



**MANAGEMENT'S DISCUSSION & ANALYSIS  
FOR THE THREE AND SIX MONTHS ENDED  
JUNE 30, 2023**

**TABLE OF CONTENTS**

Q2 2023 PERFORMANCE HIGHLIGHTS	2
ABOUT DENISON	3
RESULTS OF OPERATIONS	5
Wheeler River Uranium Project	7
LIQUIDITY AND CAPITAL RESOURCES	21
OUTLOOK FOR 2023	23
ADDITIONAL INFORMATION	23
CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS	24

This Management's Discussion and Analysis ('MD&A') of Denison Mines Corp. and its subsidiary companies and joint arrangements (collectively, 'Denison' or the 'Company') provides a detailed analysis of the Company's business and compares its financial results with those of the previous year. This MD&A is dated as of August 9, 2023 and should be read in conjunction with the Company's unaudited interim condensed consolidated financial statements and related notes for the three and six months ended June 30, 2023. The unaudited interim condensed consolidated financial statements are prepared in accordance with International Financial Reporting Standards ('IFRS') as issued by the International Accounting Standards Board ('IASB'), including IAS 34, *Interim Financial Reporting*. Readers are also encouraged to consult the audited consolidated financial statements and MD&A for the year ended December 31, 2022. All dollar amounts in this MD&A are expressed in Canadian dollars, unless otherwise noted.

Additional information about Denison, including the Company's press releases, quarterly and annual reports, Annual Information Form and Form 40-F is available through the Company's filings with the securities regulatory authorities in Canada at [www.sedarplus.com](http://www.sedarplus.com) ('SEDAR+') and the United States at [www.sec.gov/edgar.shtml](http://www.sec.gov/edgar.shtml) ('EDGAR').

## Q2 2023 PERFORMANCE HIGHLIGHTS

### ▪ Feasibility Study for Wheeler River Phoenix deposit yields significant increase in economic results

In June 2023, Denison released the results of the Feasibility Study ('Phoenix FS') completed for In-Situ Recovery ('ISR') mining of the high-grade Phoenix uranium deposit ('Phoenix'). The Phoenix FS demonstrates robust economics including:

- Base case pre-tax Net Present Value ('NPV') (8%) of \$2.34 billion (100% ownership-basis) representing a 150% increase in the base-case pre-tax NPV<sub>8%</sub> for Phoenix from the 2018 Pre-Feasibility Study ('2018 PFS').
- Very robust base-case pre-tax Internal Rate of Return ('IRR') of 105.9%.
- Adjusted base case after-tax NPV<sub>8%</sub> of \$1.56 billion (100% basis) and IRR of 90.0% – with Denison's effective 95% interest in the project equating to an adjusted base case after-tax NPV<sub>8%</sub> of \$1.48 billion.
- Base case pre-tax and after-tax (adjusted) payback period of 10 months – equating to a reduction of 11 months for the pre-tax payback period from the 2018 PFS.
- Optimized production profile, based on ISR mine planning efforts evaluating production potential for individual well patterns – resulting in an increase to the planned rate of production by approximately 43% during the first five years of operations.
- Estimated pre-production capital costs of under \$420 million (100% basis), yielding an impressive base-case after-tax (adjusted) NPV to initial capital cost ratio in excess of 3.7 to 1.
- Robust economics that easily absorb cost-inflation and design changes impacting both operating and capital costs, confirming Phoenix's position with estimated cash operating and all-in costs expected to be amongst the lowest-cost uranium mines in the world.
- Phoenix FS plans aligned and costed to meet or exceed environmental criteria expected to be required by the ongoing regulatory approval process.
- Updated mineral resource estimate, reflecting the results of 70 drill holes completed in support of ISR de-risking and resource delineation activities, which has upgraded 30.9 million pounds U<sub>3</sub>O<sub>8</sub> into measured mineral resources, and increased the average grade of the Zone A high-grade domain. This zone is now estimated to contain 56.3 million pounds U<sub>3</sub>O<sub>8</sub> in Measured and Indicated mineral resources at an average grade of 46.0% U<sub>3</sub>O<sub>8</sub>.
- Upgraded 3.4 million pounds U<sub>3</sub>O<sub>8</sub> into Proven mineral reserves, representing the equivalent of 85% of production planned during the first calendar year of operations.

### ▪ Completion of Phoenix ISR De-Risking and Transition to Engineering Design

The Phoenix FS reflects independent third-party validation of the selection of the ISR mining method for Phoenix and builds on the findings from a comprehensive and rigorous multi-year technical de-risking process highlighted by the highly successful completion of the leaching and neutralization phases of the Phoenix Feasibility Field Test ('FFT') in late 2022. Through the technical de-risking process, Denison has acquired extensive deposit-specific data and developed a robust ISR mine planning model that involved evaluation of the production potential for individual well patterns.

With technical de-risking of the project substantially complete, front-end engineering design ('FEED') efforts to support the advancement of the planned Phoenix operation are already significantly progressed and the Company is on track to transition into detailed design efforts, consistent with the Company's Outlook for 2023, before the end of the year.

### ▪ Cost update to the 2018 PFS for Wheeler River Gryphon deposit ('Gryphon') confirms the project remains to be positioned amongst the lowest-cost uranium mines in the world

A cost update ('Gryphon Update') to the 2018 PFS for conventional underground mining of the basement-hosted Gryphon was completed. The scope of the Gryphon Update was targeted at the review and update of capital and

operating costs. Mining and processing plans remain largely unchanged from the 2018 PFS aside from minor scheduling and construction sequencing optimizations. The key points include:

- Base case pre-tax NPV (8%) of \$1.43 billion (100% basis) is a 148% increase in the base-case pre-tax NPV<sub>8%</sub> for Gryphon from the 2018 PFS.
- Strong base-case pre-tax IRR of 41.4%.
- Base case after-tax NPV<sub>8%</sub> of \$864.2 million (100% basis) and IRR of 37.6% – with Denison's effective 95% interest in the project equating to a base case after-tax NPV<sub>8%</sub> of \$821.0 million.
- Base case pre-tax payback period of 20 months, and base case after-tax payback period of 22 months – equating to a reduction of 17 months for the pre-tax payback period from the 2018 PFS.

Importantly, Gryphon remains a highly valuable project that provides Denison with an additional source of low-cost potential production to deploy significant free cash flows expected from Phoenix.

## ABOUT DENISON

Denison Mines Corp. was formed under the laws of Ontario and is a reporting issuer in all Canadian provinces and territories. Denison's common shares are listed on the Toronto Stock Exchange (the 'TSX') under the symbol 'DML' and on the NYSE American exchange under the symbol 'DNN'.

Denison is a uranium exploration and development company with interests focused in the Athabasca Basin region of northern Saskatchewan, Canada. The Company has an effective 95% interest in its flagship Wheeler River Uranium Project, which is the largest undeveloped uranium project in the infrastructure rich eastern portion of the Athabasca Basin region of northern Saskatchewan. In mid-2023, a Feasibility Study was completed for Wheeler River's Phoenix deposit as an ISR mining operation, and an update to the previously prepared 2018 PFS was completed for Wheeler River's Gryphon deposit as a conventional underground mining operation. Based on the respective studies, both deposits have the potential to be competitive with the lowest cost uranium mining operations in the world. Permitting efforts for the planned Phoenix ISR operation commenced in 2019 and have advanced significantly, with licensing in progress and a draft Environmental Impact Statement ('EIS') submitted for regulator and public review October 2022.

Denison's interests in Saskatchewan also include a 22.5% ownership interest in the McClean Lake Joint Venture ('MLJV'), which includes several uranium deposits and the McClean Lake uranium mill, which is contracted to process the ore from the Cigar Lake mine under a toll milling agreement, plus a 25.17% interest in the Midwest Main and Midwest A deposits and a 67.41% interest in the Tthe Heldeth Túé ('THT,' formerly J Zone) and Huskie deposits on the Waterbury Lake property. The Midwest Main, Midwest A, THT and Huskie deposits are located within 20 kilometres of the McClean Lake mill.

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

Denison's exploration portfolio includes further interests in properties covering approximately 285,000 hectares in the Athabasca Basin region.

Denison is also engaged in post-closure mine care and maintenance services through its Closed Mines group, which manages Denison's reclaimed mine sites in the Elliot Lake region and provides related services to third party projects.

## SELECTED FINANCIAL INFORMATION

(in thousands)	As at June 30, 2023		As at December 31, 2022	
<b>Financial Position:</b>				
Cash and cash equivalents	\$	46,500	\$	50,915
Working capital <sup>(1)</sup>	\$	51,818	\$	53,660
Investments in uranium	\$	185,357	\$	162,536
Property, plant and equipment	\$	251,618	\$	253,505
Total assets	\$	532,625	\$	515,796
Total long-term liabilities <sup>(2)</sup>	\$	63,414	\$	61,365

(1) 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 (i.e. working capital at June 30, 2023 excludes \$4,536,000 from the current portion of deferred revenue (December 31, 2022 – \$4,915,000)).

(2) Predominantly comprised of the non-current portion of deferred revenue, non-current reclamation obligations, and deferred income tax liabilities.

