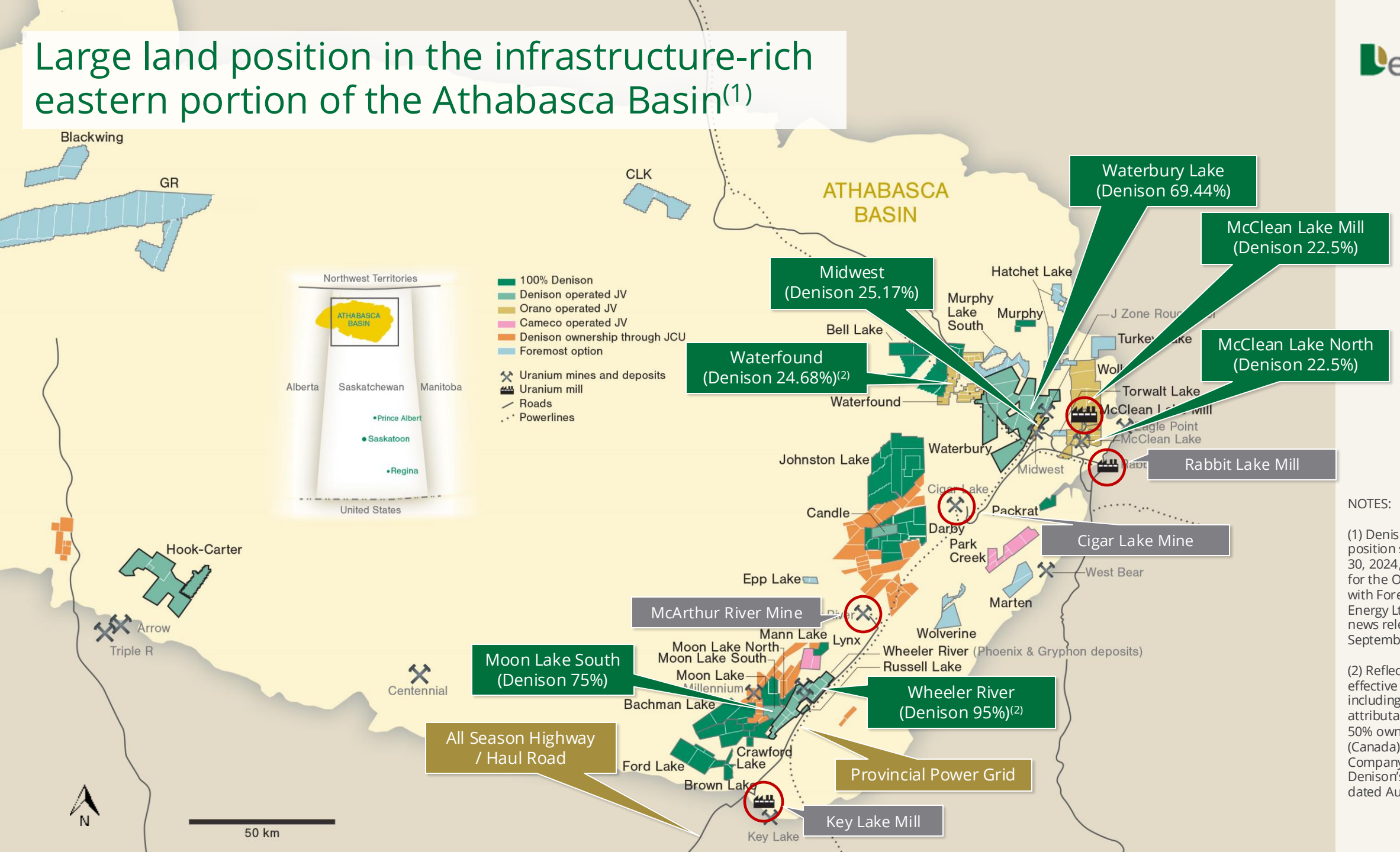
(5) See news release dated July 11, 2024.

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

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

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

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, 2024, then adjusted for the Option Agreement with Foremost Clean Energy Ltd. See Denison's news release dated September 24, 2024.

(2) Reflects Denison's effective interest, including a portion attributable to Denison's 50% ownership in JCU (Canada) Exploration Company, Limited. See Denison's news release dated August 3, 2021.

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

Delivering 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 to final investment decision

Detailed design engineering in progress

Draft Environmental Impact Statement submitted October 2022

Rigorous multi-year technical de-risking program completed

2022 Feasibility Field Test successfully recovered uranium bearing solution

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)
Proven & Probable Reserves

2-year Construction

Planned construction period for Phoenix

2027 / 2028

Planned Production Start-up for Phoenix

PHOTO:

Installation of large-diameter commercial scale ISR test wells at Phoenix during 2021.

LINKS:

Wheeler River Project Page on Denison Website

NOTES:

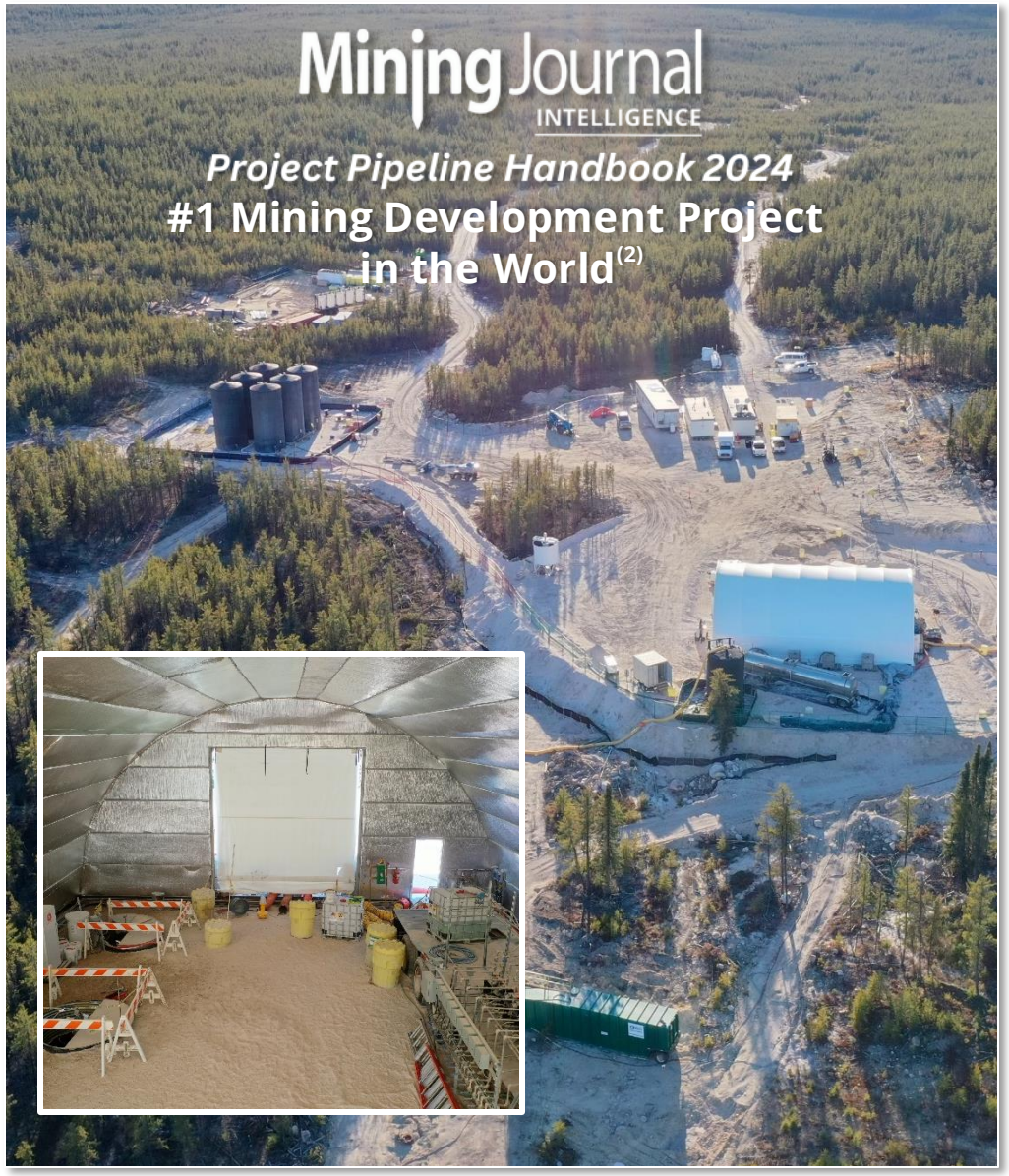
(1) Refer to the Wheeler River Technical Report titled "NI 43-101 Technical Report on the Wheeler River Project, Athabasca Basin, Saskatchewan, Canada" dated June 23, 2023.