## SELECTED QUARTERLY FINANCIAL INFORMATION

(in thousands, except for per share amounts)	2023 Q2		2023 Q1		2022 Q4		2022 Q3	
Total revenues	\$	3,491	\$	1,084	\$	2,977	\$	3,043
Net earnings (loss)	\$	61	\$	(2,400)	\$	(5,739)	\$	(6,383)
Basic and diluted earnings (loss) per share	\$	0.00	\$	(0.00)	\$	(0.00)	\$	(0.01)

(in thousands, except for per share amounts)	2022 Q2		2022 Q1		2021 Q4		2021 Q3	
Total revenues	\$	6,800	\$	4,125	\$	3,337	\$	9,541
Net earnings (loss)	\$	(16,147)	\$	42,623	\$	(2,648)	\$	32,866
Basic and diluted earnings (loss) per share	\$	(0.02)	\$	0.05	\$	(0.01)	\$	0.04

### Significant items causing variations in quarterly results

- The Company's toll milling revenues fluctuate due to the timing of uranium processing at the McClean Lake mill, as well as changes to the estimated mineral resources of the Cigar Lake mine. Toll milling revenue rates were updated for changes to future toll milling production rates at McClean Lake in the first quarters of both 2022 and 2023. During the first quarter of 2023, this update resulted in negative revenue. See RESULTS OF OPERATIONS below for further details.
- Revenues and operating expenses from the Closed Mines group fluctuate due to the timing of projects, which vary throughout the year in the normal course of business.
- During the second quarter of 2022, the Company recognized \$2,986,000 of non-recurring revenue from mineral sales.
- Exploration expenses are generally largest in the first and third quarters, due to the timing of the winter and summer exploration seasons in northern Saskatchewan. However, both the 2021 and 2022 exploration programs at Wheeler River took place during the third and fourth quarters due to the timing of ISR field programs.
- Other income and expense fluctuate due to changes in the fair value of the Company's portfolio investments, share purchase warrants, and uranium investments, all of which are recorded at fair value through profit or loss and are subject to fluctuations in the underlying share / commodity price. The Company's uranium investments and certain of its share purchase warrants are also subject to fluctuations in the US dollar to Canadian dollar exchange rate. The impact of fair value changes on the Company's net earnings / loss was particularly significant in the first and second quarters of 2022 and the second quarter of 2023. See OTHER INCOME below for more details.
- The Company's results are also impacted, from time to time, by other non-recurring events arising from its ongoing activities, as discussed below, where applicable.

## RESULTS OF OPERATIONS

### REVENUES

#### McClellan Lake Uranium Mill

McClellan Lake is located on the eastern edge of the Athabasca Basin in northern Saskatchewan, approximately 750 kilometres north of Saskatoon. Denison holds a 22.5% ownership interest in the MLJV and the McClellan Lake uranium mill, one of the world's largest uranium processing facilities, which is contracted to process ore from the Cigar Lake mine under a toll milling agreement. The MLJV is a joint venture between Orano Canada Inc. ('Orano Canada') with a 77.5% interest and Denison with a 22.5% interest.

In February 2017, Denison closed an arrangement with Ecora Resources PLC ('Ecora', then known as Anglo Pacific Group PLC) and one of its wholly owned subsidiaries (the 'Ecora Arrangement') under which Denison received an upfront payment of \$43,500,000 in exchange for its right to receive future toll milling cash receipts from the MLJV under the then current toll milling agreement with the Cigar Lake Joint Venture ('CLJV') from July 1, 2016 onwards. The Ecora Arrangement consists of certain contractual obligations of Denison to forward to Ecora the cash proceeds of future toll milling revenue earned by the Company related to the processing of the specified Cigar Lake ore through the McClellan Lake mill and, as such, the upfront payment was accounted for as deferred revenue.

During the three and six months ended June 30, 2023, the McClellan Lake mill processed 3.8 and 7.6 million pounds  $U_3O_8$ , respectively, for the CLJV (June 30, 2022 – 5.4 million and 9.1 million pounds  $U_3O_8$ ) and Denison recorded toll milling revenue of \$968,000 and negative net toll milling revenue of \$14,000, respectively (June 30, 2022 – \$1,505,000 and \$3,976,000). The decrease in toll milling revenue in the current quarter, as compared to the prior year, is due to the mill processing fewer pounds  $U_3O_8$  for the CLJV. The decrease in toll milling revenue in the six months ending June 30, 2023, as compared to the prior year, is due to both a decrease in the quantity of  $U_3O_8$  processed for the CLJV, as well as a negative \$1,946,000 non-cash cumulative accounting adjustment which was recorded in the first quarter of 2023 and which more than offset the revenue recognized from the first quarter's toll milling activity of \$964,000. By comparison, in the first quarter of 2022, the Company recognized toll milling revenue of \$1,027,000 and a \$1,444,000 positive non-cash cumulative accounting adjustment. The true ups recorded in the first quarter of both years were driven by changes in the estimated timing of the processing of the Cigar Lake ore. In the first quarter of 2022, the operators of the Cigar Lake mine announced a reduction in forecasted mine production from 18 million pounds  $U_3O_8$  per year to 15 million pounds  $U_3O_8$  per year in 2022 and 2023, and then to 13.5 million pounds  $U_3O_8$  per year thereafter. In the first quarter of 2023, the operators of the Cigar Lake mine announced that forecasted future mine production was increased back to 18 million pounds  $U_3O_8$  per year. Under IFRS 15, *Revenue from Contracts with Customers*, the change in the estimated timing of the toll milling of the CLJV ores in 2022 resulted in an increase to the implied financing component of the toll milling transaction, thus increasing the total deferred revenue to be recognized over the life of the toll milling contract as well as the deferred revenue drawdown rate. The updated drawdown rate was applied retrospectively to all pounds produced for the CLJV since the inception of the Ecora Arrangement in July 2016, resulting in the increase in revenue in the three months ended March 31, 2022. This was effectively reversed in the first quarter of 2023, resulting in the current period reduction in revenue.

During the three and six months ended June 30, 2023, the Company also recorded accounting accretion expense of \$779,000 and \$2,001,000, respectively, on the toll milling deferred revenue balance (June 30, 2022 – \$739,000 and \$1,181,000). While the annual accretion expense will decrease over the life of the contract as the deferred revenue liability decreases over time, the increase in accretion expense in the three and six months ended June 30, 2023, as compared to the prior year, was predominantly due a \$483,000 true up to increase the life-to-date accretion expense recorded in the first quarter of 2023 due to the change in the timing in the estimated CLJV toll milling activities discussed above (June 30, 2022 – \$297,000 true up which reduced the life-to-date accretion expense)

The impact of the current and prior period true-ups to revenue and accretion are non-cash.

#### Mineral Sales

Mineral sales revenue for the three and six months ended June 30, 2023 was \$nil and \$nil, respectively (June 30, 2022 – \$2,986,000 and \$2,986,000). Mineral sales revenue earned in the second quarter of 2022 was from the sale of 40,000 pounds  $U_3O_8$  from inventory at an average price of \$74.65 (US\$59.25) per pound. The inventory sold in the second quarter of 2022 was from the Company's share of production from the SABRE test mining program completed at McClellan Lake in 2021.

### Closed Mine Services

Denison's Closed Mines group has provided long-term care and maintenance for closed mine sites since 1997. With offices in Ontario and Quebec, the Closed Mines group manages Denison's Elliot Lake reclamation projects and provides related services for certain third-party projects.

Revenue from Closed Mines services during the three and six months ended June 30, 2023 was \$2,523,000 and \$4,589,000, respectively (June 30, 2022 - \$2,309,000 and \$3,963,000). The increase in revenue in the three and six months ended June 30, 2023, as compared to 2022, was due to an increase in care and maintenance activities at certain sites.

### OPERATING EXPENSES

#### Mining

Operating expenses of the mining segment include depreciation and development costs, as well as cost of sales related to the sale of uranium, when applicable. Operating expenses in the three and six months ended June 30, 2023 were \$725,000 and \$1,479,000, respectively (June 30, 2022 – \$1,779,000 and \$2,521,000).

Included in operating expense is depreciation expense relating to the McClean Lake mill of \$614,000 and \$1,268,000, respectively (June 30, 2022 – \$929,000 and \$1,553,000), as a result of processing approximately 3.8 and 7.6 million pounds U<sub>3</sub>O<sub>8</sub>, respectively for the CLJV (June 30, 2022 – 5.4 million and 9.1 million pounds).

Operating expenses for the six months ended June 30, 2022 also includes \$444,000 in cost of sales, selling expenses of \$34,000, and sales royalties and resource surcharges of \$216,000 related to the sale of 40,000 pounds of U<sub>3</sub>O<sub>8</sub>.

#### Closed Mine Services

Operating expenses during the three and six months ended June 30, 2023 totaled \$2,282,000 and \$4,088,000 respectively (June 30, 2022 - \$1,875,000 and \$3,531,000). The expenses relate primarily to care and maintenance services provided to clients, and include labour and other costs. The increase in operating expenses in the current period, as compared to the prior year, is predominantly due to increased activity at certain care and maintenance sites.

### MINERAL PROPERTY EVALUATION

During the three and six months ended June 30, 2023, Denison's share of evaluation expenditures was \$4,662,000 and \$7,384,000 (June 30, 2022 –\$6,616,000 and \$11,081,000). The decrease in evaluation expenditures, compared to the prior period, was due to a decrease in Wheeler River ISR field activities as well as a decrease in costs associated with the FFT, which transitioned to care and maintenance for the winter. Commissioning of the final phases of the FFT was completed late in the second quarter of 2023.

The following table summarizes the evaluation activities completed during the six months ended June 30, 2023.