(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.

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

Reflects rigour of multi-year technical de-risking and delivers impressive economic results(1)



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
impressive
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.

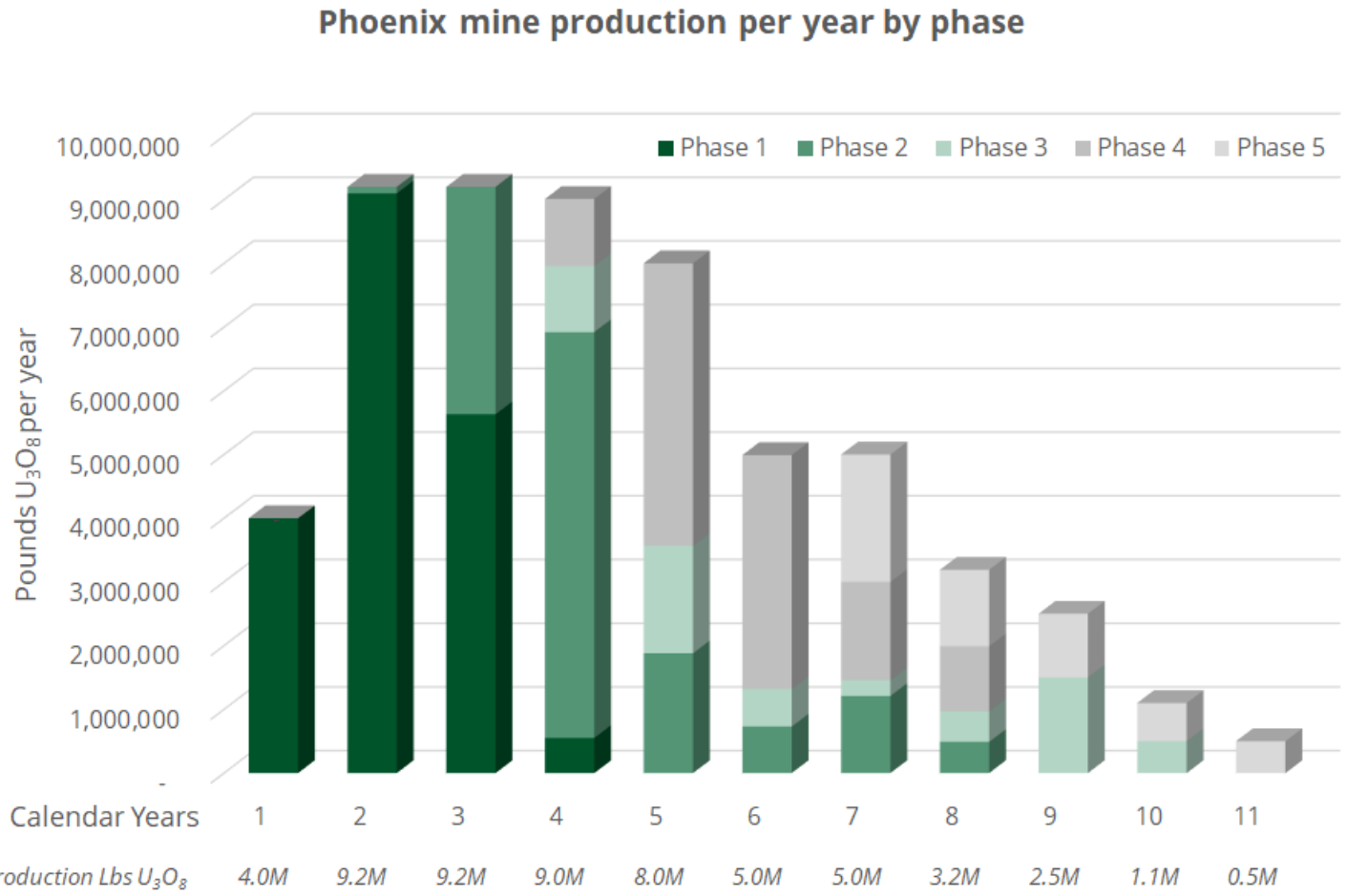
NOTES:
(1) See the Wheeler River Technical Report titled "NI 43-101 Technical Report on the Wheeler River Project, Athabasca Basin, Saskatchewan, Canada" dated June 23, 2023.

(2) www.mining-journal.com/research-reports/special-report/4204632/mining-journal-intelligence-project-pipeline-handbook-2024-epublication

(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 for details.

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



Robust economics easily absorb cost-inflation + design changes

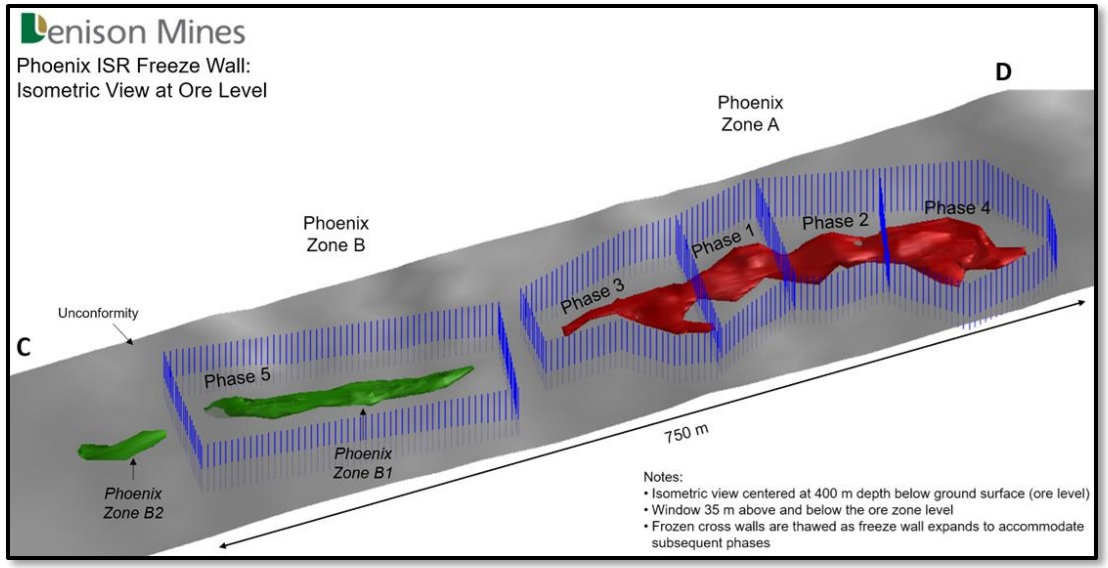
First production targeted for 2027 or 2028

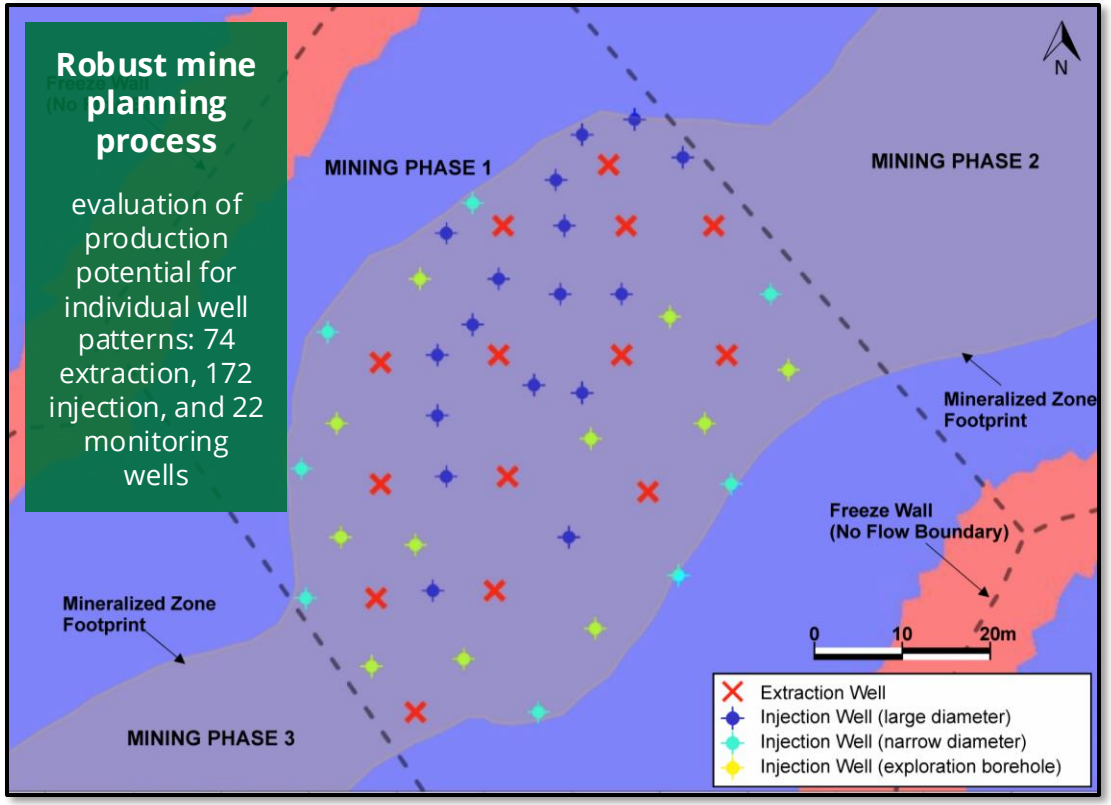
Planned 2-year construction period

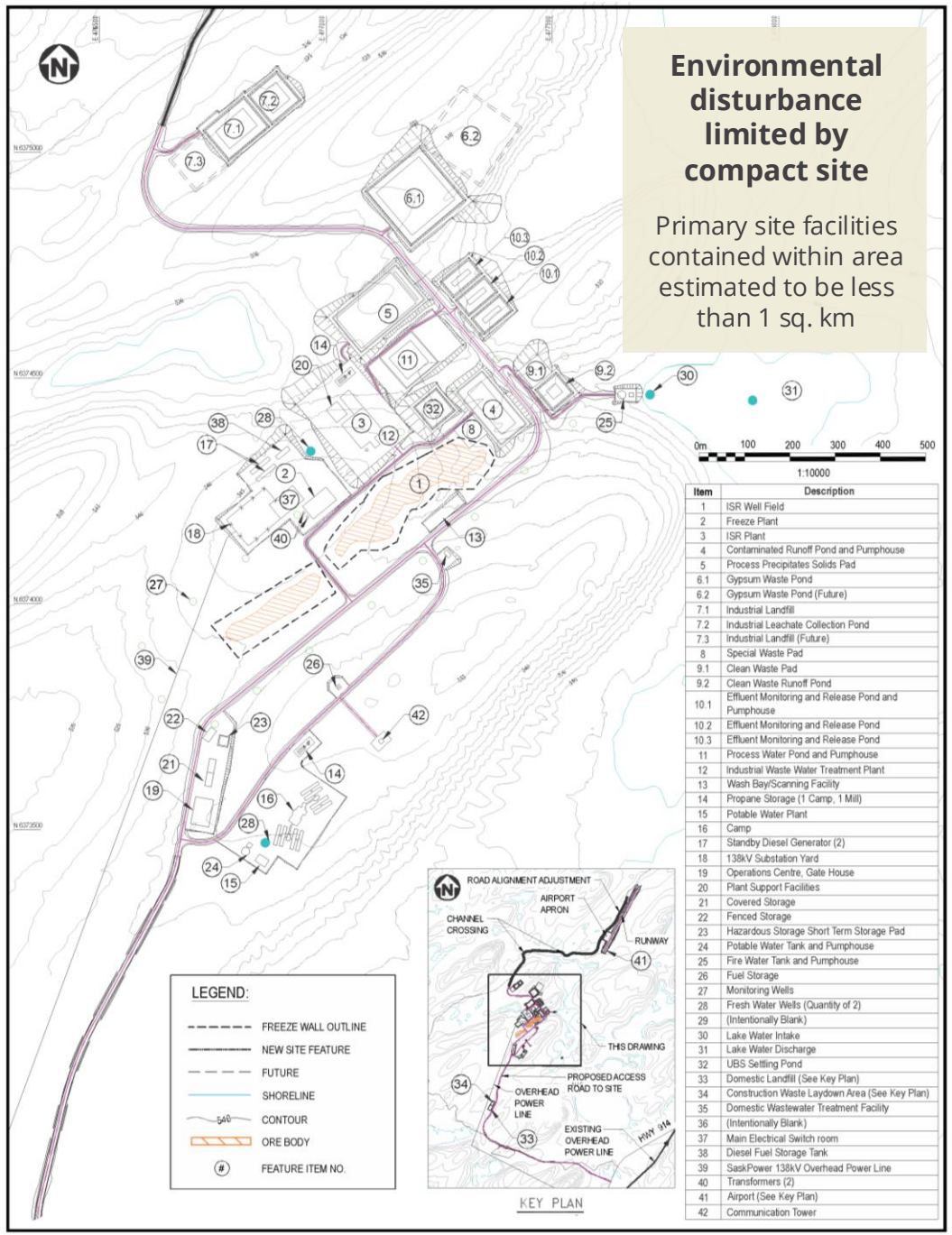
56.7 million lbs U_3O_8 in proven and probable reserves (219,000 tonnes at 11.7% U_3O_8)

Assumptions / Results[1]	Base Case	PFS Ref.
Selling price / lb U_3O_8	US$66-US$70	US$65
USD:CAD FX Rate	1.35	1.3
Pre-tax $NPV_{8\%}$[2][4] (100%)	**$2.34 billion**	**$2.05 billion**
Change from 2018 PFS	+150%	+5%
Pre-tax payback period[3][5]	~10 months	~10 months
Pre-tax IRR[2][6]	105.9%	98.4%

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 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 and $1.26 billion ($1.38 billion adjusted) in the PFS Reference Case; (5) Post-tax payback period is estimated to be 11 months (10 months adjusted) in the Base-Case and 12 months (11 months adjusted) in the PFS Reference Case; (6) Post-tax IRR is estimated to be 82.3% (90.0% adjusted) in the Base-Case and 76.4% (83.9% adjusted) in the PFS Reference 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.