PROJECT EVALUATION ACTIVITIES		
Property	Denison's ownership	Evaluation activities
Wheeler River	95% <sup>(1)</sup>	Engineering, FS, metallurgical testing, FFT care and maintenance and Phase 3 commissioning, environmental and sustainability activities, EIS regulatory reviews, construction license application submission.
Waterbury Lake	67.41% <sup>(2)</sup>	Project planning, initiation of 2023 field activities including drilling and development of five HQ wells.
Midwest	25.17%	Project planning, initiation of 2023 field activities including permeameter testing and hydrogeological characterization of cores.

Notes:

(1) The Company's effective ownership interest as at June 30, 2023, including the indirect 5% ownership interest held through JCU.

(2) Represents Denison's ownership position as at November 30, 2022. Korea Waterbury Uranium Limited Partnership ('KWULP'), which holds the non-Denison interests in Waterbury Lake, have deferred their funding decision regarding the 2023 evaluation program, and Denison is currently funding 100% of project expenditures.

## Wheeler River Uranium Project

On June 26, 2023 Denison announced the results of (i) the Phoenix FS completed for ISR mining of the high-grade Phoenix deposit and (ii) an updated Gryphon PFS for conventional underground mining of the basement-hosted Gryphon deposit.

The Phoenix FS was completed by Wood Canada Limited ('Wood'), WSP USA Environment and Infrastructure Inc. ('WSP'), SRK Consulting (Canada) Inc. ('SRK'), and Newmans Geotechnique Inc. ('Newmans'). The study confirms robust economics and the technical viability of an ISR uranium mining operation with low initial capital costs and a high rate of return.

The Phoenix FS reflects several design changes and the results of a rigorous technical de-risking program completed by Denison over the last 4.5 years following the publication of the 2018 PFS, which was highlighted by the then-novel selection of the ISR mining method for Phoenix.

With the benefit of extensive metallurgical and field testing of all key elements of the proposed ISR mining operation, and current cost estimates reflecting recent inflationary pressures, the Phoenix FS is expected to provide Denison with an excellent basis to advance engineering designs in support of a future final investment decision ('FID').

See details above and the following tables for the highlights of the Phoenix FS.

<b>Summary of Economic Results (100% Basis) – Base Case</b>	
Uranium selling price	<b>UxC Spot Price<sup>(1)</sup></b> (~US\$66 to US\$70/lb U3O8)
Exchange Rate (US\$:CAD\$)	1.35
Discount Rate	8%
Operating profit margin <sup>(2)</sup>	90.9%
Pre-tax NPV <sub>8%</sub> <sup>(3)</sup> (Change from 2018 PFS) <sup>(4)</sup>	\$2.34 billion (+150%)
Pre-tax IRR <sup>(3)</sup>	105.9%
Pre-tax payback period <sup>(5)</sup>	~10 months
Post-tax NPV <sub>8%</sub> <sup>(3)</sup>	\$1.43 billion
Post-tax IRR <sup>(3)</sup>	82.3%
Post-tax payback period <sup>(5)</sup>	~11 months
Adjusted Post-tax NPV <sub>8%</sub> <sup>(3)(6)</sup>	\$1.56 billion
Adjusted Post-tax IRR <sup>(3)(6)</sup>	90.0%
Adjusted Post-tax payback period <sup>(3)(6)</sup>	~10 months

### Notes

- (1) Spot price forecast is based on "Composite Midpoint" scenario from UxC's UMO (defined below) and is stated in constant (not-inflated) dollars. See Denison news release dated June 26, 2023 and the Wheeler Technical Report (defined below) for details.
- (2) Operating profit margin is calculated as aggregate uranium revenue less aggregate operating costs, divided by aggregate uranium revenue. Operating costs exclude all royalties, surcharges and income taxes.
- (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.
- (4) Change from 2018 PFS is computed by reference to the same scenario from the 2018 PFS, adjusted to incorporate certain pre-FID costs for consistent comparability.
- (5) Payback period is stated as number of months to payback from the start of uranium production.
- (6) The Adjusted Post-tax NPV, IRR and payback period are based on the "adjusted post-tax" scenario, which includes the benefit of certain entity level tax attributes which are expected to be available and used to reduce taxable income from the Phoenix operation. See Denison news release dated June 26, 2023 and the Wheeler Technical Report (defined below) for details.

Summary of Key Phoenix Operational Parameters (100% basis)	
Mine life	10 years
Proven & Probable reserves <sup>(1)</sup>	56.7 million lbs U <sub>3</sub> O <sub>8</sub> (219,000 tonnes at 11.7% U <sub>3</sub> O <sub>8</sub> )
First 5 years of reserves <sup>(2)</sup>	41.9 million lbs U <sub>3</sub> O <sub>8</sub> (Average 8.4 million lbs U <sub>3</sub> O <sub>8</sub> / year)
Remaining years of reserves	14.8 million lbs U <sub>3</sub> O <sub>8</sub> (Average 3.0 million lbs U <sub>3</sub> O <sub>8</sub> / year)
Initial capital costs <sup>(3)</sup>	\$419.4 million
Average cash operating costs	\$8.51 (US\$6.28) per lb U <sub>3</sub> O <sub>8</sub>
All-in cost <sup>(4)</sup>	\$21.73 (US\$16.04) per lb U <sub>3</sub> O <sub>8</sub>

Notes:

- (1) See Denison press released dated June 26, 2023 for additional details regarding Proven & Probable reserves.
- (2) The first five years is determined by reference to the 60 month period that commences at the start of operations.
- (3) Initial capital costs exclude \$67.4 million in estimated pre-FID expenditures expected to be incurred before the projects FID has been made.
- (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<sub>3</sub>O<sub>8</sub> to be produced.

The Gryphon Update was prepared by Engcomp Engineering and Computing Professionals Inc. ('Engcomp'), SLR International Corporation ('SLR'), Stantec Consulting Ltd. ('Stantec'), and Hatch Ltd. ('Hatch'), and is largely based on the 2018 PFS, with efforts targeted at the review and update of capital and operating costs, as well as various minor scheduling and design optimizations. The study remains at the PFS level of confidence.

Overall, the Gryphon Update demonstrates that the underground development of Gryphon is a positive potential future use of cash flows generated from Phoenix, as it is able to leverage existing infrastructure to provide an additional source of low-cost production.

See details above and the following tables for the highlights of the Gryphon Update.

Summary of Economic Results (100% Basis) – Base Case	
Uranium selling price	<b>US\$75/lb U<sub>3</sub>O<sub>8</sub><sup>(1)</sup></b> (Fixed selling price)
Exchange Rate (US\$:CAD\$)	<b>1.35</b>
Discount Rate	<b>8%</b>
Operating profit margin <sup>(3)</sup>	<b>83.0%</b>
Pre-tax NPV <sub>8%</sub> <sup>(3)</sup> (Change from 2018 PFS) <sup>(4)</sup>	<b>\$1.43 billion (+148%)</b>
Pre-tax IRR <sup>(3)</sup>	<b>41.4%</b>
Pre-tax payback period <sup>(5)</sup>	<b>~ 20 months</b>
Post-tax NPV <sub>8%</sub> <sup>(3)(6)</sup>	<b>\$864.2 million</b>
Post-tax IRR <sup>(3)(6)</sup>	<b>37.6%</b>
Post-tax payback period <sup>(5)(6)</sup>	<b>~ 23 months</b>

Notes

- (1) Fixed selling price is based on the forecasted annual "Composite Midpoint" long-term uranium price from UxC's Q2'2023 UMO (defined below) and is stated in constant (not-inflated) dollars. See Denison news release dated June 26, 2023 and the Wheeler Technical Report (defined below) for details.
- (2) Operating profit margin is calculated as aggregate uranium revenue less aggregate operating costs, divided by aggregate uranium revenue. Operating costs exclude all royalties, surcharges and income taxes.
- (3) NPV and IRR are calculated to the start of construction activities for the Gryphon operation, and excludes \$56.5 million in pre-FID expenditures.
- (4) Change from 2018 PFS is computed by reference to the same scenario from the 2018 PFS, adjusted to incorporate certain pre-FID costs for consistent comparability.
- (5) Payback period is stated as number of months to payback from the start of uranium production.
- (6) There is no "adjusted" post-tax case for Gryphon, given that the entity level tax attributes of the WRJV owners are assumed to have been fully depleted by the Phoenix operation. See Denison news release dated June 26, 2023 and the Wheeler Technical Report (defined below) for details.