Phoenix ISR De-Risking:

Combining the world's lowest-cost uranium mining method with one of the world's highest-grade undeveloped uranium deposits

2019/2020 ISR Field Tests(1)

35 small-diameter test, observation and re-charge wells

2 large-diameter commercial scale wells

Pump and injection tests collecting critical hydrogeological data

Demonstrated "Proof of Concept" for use of ISR

Specialized Core Leach Testing

Leach testing indicative of in-situ conditions using intact core samples from Phoenix

Results consistently produced uranium bearing solution head-grade levels significantly higher than grade used in the 2018 PFS(2)

+97% recovery achieved during long-term test(3)

Additional High-Grade uranium discovered at Phoenix(4)

22.0% eU_3O_8
over 8.6 metres in GWR-045

Located outside of the existing high-grade resource domain for Zone A and Phase 1 of the current mining plan

2021 field test of commercial-scale ISR test pattern(5)

Achieved commercial-scale flow-rate used in the 2018 PFS

Completed Athabasca Basin's first "tracer test" showing hydraulic control, breakthrough times consistent with modelling, and ability to carry out "clean-up"

Denison

PHOTOS (Left to Right):

Small diameter ISR test wells installed at Phoenix in 2019; Specialized core-leach testing apparatus from the Saskatchewan Research Council (SRC); high-grade uranium core and scintillometer; monitoring of commercial scale ISR test wells at Phoenix in 2021.

LINKS:

2021 Phoenix ISR Test Program on Vimeo

NOTES:

(1) See Denison's news releases dated December 18, 2019, February 24, 2020, and June 4, 2020.

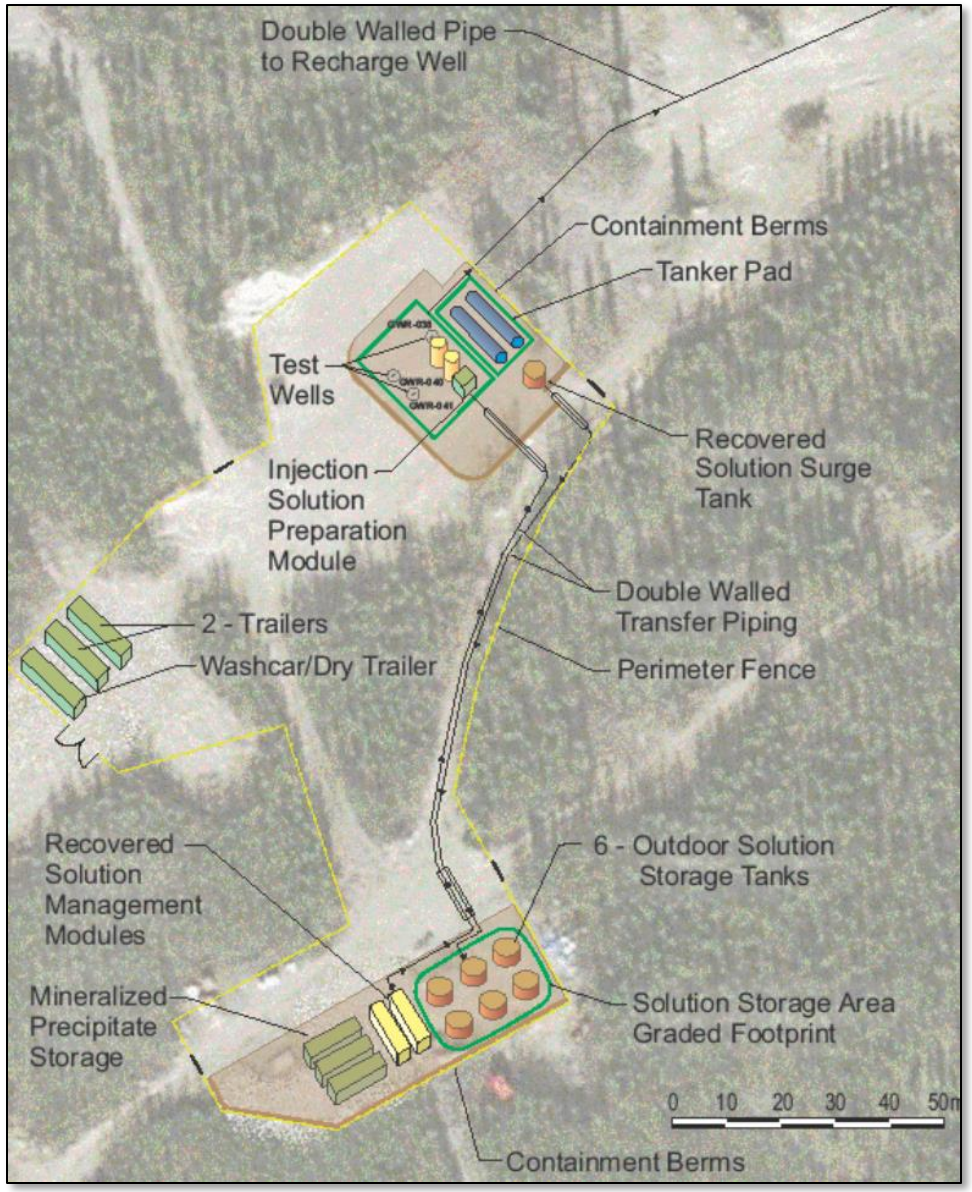
(2) See Denison's news releases dated February 19, 2020 and August 4, 2021.

(3) See Denison's news release dated December 8, 2022.

(4) See Denison's news release dated July 29, 2021.

(5) See Denison's news release dated October 28, 2021.

Fully Permitted In-Situ Recovery Feasibility Field Test (FFT):
Highly successful first-of-its-kind 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.