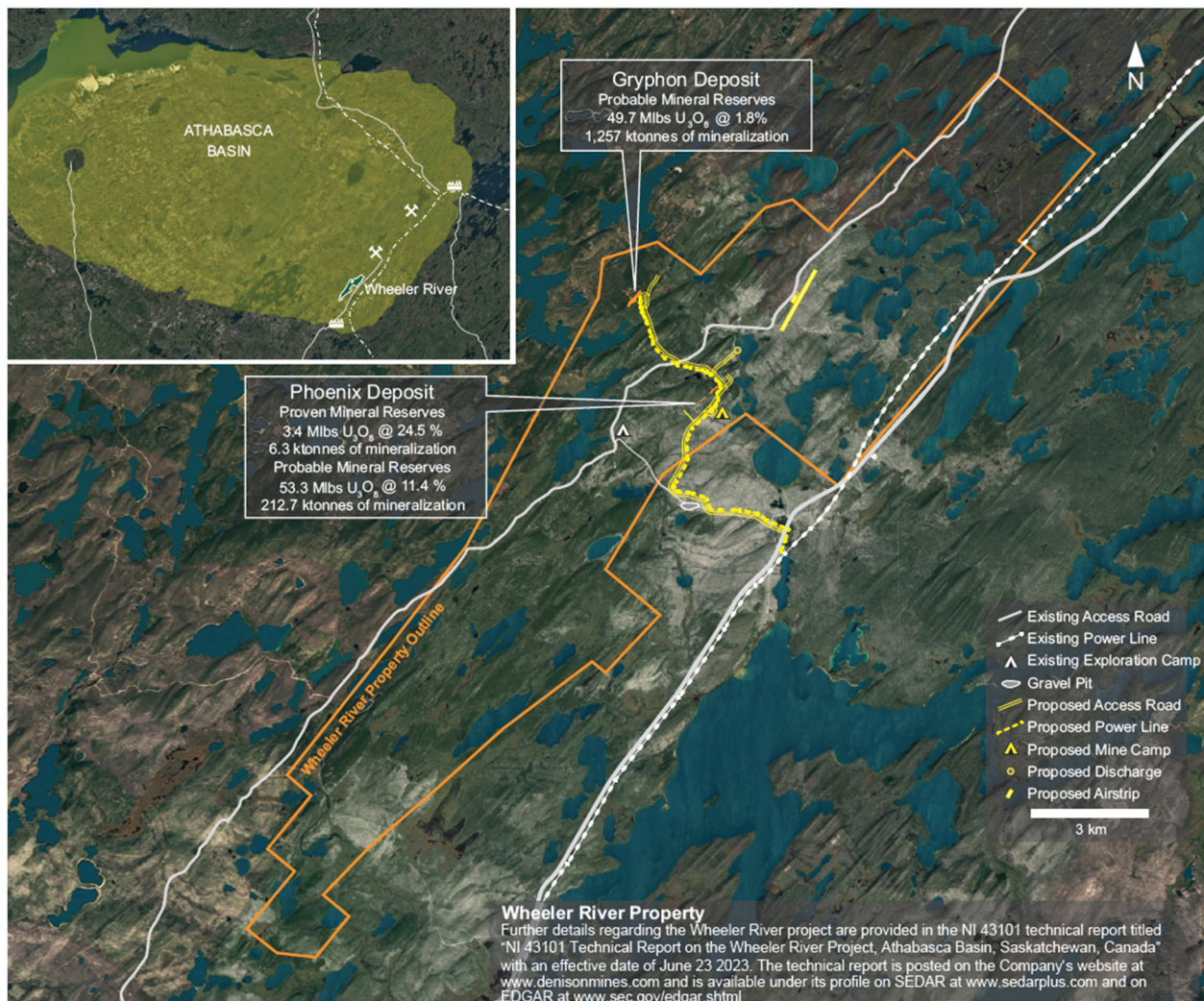
Summary of Key Gryphon Operational Parameters (100% basis)	
Mine life	6.5 years
Probable reserves <sup>(1)</sup>	49.7 million lbs U <sub>3</sub> O <sub>8</sub> (1,275,000 tonnes at 1.8% U <sub>3</sub> O <sub>8</sub> )
Average annual production	7.6 million lbs U <sub>3</sub> O <sub>8</sub>
Initial capital costs <sup>(2)</sup>	\$737.4 million
Average cash operating costs	\$17.27 (US\$12.75) per lb U <sub>3</sub> O <sub>8</sub>
All-in cost <sup>(3)</sup>	\$34.50 (US\$25.47) per lb U <sub>3</sub> O <sub>8</sub>

Notes:

- (1) See Denison press released dated June 26, 2023 for additional details regarding Probable reserves.
- (2) Initial capital costs exclude \$56.5 million in estimated pre-FID expenditures expected to be incurred before the project's FID has been made.
- (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<sub>3</sub>O<sub>8</sub> to be produced.

Further details regarding Wheeler River, including the estimated mineral reserves and resources, are provided in the Technical Report for the Wheeler River project titled ‘NI 43-101 Technical Report on the Wheeler River Project, Athabasca Basin, Saskatchewan, Canada’ with an effective date of June 23, 2023 (‘Wheeler Technical Report’). A copy of the Wheeler Technical Report is available on Denison’s website and under its profile on each of SEDAR+ and EDGAR.

The location of the Wheeler River property, as well as the Phoenix and Gryphon deposits, and existing and proposed infrastructure, is shown on the map provided below.



**Evaluation Program**

Denison’s 2023 evaluation plans for Wheeler River include (1) completing the third and final phase of the FFT, (2) completing the Phoenix FS, (3) completing FEED optimization and initiating detailed design engineering, (4) advancing through the regulatory review of the draft EIS submitted in 2022, (5) initiating activities required to license and permit construction of the proposed Phoenix ISR operation, and (6) advancing the negotiation of impact benefit type agreements with interested parties.

During the three and six months ended June 30, 2023, Denison’s share of evaluation costs at Wheeler River was \$3,768,000 and \$6,308,000, respectively (June 30, 2022 – \$7,074,000 and \$11,528,000).

## **Engineering Activities**

### Feasibility Field Test

The FFT was designed to use the existing commercial-scale ISR test pattern installed at Phoenix in 2021 in order to facilitate a combined evaluation of the Phoenix deposit's hydraulic flow properties, with the leaching characteristics that were previously assessed through the metallurgical core-leach testing program.

The successful completion of the leaching and neutralization phases of the FFT in the fourth quarter of 2022 provided further verification of the permeability, leachability, reclamation, and containment parameters needed for the successful application of the ISR mining method at the Phoenix deposit. During the first half of 2023, project planning, procurement and commissioning for the final stage of the FFT, the recovered solution management phase, were completed. During the recovered solution management phase, a solid mineralized precipitate will be created from the solutions recovered in 2022 during the leaching and neutralization phases of the test. As part of the process, a treated effluent solution will be produced to meet permit criteria for re-injection back into the mineralized formation. The solid mineralized precipitate will be stored on surface at site and will be monitored in further care and maintenance activities. The recovered solution management phase is currently scheduled for completion during the summer, with decommissioning and reclamation activities planned to follow.

### Metallurgical Testing

During the first half of 2023, the metallurgical test program continued at Saskatchewan Research Council Laboratories ('SRC') in Saskatoon including the continuation of core leach testing to further explore the recovery curve of high-grade core, and the optimization of mining solution management through the recycling of treated effluent and/or the use of barren solution as lixiviant. Other areas of optimization include the development and use of a metallurgical simulation model for the Phoenix plant.

### Feasibility Study

The results of the Phoenix FS were released in June 2023.

The Phoenix mineral resource estimate has been updated to reflect 70 additional drill holes completed since the previous mineral resource estimate from 2018. The additional drilling consisted primarily of test wells installed to support ISR de-risking activities and certain targeted resource definition drill holes. As a result of the additional drilling, 30.9 million pounds  $U_3O_8$  (64,200 tonnes at 21.8%  $U_3O_8$ ) have been upgraded from Indicated mineral resources to Measured mineral resources in recognition of the increased confidence in certain areas of Phoenix Zone A.

Phoenix is planned to be the first uranium ISR mining operation in the Athabasca Basin region. Comprehensive field and laboratory test work has been completed to de-risk the use of the ISR mining method at the Phoenix deposit – including the highly successful completion of the leaching and neutralization phases of the FFT at Phoenix in the fall of 2022. Over 3,300 data points have been collected within Phoenix to advance hydrogeological evaluations, and extensive groundwater flow modelling has been completed to develop an advanced three-dimensional estimation of the subsurface flows within and surrounding the Phoenix deposit. The data allowed for modelling of complex hydrogeological and geochemical datasets, which together with the uranium recovery curve, were used to estimate the rate of uranium dissolution within the orebody and facilitate the detailed wellfield design and production planning process.

Mining is planned to occur over a 10-year period, spanning 11 calendar years, with partial years of production occurring in both the first and final calendar year of the production plan. Progressive reclamation and decommissioning is planned to commence in each phase of the ore zone once production has ceased.

The Proven and Probable mineral reserves at Phoenix are estimated to be 56.7 million pounds  $U_3O_8$  (219,000 tonnes at 11.7%  $U_3O_8$ ). This estimate is based on the aggregate mine feed to the plant and represents 80.6% recovery of the total available uranium ( $U_3O_8$ ) in the Measured and Indicated mineral resources. Proven mineral reserves are those which were subject to a recovery test during the FFT in 2022.

Consistent with the 2018 PFS, the Phoenix FS calls for the construction of a processing plant on the Wheeler River site, which has been designed to receive uranium bearing solution ('UBS') from the wellfield for processing to a finished yellowcake product that meets industry standards.

An acidic lixiviant solution is prepared in the processing plant and transferred to an injection solution handling system for distribution in the wellfield. The solution is injected through a series of wells arranged in a pattern surrounding

extraction / recovery wells, which are designed to pump the UBS up to surface once the lixiviant has travelled through the ore zone and dissolved the uranium from the host rock.

Once the UBS is received at the processing plant, removal of impurities such as iron (Fe) and radium (Ra) occur via Stage 1 (Fe/Ra) precipitation. Next the purified leach solution feeds the Stage 2 yellowcake precipitation circuit and the yellowcake product is dried and packaged for shipment. The processing plant has been designed based on an average uranium head grade of the UBS recovered from the wellfield of 22 grams per litre and is expected to recover 96.5% of the uranium feed contained in UBS after a 6 month ramp up period of the plant (when recovery is expected to be initially 93.4%). Taken together with planned subsequent recoveries of uranium contained in the Stage 1 (Fe/Ra) precipitation product, total recovered uranium of 56.2 million pounds  $U_3O_8$  is planned to be available for sale – representing a combined 99% recovery rate.

Overall, the processing plant flowsheet remains largely consistent with the 2018 PFS; however, additional provisions have been included for effluent treatment via a three-stage neutralization process. Whereas the 2018 PFS assumed a “closed loop” processing system, the Phoenix FS design is aligned with the engineering components and criteria included in the Environmental Assessment ('EA') for the project, which allow for the treatment of process solutions and controlled release of a treated effluent to the environment. This is an example of how the iterative nature of the EA process has informed project designs during the Phoenix FS process, to ensure that the plans are aligned and costed to meet or exceed environmental criteria expected to be required by the ongoing regulatory approval process. While this design for effluent treatment has been adopted for the Phoenix FS, the potential remains for ongoing FEED studies to optimize the processing plant design

The Phoenix FS was prepared by Wood PLC, as the independent lead author, with a level of engineering design necessary to support a Class 3 capital cost estimate (AACE international standard with an accuracy of -15% /+25%).

#### Capital Costs

The estimated initial direct capital costs of \$273.8 million represent a 32% increase compared to the initial direct capital costs from 2018 PFS, which have been adjusted to reflect the movement of offsite infrastructure costs from direct costs to Other (owner's) costs. The increase in initial direct capital costs reflects recent inflationary trends in labour and materials costs and the impact of several design changes resulting from the substantive advancement of project designs from the 2018 PFS. Importantly, the design changes in the Phoenix FS reflect (i) modifications necessary to allow for production plan optimizations, leading to a 43% increase in the rate of production during the first five years of production, (ii) choices made as a result of the iterative EA evaluation process, and (iii) results of the multi-year technical de-risking program.

Initial capital costs are expected to be incurred during a 24-month construction period that will include the establishment of site infrastructure, as well as the freeze wall perimeter around the Phase 1 mining zone and initial wellfield development within Phase 1.

<b>Phoenix Capital Costs (\$ millions)</b>			
	<b>Initial</b>	<b>Sustaining</b>	<b>Total</b>
Wellfield	\$63.0	\$177.1	\$240.1
ISR processing plant	\$102.6	\$-	\$102.6
Surface facilities	\$14.7	\$2.1	\$16.8
Utilities	\$34.8	\$-	\$34.8
Electrical	\$19.1	\$-	\$19.1
Civil and earthworks	\$39.6	\$-	\$39.6
Decommissioning	\$-	\$88.8	\$88.8
<b>Subtotal – Direct Costs</b>	<b>\$273.8</b>	<b>\$268.0</b>	<b>\$541.8</b>
Indirect costs	\$70.5	\$31.6	\$102.1
Other (owner's) costs	\$32.7	\$-	\$32.7
Contingency	\$42.6	\$23.3	\$65.9
<b>Total Capital Costs</b>	<b>\$419.4</b>	<b>\$322.9</b>	<b>742.3</b>

Contingencies reflect approximately 11% of total capital costs, which is considered appropriate given the estimate was prepared to meet AACE Class 3 requirements, as well as Denison's significant experience with key capital cost drivers through the completion of multiple field test programs at Phoenix since the 2018 PFS.

Taken together with estimated indirect costs, owner's costs, sustaining and decommissioning capital costs, contingencies, and with the reallocation of certain costs to the pre-FID period, total life of mine capital costs are estimated at \$742.3 million. This represents a 74% increase in life of mine capital costs compared to the 2018 PFS.

As is demonstrated by the project's current NPV, the economic outcome of the project has not been adversely impacted by the increase in life of mine capital costs. Significant contributors to the overall increase in capital costs include the wellfield, ISR processing plant, and decommissioning costs, as further described below:

Wellfield +\$141.0 million	The increase includes the adoption of a phased "freeze wall" design to replace the novel "freeze dome" concept included in 2018 PFS. The freeze dome introduced significant technical risk to the ISR mining process and added complexity from an environmental protection standpoint. The cost of the freeze dome was included in initial capital costs, whereas the cost of the freeze wall is spread over the life of mine, thus significantly reducing the impact to the NPV from the overall increase in capital costs. Materials and installation costs for the ISR injection and extraction wells are now based on the Company's actual experience in installing both large and small-diameter test wells during the de-risking process, providing a much more accurate estimate of costs compared to the 2018 PFS.
Processing plant +\$47.1 million	The increase reflects a variety of design adjustments to the processing plant, including those which enable an increase in the planned production rate by 43% during the first 5 years, which has a positive impact on the NPV.
Decommissioning +\$60.2 million	The increase reflects the incorporation of costs associated with ore zone groundwater remediation to achieve targets proposed in the EA; more detailed management and regulatory cost requirements, improved accuracy in well decommissioning activities, process plant decontamination and demolition including transport and disposal of waste materials, additional costs for decommissioning larger industrial water treatment facilities, and environmental monitoring labour and analytical costs. As these increased capital costs are primarily expected to occur at the end of the mine life, the impact to the NPV from the increased capital costs is minimized.

### Operating Costs

Average estimated operating costs of \$8.51 (US\$6.28) per pound  $U_3O_8$  produced remain highly competitive amongst the lowest-cost uranium mining operations globally. Operating costs during the first five years of production are expected to be \$6.64 (US\$4.90) per pound  $U_3O_8$ , benefitting from the increased scale of operations and higher concentrations of uranium contained in recovered UBS. During the remaining years of production, operating costs are expected to be \$13.69 (US\$10.10) per pound  $U_3O_8$ .

As a proportion of operating costs per pound, processing costs have increased from the 2018 PFS, now accounting for nearly 62%, as compared to 45% in the 2018 PFS. The biggest contributors to the increased processing costs include reagent usage, as well as estimated costs for reagents, fuel/propane, and labour.

Changes to reagent usage reflect the results of the Company's multi-year technical de-risking process, which has provided a robust data set of metallurgical tests on which the current estimate of reagent usage has been based, as compared to limited preliminary leach data used for the 2018 PFS.

The cost of reagents, fuel/propane, and labour reflect the impact of inflation and supply chain challenges experienced through 2022 and into 2023. Based on the timing of this study, reagent and fuel/propane prices used may be reflective of "peak inflation" pricing and present a possible opportunity for optimization in future years. These cost increases are expected to impact uranium mining operations globally; however, few have completed significant operating cycles and/or estimates of future costs in the current cost environment.

### Uranium Selling Price Assumptions

The base case economic analysis assumes uranium sales from Phoenix mine production will be made from time to time throughout the production period at the forecasted annual "Composite Midpoint" uranium spot price from the Q2'2023 Uranium Market Outlook ('UMO') issued by UxC, LLC ('UxC'), which is stated annually in constant (non-inflated) 2023 dollars and ranges from ~US\$66 to US\$70 per pound  $U_3O_8$  during the indicative production period of the

Phoenix operation. This is the same pricing methodology applied for Phoenix as the base case scenario in the 2018 PFS, where the "Composite Midpoint" uranium prices during the indicative years of production then ranged from only US\$29 to US\$45 per pound U<sub>3</sub>O<sub>8</sub> in constant 2018 dollars. Consistent with the 2018 PFS, the overall cost profile and construction timeline of the planned Phoenix ISR mine is not expected to require substantial contract base loading to justify development. Accordingly, the spot price indicator from UxC has been used for the Phoenix base case economic analysis.

#### Gryphon PFS Update

The mineral resource estimate for Gryphon remains unchanged from the 2018 PFS. Using a cut-off grade of 0.2% U<sub>3</sub>O<sub>8</sub>, Gryphon is estimated to contain Indicated mineral resources of 1,643,000 tonnes, at a grade of 1.7% U<sub>3</sub>O<sub>8</sub> for a total of 61.9 million pounds U<sub>3</sub>O<sub>8</sub>, plus Inferred mineral resources of 73,000 tonnes at a grade of 1.2% U<sub>3</sub>O<sub>8</sub> for a total of 1.9 million pounds U<sub>3</sub>O<sub>8</sub>. Mineral resources are stated inclusive of mineral reserves. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

The mine development and production plan for Gryphon remains largely the same as the 2018 PFS. Access to the deposit is planned to be via a primary production shaft with a diameter of 6.1 metres, installed using a blind boring method to a depth of 550 metres below surface. A ventilation shaft with a diameter of 5.8 metres, is also planned to be excavated via blind boring to a depth of 550 metres.

Access from the shaft to the mine workings will be via a single ramp located on the hanging wall of the deposit. Mining is planned to consist of conventional underground longhole stoping mining methods and is expected to primarily utilize a longitudinal retreat approach. Mined stopes will be backfilled using a combination of rockfill, cemented rockfill, and hydraulic fill.

Overall, 49.7 million pounds U<sub>3</sub>O<sub>8</sub> over 1,260,000 tonnes grading 1.8% U<sub>3</sub>O<sub>8</sub> are planned to be extracted from Gryphon over an approximately 6.5-year mine life.

Consistent with the 2018 PFS, production from the Gryphon operation is assumed to be processed at the 22.5% Denison-owned McClean Lake processing plant, which is located in the northeastern portion of the Athabasca Basin region. The results from the 2018 PFS indicate that the Gryphon deposit is amenable to recovery utilizing the existing flowsheet for the McClean Lake mill with minimal required upgrades and an estimated recovery rate of 98.2%. Due to the volume of throughput expected from the Gryphon operation, the McClean Lake mill will require certain upgrades to process the mine production from Gryphon.

To facilitate access to the McClean Lake mill from the Wheeler River site, the Gryphon Update carries certain costs of building an extension to Highway 914 to connect the McArthur River and Cigar Lake operations and to allow for the transport of Gryphon mine production over an approximately 160 kilometre route.