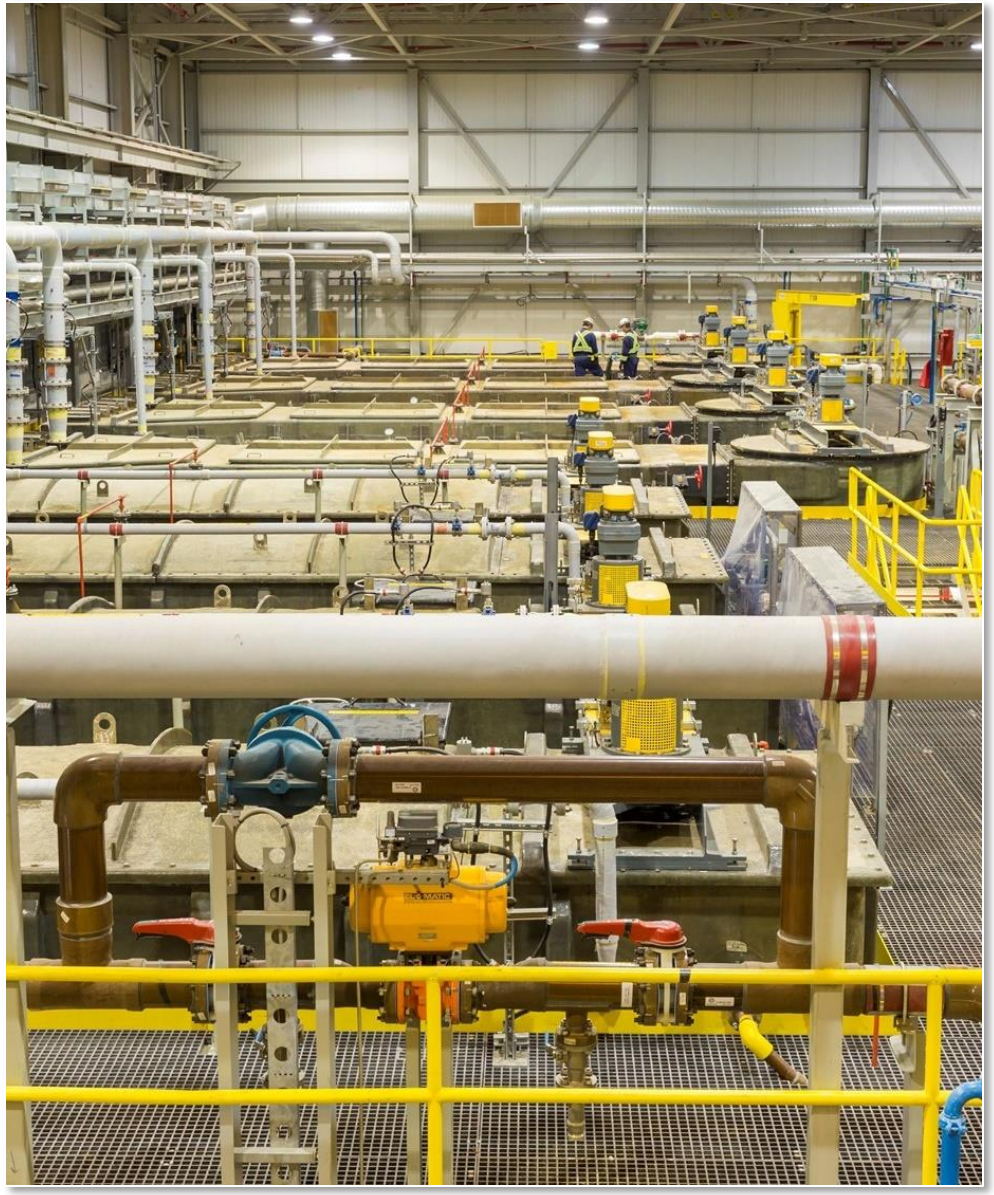
(3) See Denison's news release dated October 17, 2022.

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

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

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]

C$737M

estimated

Initial CAPEX
(100% basis)

37.6%

estimated

Base-case after-tax IRR[2]

2023 PFS Update

Scope limited to cost update and minor schedule optimization

US$12.75
/ lbs U_3O_8

average

Cash Operating Costs

(C$17.27/lb U_3O_8)

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

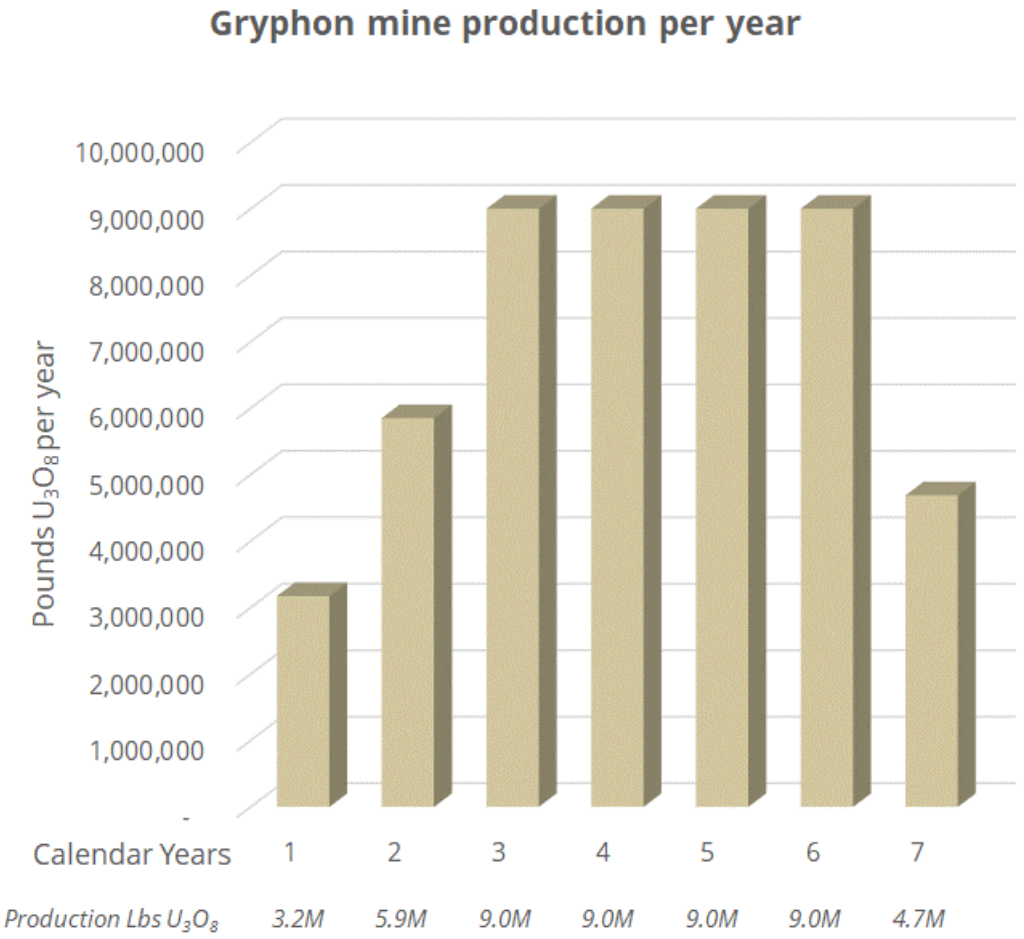
NOTES:

(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.