Due to its proximity to Phoenix, the Gryphon operation is expected to benefit from site infrastructure that is planned to be established in support of the Phoenix ISR mine (e.g., airstrip, camp, access road, power distribution). Additional site infrastructure for Gryphon is generally limited to items directly related to the underground mining operation, including incremental power distribution requirements, ore and waste rock handling, as well as mine water handling and treatment.

#### Capital Costs

Estimated direct initial capital costs of \$487.6 million represent a 48% increase compared to the 2018 PFS. The increase in direct initial capital costs reflect recent inflationary trends in labour and materials costed using the Chemical Engineering Plant Cost Index. Initial capital costs are expected to be incurred during a 42-month construction period that will include approximately 24 months for the completion of the production shaft and vent raise. Surface facilities, underground excavation, haulage road, and McClean Lake mill upgrades are expected to take approximately 18 months. Initial ore recovery occurs prior to the completion of construction and ramps up for the mine to achieve full production by year 3.

Contingencies reflect approximately 25% of total capital costs, which is considered appropriate given the estimate was prepared to meet AACE Class 4 requirements in alignment with the stage of engineering and design efforts for the project.

Taken together with estimated indirect costs, sustaining and decommissioning capital costs, and the reallocation of certain costs to the pre-FID period, total life of mine capital costs are estimated at \$841.1 million. This represents a 19% increase in life of mine capital costs compared to the 2018 PFS. Due to construction schedule optimization, the

impact of increased capital costs to the NPV has been minimized.

#### Operating Costs

Estimated operating costs of \$17.27 (US\$12.75) per pound U<sub>3</sub>O<sub>8</sub> produced have increased by approximately 14% from the 2018 PFS and remain highly competitive amongst the lowest-cost uranium mining operations globally. Operating costs have increased as a result of recent inflationary trends in labour and materials, partially offset by favourable updates to certain milling assumptions.

#### Uranium Selling Price Assumptions

The base case economic analysis assumes uranium sales from Gryphon mine production will be made throughout the mine life at a fixed price of US\$75 per pound U<sub>3</sub>O<sub>8</sub>, which is based on the average of the forecasted annual "Composite Midpoint" long-term uranium price from UxC's Q2'2023 UMO, which is stated in constant (non-inflated) 2023 dollars, during the indicative production period of Gryphon, rounded to the nearest US\$5 per pound U<sub>3</sub>O<sub>8</sub>. This is the same pricing methodology applied for Gryphon as the base case scenario in the 2018 PFS, where the "Composite Midpoint" long-term uranium price during the indicative years of production averaged ~US\$50 per pound U<sub>3</sub>O<sub>8</sub> in then constant 2018 dollars. Consistent with the 2018 PFS, the overall cost profile and construction timeline of the planned Gryphon underground mine is considered to be more amenable to fixed (base escalated) price contracts with nuclear energy utilities to reduce risk and justify a development decision. Accordingly, the long-term price indicator from UxC has been used for the Gryphon base case economic analysis.

### ***Environmental and Sustainability Activities and Licensing Activities***

#### Environmental Assessment Activities

In October 2022, the draft EIS for the Wheeler River Project was submitted to Provincial and Federal regulators and the formal review process was initiated. Technical comments and information requests were received from both regulatory agencies in the first quarter of 2023 and the Company has provided technical responses to both the Provincial and Federal regulators. Additional rounds of review are expected to be initiated prior to finalization of the EIS.

#### Licensing Activities

The Company submitted documentation to the Canadian Nuclear Safety Commission ('CNSC') as part of the licensing process required to obtain a site preparation and construction license for Phoenix. The process will include the review and acceptance of program and engineering documents outlining Denison's plans to safely design, manage, prepare and construct the proposed ISR mine and processing facility.

### **Evaluation Pipeline Properties**

#### Waterbury Lake

In 2020, an independent preliminary economic analysis ('PEA') was completed for the Waterbury Lake Property, which evaluated the potential use of the ISR mining method at the THT deposit. Further details regarding Waterbury, including the estimated mineral resources, are provided in the Technical Report for the Waterbury project 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 Technical Report'). A copy of the Waterbury PEA Technical Report is available on Denison's website and under its profile on each of SEDAR+ and EDGAR.

Denison's 2023 evaluation plans for Waterbury are designed to build upon the PEA, including an ISR field program that is expected to include the installation of eight new ISR test wells within the mineralized zone at THT, the collection of site-specific hydrogeological test data to verify permeability and containment assumptions, and the collection of fresh metallurgical drill core samples in order to support additional de-risking of the ISR mining approach for the THT deposit.

The ISR field program commenced in the second quarter of 2023 with the installation of the first ISR test wells at THT, and is expected to include pump testing, injection testing, tracer testing, permeameter data, hydrogeological logging,

and geological logging. During the three and six months ended June 30, 2023, evaluation costs at Waterbury Lake were \$1,537,000 and \$1,600,000, respectively (Denison's share \$1,036,000 and \$1,079,000, respectively).

### Midwest

The Midwest Joint Venture ('MWJV') is operated by Orano Canada and is host to the high-grade Midwest Main and Midwest A uranium deposits, which lie along strike and within six kilometres of the THT and Huskie deposits on Denison's 67.41% owned Waterbury Lake project. The Midwest and Waterbury deposits are all located in close proximity to existing uranium mining and milling infrastructure – including provincial highways, powerlines, and Denison's 22.5% owned McClean Lake mill.

A Concept Study for ISR application at Midwest (the 'Concept Study') was prepared by Denison during 2022 and was formally issued to the MWJV in early 2023 (see Denison press release dated April 12, 2023). Based on the positive results of the Concept Study, the MWJV provided Denison with approval to complete additional ISR-related evaluation work for Midwest in 2023.

Denison's 2023 evaluation plans for Midwest include an inaugural ISR field program which has been designed to assess site-specific technical elements of the Midwest deposit. The field program commenced during the second quarter of 2023, and the results of the program, along with further technical studies are expected to be used to further advance the evaluation of the ISR mining method for the property, which may include the preparation of a PEA.

During the three and six months ended June 30, 2023, Denison's share of evaluation costs at Midwest was \$41,000 and \$41,000, respectively (June 30, 2022 – \$nil and \$nil). The work plan for 2023 includes (1) preliminary geological and hydrogeological modelling to guide field program data collection, (2) relogging of historical drill core to assess for hydrogeological characteristics, (3) collection of preliminary rock permeability values at Midwest, and (4) refined hydrogeological modelling based on results of field data.

In addition, metallurgical testing on historic drill core samples is also planned for 2023. The metallurgical test work is planned to commence in the third quarter of 2023 and is expected to consist of bottle roll tests designed to provide initial site-specific, ISR focused, metallurgical results.

### **Community Engagement Activities**

During the first half of 2023, Denison continued working with Indigenous communities of interest and collaborated on engagement activities in the Athabasca Basin region of northern Saskatchewan, including community visits to provide information about the Company's Wheeler River Project and other exploration and evaluation activities. To start the field season at THT, the Ya'thi Néné Lands and Resources Office facilitated an opening ceremony that occurred prior to the commencement of drilling activities associated with the 2023 ISR field program. Several community site visits were also conducted at the Wheeler River Project FFT site. Denison is also progressing the preparation of responses to comments from Indigenous and non-Indigenous communities received in relation to the Wheeler River EIS.

### **MINERAL PROPERTY EXPLORATION**

During the three and six months ended June 30, 2023, Denison's share of exploration expenditures was \$1,834,000 and \$5,781,000, respectively (June 30, 2022 –\$1,060,000 and \$3,626,000). The increase in exploration expenditures compared to the prior year was due to an increase in winter exploration activities.

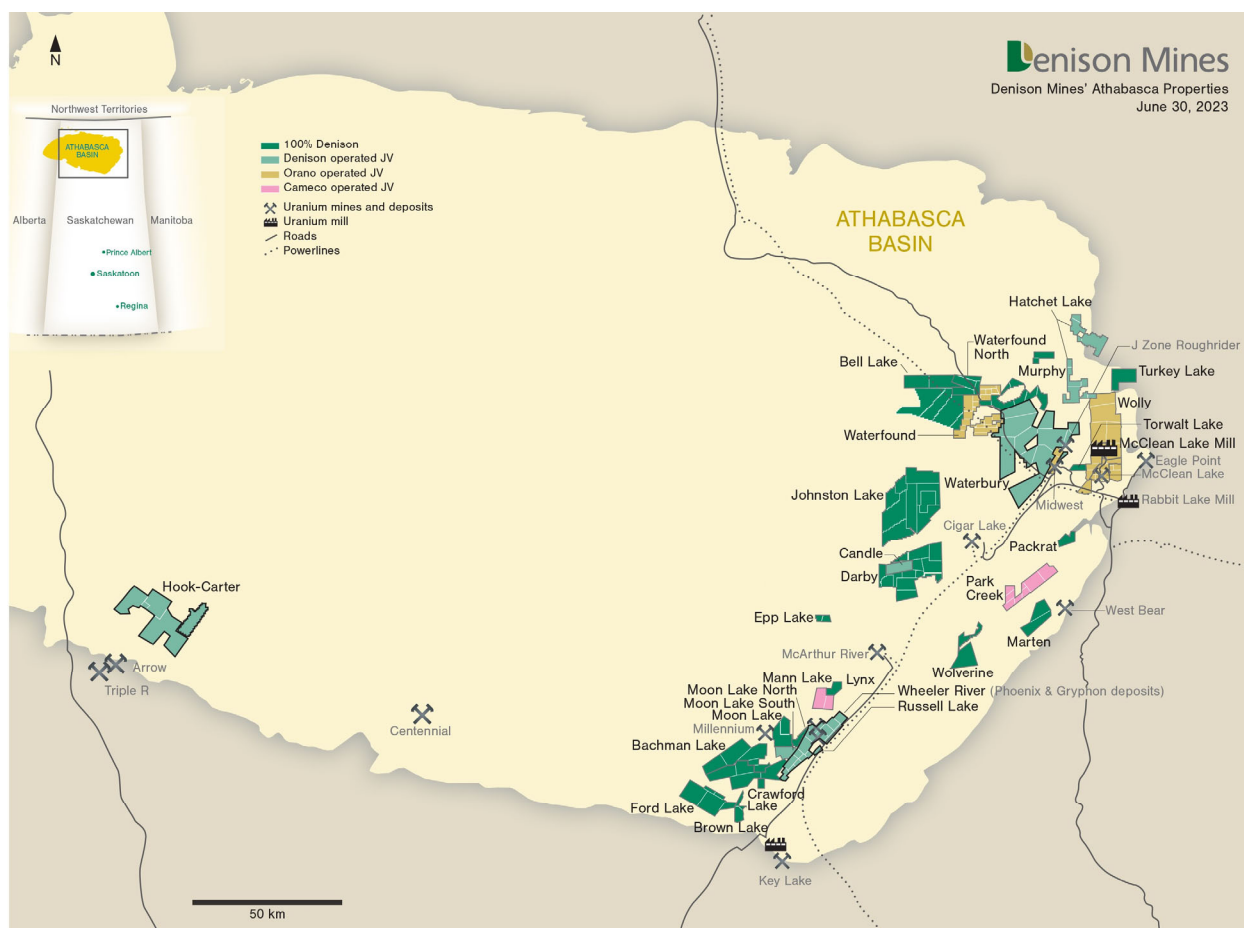
Exploration spending in the Athabasca Basin is generally seasonal in nature, with spending typically higher during the winter exploration season (January to mid-April) and summer exploration season (June to mid-October).

The following table summarizes the 2023 exploration activities which were completed up to early July 2023. Exploration drilling programs were conducted at Wheeler River, Moon Lake South, Moon Lake, Johnston Lake, and at Waterfound, one of the Company's non-operated properties. All exploration expenditure information in this MD&A covers the three and six months ended June 30, 2023.

EXPLORATION ACTIVITIES			
Property	Denison's ownership	Drilling in metres (m) <sup>(1)</sup>	Other activities
Bell Lake	100.00%	-	Geophysical Survey
Johnston Lake	100.00%	2,346 (3 holes)	Geophysical Survey
Moon Lake	100.00%	627 (1 hole)	-
Moon Lake South	75.00%	3,306 (6 holes)	-
Waterfound	24.68% <sup>(2)</sup>	8,061 (13 holes)	-
Wheeler River	95.00% <sup>(3)</sup>	3,034 (5 holes)	Geophysical Survey
<b>Total</b>		<b>17,374 (28 holes)</b>	

- (1) The Company reports total exploration metres drilled and the number of holes that were successfully completed to their target depth.
- (2) Denison's effective ownership interest as at June 30, 2023, including an indirect 12.90% ownership interest held through Denison's 50% ownership of JCU.
- (3) Denison's effective ownership interest as at June 30, 2023, including the indirect 5.0% ownership interest held through the JCU.

The Company's land position in the Athabasca Basin, as of June 30, 2023, is illustrated in the figure below. The Company's Athabasca land package decreased during the second quarter of 2023, from 295,752 hectares (213 claims) to 286,146 hectares (207 claims). The decrease was due to the sale of the South Dufferin property to Skyharbour Resources Ltd., slightly offset by the acquisition of three additional claims adjacent to the Darby property. The land position reported by the Company excludes the land positions held by JCU.



### Wheeler River Exploration

Denison's share of exploration costs at Wheeler River during the three and six months ended June 30, 2023 was \$67,000 and \$1,295,000, respectively (June 30, 2022 – \$37,000 and \$148,000).

The 2023 Wheeler River winter exploration drilling program was initiated in mid-January, and was completed during the first quarter. A total of 3,034 metres was drilled in 5 holes, with three holes drilled approximately 850 metres south of Gryphon, and an additional two drill holes completed at the Gryphon South target area, approximately 2.8 kilometres south of the Gryphon deposit.

During the second quarter of 2023, exploration work at Wheeler River included the analysis and interpretation of the results of the 2023 winter drilling program and planning for the summer drilling program, which is expected to commence in September 2023 and is planned to include 2,500 metres of diamond drilling.

### Drilling

During the first quarter of 2023, three holes were drilled to test the potential to upgrade the unconformity-associated mineralization found in 2015 drill hole WR-597, located approximately 850 metres south of the Gryphon deposit (4.5%  $U_3O_8$  over 4.5 metres), by testing the unconformity approximately 100 metres southwest along strike of WR-597. While the 2023 drill holes did not intersect unconformity-hosted uranium mineralization, multiple intervals of basement-hosted mineralization were identified: WR-810A intersected uranium mineralization grading 1.27%  $eU_3O_8$  over 1.0 metres approximately 60 metres below the unconformity; and WR-811A identified basement-hosted mineralization grading 0.61%  $eU_3O_8$  over 4.0 metres, approximately 4.0 metres below the unconformity.

Also in the first quarter of 2023, two additional holes were completed at the Gryphon South target area, designed to test conductivity anomalies associated with the edges of a resistivity low anomaly, located an additional 2.8 km along strike to the south of WR-810A and WR-811A. This basement resistivity low exhibits an S-shaped flexure, creating a structural setting where zones of both dilation and compression may be present, which present attractive targets for both basement-hosted and unconformity-hosted mineralization respectively.

WR-808 targeted the SE edge of the resistivity anomaly. A graphitic pelite was intersected in the upper basement, interpreted to explain the conductive response. Unfortunately, no significant structural disruption was associated with this graphitic pelite. Significant carbonate veining was observed approximately 150 metres below the unconformity, perhaps indicating that there may be a significant structure nearby. No significant elevated radioactivity was encountered in WR-808.

WR-809 targeted the NW edge of the resistivity anomaly and intersected a graphitic fault zone approximately 40 metres below the unconformity consisting of sporadic breccias with structurally upgraded graphite with thicknesses of up to 20 centimetres. The up-dip projection of this structure at the unconformity presents a target for future exploration drilling.

### Ground Geophysics

In addition to the winter diamond drilling activities, the Stepwise Moving Loop Electromagnetic ('SWML EM') survey that was initiated at the N Zone target area in the fourth quarter of 2022 was completed in January 2023. The final processed data set was received in the first quarter of 2023. Analysis and interpretation is ongoing.

### **Exploration Pipeline Properties**

During the first half of 2023, five exploration field programs were carried out at Denison's pipeline properties (four operated by Denison) and Denison's share of exploration costs for these properties was \$1,591,000 and \$4,360,000 respectively, for the three and six months ended June 30, 2023 (June 30, 2022 - \$851,000 and \$3,139,000).

The Company continues to review, prioritize and rationalize its Athabasca Basin exploration portfolio with the objective of continuing to explore its highest priority projects, with the potential to deliver significant and meaningful new discoveries.

### Bell Lake

During the first quarter of 2023, a Small Moving Loop Electromagnetic ('SML EM') survey was completed on the Company's 100%-owned Bell Lake property to locate and refine the positions of discrete, steeply-dipping conductors within a broad resistivity low anomaly identified from the 2013 and 2015 DC resistivity surveys. The final processed data set was received during the second quarter. The results of the survey are currently being evaluated by Denison's exploration team and will be used to generate targets for future exploration drilling programs.

### Hook-Carter

Located in the southwest corner of the Athabasca basin, the Hook-Carter project is interpreted to host the strike extension of the Patterson Lake corridor, which hosts NexGen Energy's Arrow deposit, Fission Uranium's Triple R deposit, and Purepoint Uranium Group's Spitfire zone. The project also overlies the interpreted strike extension of the Carter and Derkson corridors, each of which represent highly prospective, under-explored corridors in which significant uranium mineralization may exist.

A property-wide Z-Axis Tipper Electromagnetic ('ZTEM') survey was completed on the Company's Hook-Carter property in June of 2023. The primary objective of the ZTEM survey is to develop a project-scale conductivity model that will provide valuable insight into the underlying basement geology, which will be used to drive further exploration activities on the project. A total of 1,559 kilometres of ZTEM data was collected. The final processed data set is expected to be received during the third quarter of 2023.

### Johnston Lake

The Johnston Lake project is 100% owned and operated by Denison. The property, located approximately 20 kilometres northwest of Cameco's Cigar Lake operation, consists of nine mineral dispositions totaling 28,647 hectares.

During the first quarter of 2023, a SML EM survey was completed on the property to better define basement conductivity associated with the MJ1 conductive trend and generate targets for future drill testing on the project. The final processed data set was received in the second quarter. Further integration and interpretation by Denison's exploration team is ongoing.

The 2023 exploration drilling program at Johnston Lake commenced in early June and is expected to be completed in the third quarter. A total of 6,000 metres is planned to evaluate the MJ-1 trend, where historic drilling identified significant uranium and base metal enrichment. As of mid-July 2023, three drill holes were complete for a total of 2,346 metres. Alteration and structure indicative of a potentially mineralizing system have been intersected in all three drill holes.