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

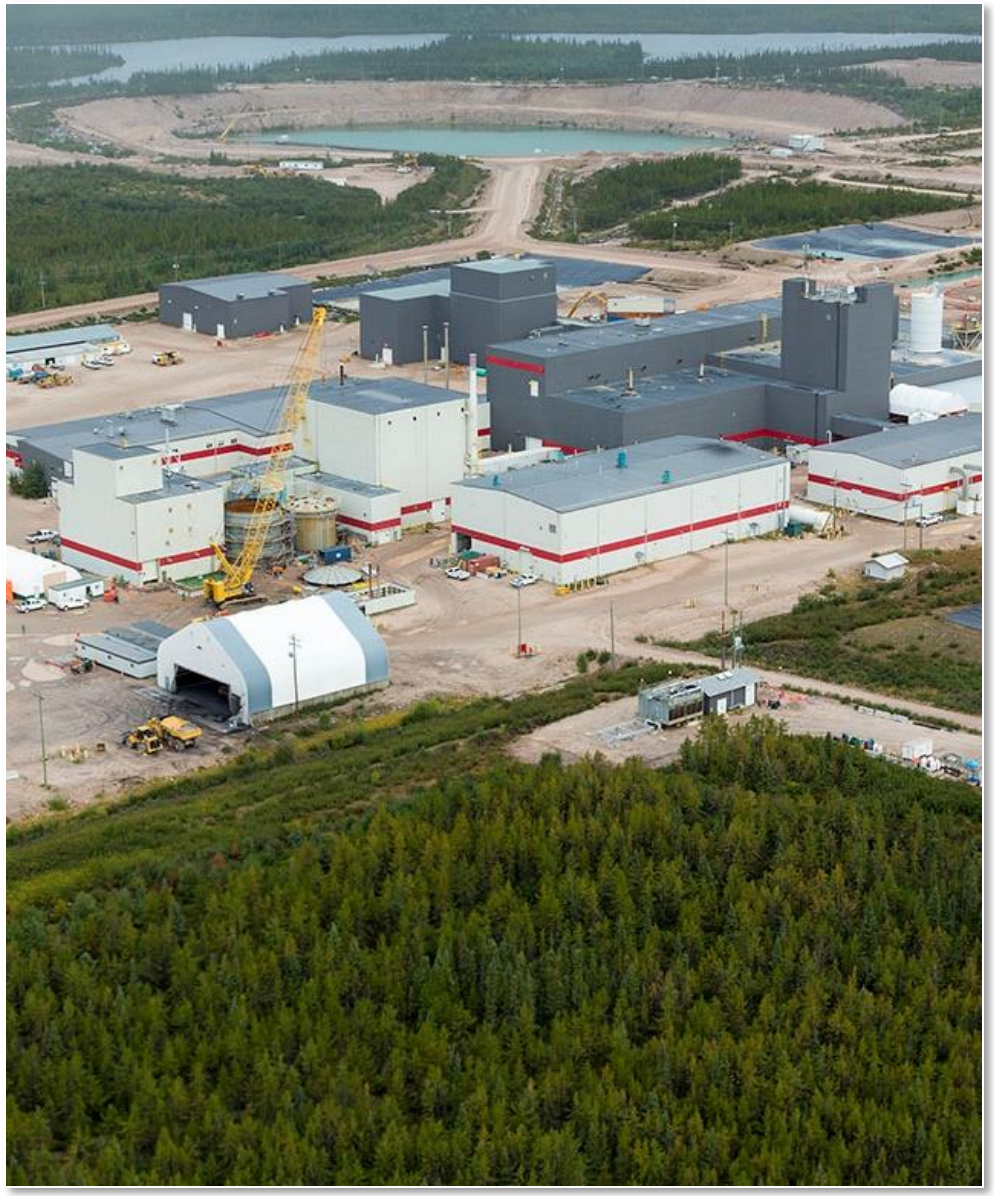
Payback period under 2-years
for pre- and post-tax base-case scenarios

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	PFS Ref.
Selling price / lb U_3O_8	US$75	US$65
USD:CAD FX Rate	1.35	1.3
Pre-tax $NPV_{8\%}$[2][4] (100%)	**$1.43 billion**	**$1.00 billion**
Change from 2018 PFS	+148%	-5%
Pre-tax payback period[3][5]	~20 months	~24 months
Pre-tax IRR[2][6]	41.4%	34.0%

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 and $599.9 million in the PFS Reference Case; (5) Post-tax payback period is estimated to be 23 months in the Base-Case and 26 months in the PFS Reference Case; (6) Post-tax IRR is estimated to be 37.6% in the Base-Case and 30.6% in the PFS Reference Case.

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



~11%
of global uranium production

2023 operating production of 15.1M lbs U_3O_8 from Cigar Lake under toll milling agreement(3)

24M
lbs U_3O_8

Licensed annual mill capacity(2)

~9M
lbs U_3O_8

Excess licensed mill capacity

Based on 2023 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

LINKS:

McClean Lake Project Page on Denison Website

NOTES:

(1) Per UxC's Q1'2024 Uranium Market Outlook and Cameco's Management's discussion and analysis dated February 8, 2024.

(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:
SABRE mining method has potential to unlock value from unmined deposits close to mill

2025 Mining Restart

~800,000 lbs U_3O_8 (100% basis) are targeted in **2025** for production from McClean North

Additional potential production of ~3 million lbs U_3O_8 (100% basis) identified from a combination of the McClean North and Caribou deposits for 2026 to 2030(1)

SABRE Patented & Tested

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

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

Produced ~1,500 tonnes of high-value ore from McClean Lake North in 2021(2)

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

Combined 374,900 tonnes @ 2.22% U_3O_8

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

Combined 510,900 tonnes @ 0.68% U_3O_8

2024 Activities

Planned to ready the existing SABRE mining site and equipment, and install pilot holes for the first mining cavities

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(4) in 2021 + expanded footprint in 2022(5)

PHOTO:

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

LINKS:

McClean Lake Project Page on Denison Website

NOTES:

(1) See Denison's news release dated January 24, 2024.

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

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

(4) See Denison's current Annual Information Form.

(5) See Denison's news release dated September 8, 2022.

25.17% Denison-owned Midwest Property:
Two high-grade uranium deposits in close proximity to the McClean Lake mill

Approved Environmental Impact Statement ("EIS")

Despite deferral of development decision in 2008, EIS approval efforts continued with assessment of open pit mining method and processing at McClean Lake

CNSC approved final EIS in 2012(1)

25km from McClean Lake mill

Via existing roads, and only 1km from the Points North airstrip

2024 ISR Field Test(3)

Results suggest Midwest Main deposit possesses characteristics needed for ISR mining.

ISR evaluation efforts advancing to PEA

Orano Canada Inc.

French nuclear giant serves as project operator and is owner of 74.83% interest

Midwest Main deposit(2)

39.9M lbs U_3O_8 (453,000 tonnes @ 4.0% U_3O_8) in Indicated Mineral Resources

11.5M lbs U_3O_8 (793,000 tonnes @ 0.66% U_3O_8) in Inferred Mineral Resources

Midwest "A" deposit(2)

10.8M lbs U_3O_8 (566,000 tonnes @ 0.87% U_3O_8) in Indicated Mineral Resources

6.7M lbs U_3O_8 (53,000 tonnes @ 5.8% U_3O_8) in Inferred Mineral Resources

PHOTO:

Aerial view of Midwest Project.

LINKS:

Midwest Project Page on Denison Website

NOTES:

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

(2) Refer to the Midwest Technical Report titled "Technical Report with an Updated Mineral Resource Estimate for the Midwest Property, Northern Saskatchewan, Canada" and dated March 26, 2018.

(3) See Denison's news release dated June 3, 2024. Mineral resource figures shown on a 100% basis.

69.44% 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

PHOTO:
Isometric schematic of ISR wellfield and freeze wall at depth of the THT deposit on Waterbury Lake property.

LINKS:
Waterbury Lake Project Video on Vimeo

Waterbury Project Page on Denison Website

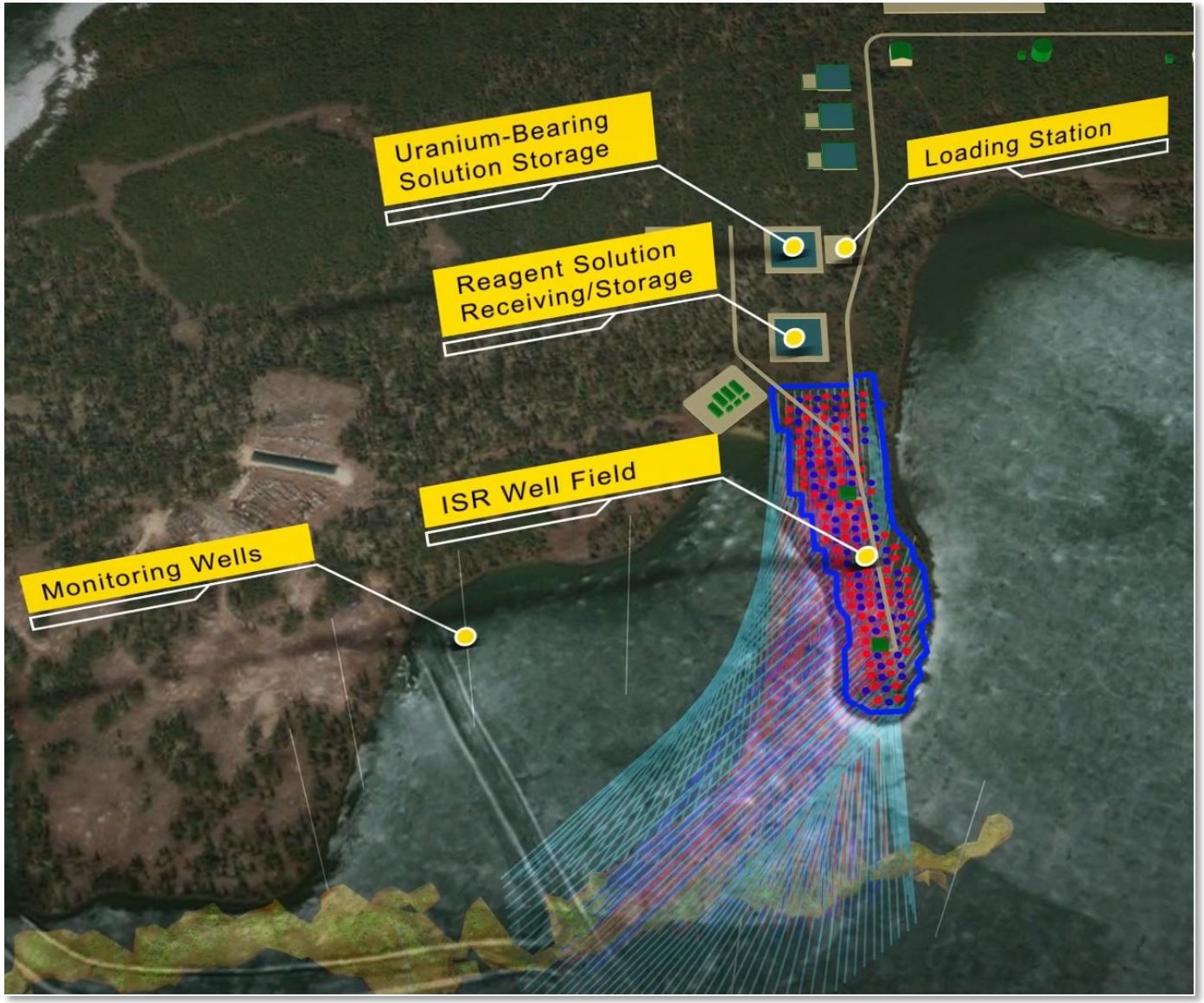
NOTES:
(1) Refer to the Waterbury Lake Technical Report titled "Preliminary Economic Assessment for the Tthe Heldeth Túé (J Zone) Deposit, Waterbury Lake Property, Northern Saskatchewan, Canada" and dated October 30, 2020.

(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.

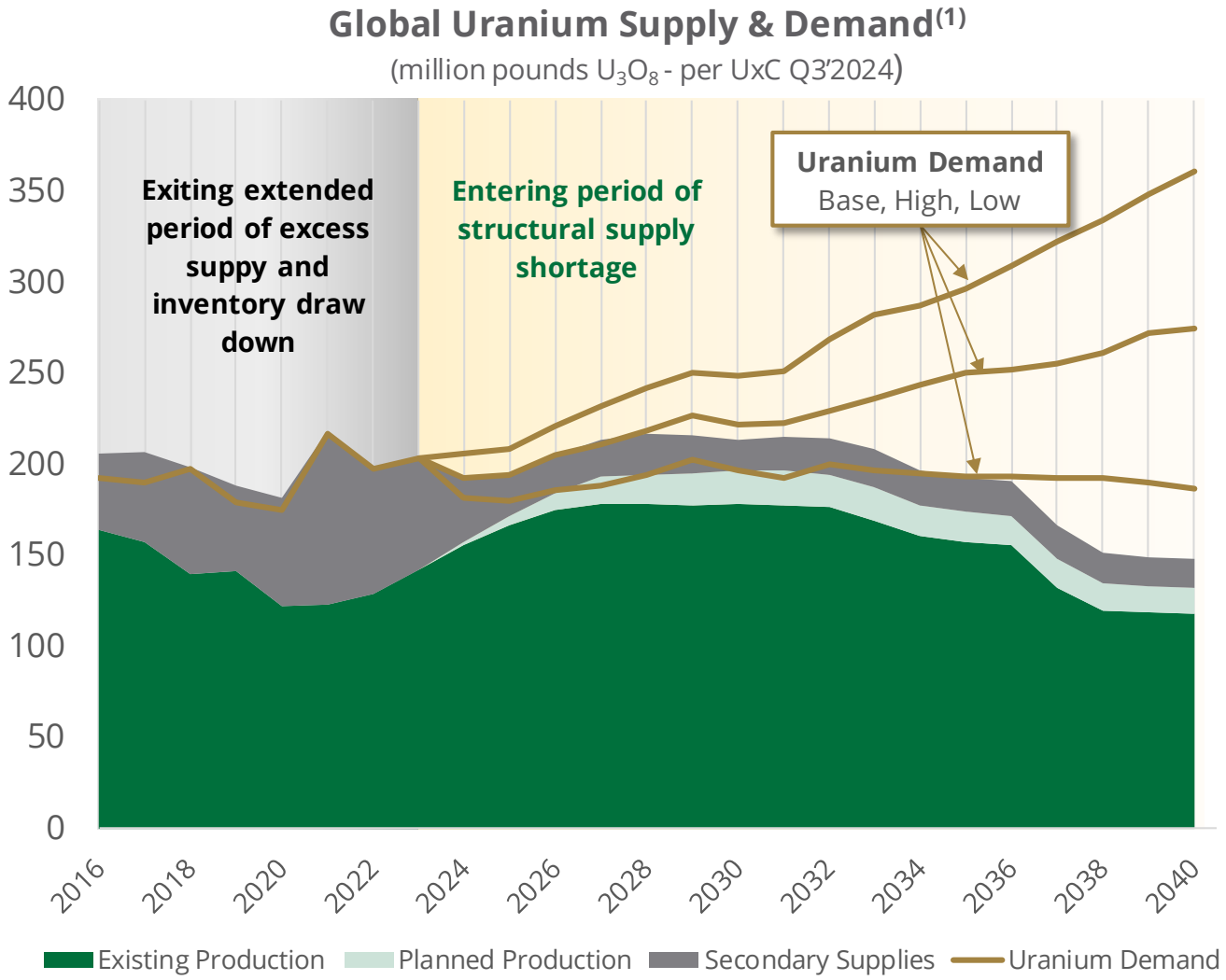
(2) All-in cost is estimated on a pre-tax basis and includes all project operating costs and capital costs divided by the estimated number of finished pounds U_3O_8 produced.

(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).

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



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 entering period of projected sustained structural supply shortage, with mine production deficit in 2023 estimated at 30% 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)
- Potentially significant increase in demand growth on the horizon with commitment of 20+ countries at COP28 to triple nuclear power capacity by 2050

NOTES: (1) Data in this slide has been derived from UxC's Uranium Market Outlook dated Q3'2024, including supply & demand estimates and market balance figures. (2) OPG projects completion of SMR at Darlington by 2028 (LINK).

Reserves & Resources as of December 31, 2023

Mineral Reserves (see Notes 1, 2, 3, 4, 14, 15)	100% Basis			Denison Share[9]
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, 15)	100% Basis			Denison Share[9]
Project/Deposit	Tonnes	Grade % U_3O_8	Lbs U_3O_8 (,000)	Lbs U_3O_8 (,000)
Wheeler River - Phoenix[7] (Measured)	64,200	21.8	30,900	29,400
Wheeler River - Phoenix[7] (Indicated)	216,000	8.3	39,700	37,700
Wheeler River - Gryphon[7] (Indicated)	1,643,000	1.7	61,900	58,800
McClean - Caribou (Indicated)	47,800	2.6	2,800	600
McClean - Sue D (Indicated)	122,800	1.1	2,800	600
McClean - McClean North (Indicated)	204,300	2.8	12,200	2,700
Midwest - Midwest Main (Indicated)	453,000	4.0	39,900	10,100
Midwest - Midwest A (Indicated)	566,000	0.87	10,800	2,700
Waterbury – THT (Indicated)	291,000	2.0	12,800	8,900
Total Measured & Indicated Resources	**3,608,100**		**213,800**	**151,500**

Inferred Mineral Resources (see Notes 1, 6, 15)	100% Basis			Denison Share[9]
Project/Deposit	Tonnes	Grade % U_3O_8	Lbs U_3O_8 (,000)	Lbs U_3O_8 (,000)
Wheeler River - Phoenix[7]	5,600	2.6	300	300
Wheeler River - Gryphon[7]	73,000	1.2	1,900	1,800
McClean - Sue D	24,200	0.39	200	0
McClean - Sue E[8]	483,400	0.69	7,300	1,600
McClean - McClean North	3,300	0.79	100	0
Midwest - Midwest Main	793,000	0.66	11,500	2,900
Midwest - Midwest A	53,000	5.8	6,700	1,700
Waterbury - Huskie	268,000	0.96	5,700	4,000
Christie Lake[11]	588,000	1.57	20,400	3,500
Total Inferred Resources	**2,291,500**		**54,100**	**15,800**

Historic Mineral Resources (see Notes 15, 16)	100% Basis			Denison Share[10]
Project/Deposit	Tonnes	Grade % U_3O_8	Lbs U_3O_8 (,000)	Lbs U_3O_8 (,000)
Millennium[12] (Indicated)	1,442,600	2.39	75,900	11,400
Kiggavik[13] (Indicated)	10,418,000	0.55	127,300	21,500
Tot. Historic Indicated Resources	**11,860,600**		**203,200**	**32,900**
Millennium[12] (Inferred)	412,400	3.19	29,000	4,400
Kiggavik[13] (Inferred)	733,000	0.33	5,400	900
Tot. Historic Inferred Resources	**1,145,400**		**34,400**	**5,300**

Notes cont'd: (7) Measured & Indicated mineral resources for Phoenix and Gryphon deposits 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) 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% U3O8. (12) Millennium mineral resources as reported by Cameco on its 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. (13) Kiggavik mineral resources as reported by Orano in its 2022 Activities Report available on its 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 and converted from tonnes U to pounds U3O8 and from %U to %U3O8. Cut-off grades and other assumptions, parameters and methods used to estimate resources are unknown. (14) The summary information on Denison's proven mineral reserve estimates for McClean Lake was prepared from the year-end stockpile survey reported by Orano Canada, the MLJV operator. (15) Numbers may not add due to rounding. **(16) 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. See AIF for details.**

SOURCE:

Denison's Annual Information Form dated March 28, 2024

NOTES:

(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% U3O8 based on the ISR mining method, using a long-term uranium price of US$50/lb U3O8 and a CA$/US$ exchange rate of 1.33. The mineral reserves are based on a mine operating cost of $0.78/lb U3O8, process operating cost of $5.20/lb U3O8, 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 U3O8 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% U3O8 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) See AIF for details of the various cut-off grades used for measured & indicated mineral resources.

(6) See AIF for details of the cut-off grades used for the inferred mineral resources.

Capital Structure & Corporate Information

Market Summary[1]

Exchanges	DML LISTED TSX / DNN LISTED NYSE AMERICAN
Shares Outstanding	892.4 M
Share Purchase Warrants	-
Share Units	7.3 M
Options	5.9 M
Fully Diluted Shares	905.5 M

DML (TSX)

Market Cap @ C$2.46/share[2]	CAD $2.2B
Daily Trading Volume[3]	5.3M Shares

DNN (NYSE American)

Market Cap @ US$1.83/share[2]	USD $1.6B
Daily Trading Volume[3]	16.9M 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)
Chad Sorba (VP Tech. Services & Project Eval.)
Janna Switzer (VP Env., Sustainability & Regulatory)
Amanda Willett (VP Legal)
Andy Yackulic (VP Exploration)
David Bronkhorst (Technical Advisor)

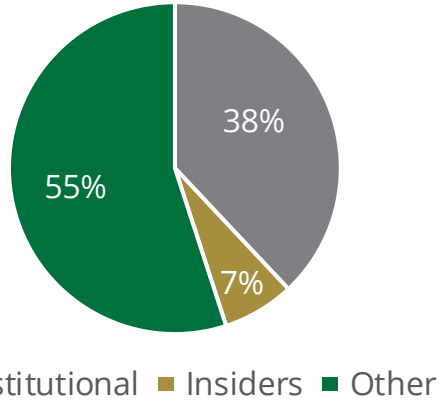
Board of Directors

Jennifer Traub (Non-Executive Chair)
Brian Edgar (Lead Director)
David Cates (President & CEO, Director)
Jong Ho Hong (KHNP Nominee)
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 (Bryce Adams)
Cormark (Nicolas Dion)
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

LINKS:

Website:
www.denisonmines.com

Twitter:
@DenisonMinesCo

Email:
IR@denisonmines.com

NOTES:

(1) Share capital information as of August 8, 2024 (MD&A for the period ended June 30, 2024).

(2) Based on basic shares outstanding at August 8, 2024 (MD&A for the period ended June 30, 2024) and DML/DNN share prices as of the end of September 2024.

(3) Average daily trading volume over previous 3 months as of the end of September 2024. Canadian trading includes all Canadian exchanges.

(4) As of Sept.30, 2024.

(5) Shareholder information is estimated as of December 31, 2023. 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.