### Moon Lake

The Moon Lake property is located in the southeastern part of the Athabasca Basin, adjacent to the western boundary of the Wheeler River project. During the first quarter of 2023, the Company completed an exploration drilling program, consisting of one diamond drill hole drilled to 627 metres depth. No significant structure, alteration, or uranium mineralization was intersected. No further work is planned for the property in 2023.

### Moon Lake South

The Moon Lake South property is also located adjacent to the western boundary of the Wheeler River project and is north of Denison's 100% owned Crawford Lake project, approximately 30 kilometres northwest of Cameco's Key Lake operation. The Moon Lake South project is a joint venture between Denison Mines Corp., which holds a 75% interest in the property, and CanAlaska Uranium Ltd. ('Moon Lake South JV'), which holds the remaining 25% interest. Denison is the project operator.

The 2023 winter exploration program consisted of six completed diamond drill holes totaling 3,306 metres, designed to evaluate the potential to expand the footprint of known mineralization discovered in 2016 and 2021 by testing conductivity anomalies identified from the 2022 SWML EM survey.

In April 2023, the Company announced that uranium mineralization was encountered in four of the six drill holes completed during the 2023 winter exploration program, highlighted by MS-23-10A which intersected perched high-grade uranium mineralization lying approximately 30 metres above the sub-Athabasca unconformity. Assay results from the 2023 winter drilling program were received during the second quarter, which confirmed and upgraded the high-grade result reported from MS-23-10A, returning 2.46%  $U_3O_8$  over 8.0 metres (0.05%  $U_3O_8$  cut-off), including 3.71%  $U_3O_8$  over 4.5 metres (2%  $U_3O_8$  cut-off). This represents a significant increase in the average grade of the mineralized intersection compared to the previously reported radiometric equivalent probe grades (1.38%  $eU_3O_8$  over 8.7 metres (0.05%  $eU_3O_8$  cut-off), including a sub-interval grading 2.88%  $eU_3O_8$  over 3.1 metres).

The Moon Lake South JV has approved a supplemental program to drill up to an additional 4,400 metres to test for additional mineralization in the vicinity of MS-23-10A. The supplemental drill program is expected to begin in September 2023.

### Waterfound River

Waterfound River ('Waterfound') is operated by Orano Canada. Denison has an effective 24.68% ownership interest in the project, including an 11.78% direct interest and a 12.90% indirect interest from its 50% ownership of JCU.

The 2023 winter diamond drill program was designed with three objectives: (i) to evaluate and define the extent of high-grade unconformity associated uranium mineralization around the recently discovered Crocodile zone (including the broad zone of uranium mineralization previously encountered in WF-74A, which returned 4.75% eU<sub>3</sub>O<sub>8</sub> over 13.3 metres, including a peak interval of 25.23% eU<sub>3</sub>O<sub>8</sub> over 0.5 metres); (ii) characterize and determine the extent of historical mineralization at the Alligator showing (includes 4.49% U<sub>3</sub>O<sub>8</sub> over 10.53 metres); and (iii) test the potential for high-grade mineralization between the two mineralized zones.

The most significant mineralization returned from the 2023 winter drill program was encountered in WF-74A-1, which tested the unconformity approximately 17 metres south of WF-74A. Mineralization grading 0.53% eU<sub>3</sub>O<sub>8</sub> over 4.6 metres was encountered straddling the unconformity contact.

The summer drill program at Waterfound was initiated in mid-June 2023. Two holes have been completed, with one hole in progress, for a total of 1,743 metres drilled as of mid-July, of which no uranium mineralization above a cutoff grade of 0.05% eU<sub>3</sub>O<sub>8</sub> has been identified.

### **GENERAL AND ADMINISTRATIVE EXPENSES**

Total general and administrative expenses were \$3,209,000 and \$6,463,000, respectively during the three and six months ended June 30, 2023 (June 30, 2022 - \$2,759,000 and \$6,823,000). These costs are mainly comprised of head office salaries and benefits, office costs in multiple regions, audit and regulatory costs, legal fees, investor relations expenses, project costs, and all other costs related to operating a public company with listings in Canada and the United States. The increase in general and administrative expenses during the second quarter of 2023, is primarily driven by an increase in compliance costs (stock exchange fees, audit fees, etc.), as well as increased travel costs associated with site visits to the Wheeler River FFT site. The decrease in general and administrative expenses in the six months ended June 30, 2023 was predominantly driven by a decrease in the employee cash bonus expense, slightly offset by the increase in compliance costs and travel costs recorded in the second quarter.

### **OTHER INCOME**

During the three and six months ended June 30, 2023, the Company recognized net other income of \$12,000,000 and \$22,246,000, respectively (June 30, 2022 – loss of \$7,481,000 and a gain of \$45,164,000).

The main drivers of other income are as follows:

#### ***Fair value gains or losses on uranium investments***

During 2021, the Company acquired 2,500,000 pounds of U<sub>3</sub>O<sub>8</sub> at a weighted average cost of \$36.67 (US\$29.66) per pound U<sub>3</sub>O<sub>8</sub> (including purchase commissions of \$0.05 (US\$0.04) per pound U<sub>3</sub>O<sub>8</sub>) to be held as a long-term investment to strengthen the Company's balance sheet and potentially enhance its ability to access future project financing in support of the advancement and/or construction of Wheeler River. Given that this material is held for long-term capital appreciation, the Company's holdings are measured at fair value, with changes in fair value between reporting dates recorded through profit and loss. During the three months ended June 30, 2023, the spot price of U<sub>3</sub>O<sub>8</sub> increased from \$68.54 (US\$50.65) per pound U<sub>3</sub>O<sub>8</sub> as at March 31, 2023, to \$74.14 (US\$56.00) per pound U<sub>3</sub>O<sub>8</sub>, at June 30, 2023, resulting in a fair value of the Company's uranium investments of \$185,357,000 and mark-to-market gains for the three months ended June 30, 2023 of \$13,995,000 on the Company's uranium holdings (June 30, 2022 – mark to market loss of \$18,177,000). During the six months ended June 30, 2023, the spot price of U<sub>3</sub>O<sub>8</sub> increased from \$65.01 (US\$48.00) per pound U<sub>3</sub>O<sub>8</sub> as at December 31, 2022, to \$74.14 (US\$56.00) per pound U<sub>3</sub>O<sub>8</sub>, at June 30, 2023, resulting in mark-to-market gains for the six months ended June 30, 2023 of \$22,821,000 on the Company's uranium holdings (June 30, 2022 - \$29,579,000).

#### ***Fair value gains or losses on portfolio investments***

During the three and six months ended June 30, 2023, the Company recognized losses of \$3,051,000 and \$1,885,000, respectively, on portfolio investments carried at fair value (June 30, 2022 – losses of \$9,261,000 and \$4,986,000). Gains and losses on investments carried at fair value are determined by reference to the closing share price of the related investee at the end of the period, or, as applicable, immediately prior to disposal.

***Fair value gains or losses on warrants on investments***

In October 2021, the Company sold (1) 32,500,000 common shares of GoviEx Uranium Inc. ('GoviEx') and (2) 32,500,000 GoviEx warrants ('GoviEx Warrants') for combined gross proceeds of \$15,600,000. The gross proceeds were allocated to the GoviEx shares and GoviEx Warrants based on their relative fair values at the time of sale.

The GoviEx Warrants entitled the holder to acquire from Denison one common share of GoviEx owned by Denison for \$0.80 during the 18 month life of the warrant (until April 2023) and were accounted for as a derivative liability. At each applicable period end, the warrants were revalued and the revaluation gains and losses are recorded in other income and expense.

During the three and six months ended June 30, 2023, the Company recorded a fair value loss on the GoviEx Warrants of \$nil and \$nil, respectively (June 30, 2022 - gain of \$2,308,000 and \$1,170,000). The warrants expired unexercised in April 2023 and had already been reduced to a fair value of \$nil at December 31, 2022.

***Fair value gains or losses on share purchase warrants***

In February and March 2021, Denison completed two equity offerings involving the issuance of units, which were comprised of one common share and one half of a common share purchase warrant. Each full warrant entitled the holder to acquire one common share of the Company at a pre-determined exercise price for 24 months after issuance. The exercise prices for the share purchase warrants were denominated in US dollars, which differs from the Company's Canadian dollar functional currency, and therefore the warrants were classified as a non-cash derivative liability, rather than equity, on the Company's statement of financial position.

At the date of issuance of the units, the gross proceeds of each offering were allocated between the common shares and the common share purchase warrants issued using the relative fair value basis approach, and the amount related to the warrants was recorded as a non-current derivative liability. At each applicable period end, the warrants were revalued, with the revaluation gains or losses recorded in other income and expense.

During the three and six months ended June 30, 2023, the Company recorded a fair value loss of \$nil and \$nil, respectively, on the revaluation of the Denison share purchase warrants (June 30, 2022 - gains of \$17,217,000 and \$16,733,000). The warrants expired in the first quarter of 2023 and had already been reduced to a fair value of \$nil at December 31, 2022.

***Gain on receipt of proceeds from Uranium Industry a.s***

In January 2022, the Company executed a Repayment Agreement ('RA') pursuant to which the parties negotiated the repayment of the debt owing from Uranium Industry a.s ('UI') to Denison in connection with the Company's sale of its mining assets and operations located in Mongolia to UI in 2015 for upfront cash consideration as well as the rights to receive additional contingent consideration. Under the terms of the RA, UI has agreed to make scheduled payments of the amounts owing from the sale of the Mongolia operations through a series of quarterly installments and annual milestone payments, until December 31, 2025. The total amount due to Denison under the RA, including amounts received to date in 2022, is approximately US\$16,000,000, inclusive of additional interest to be earned over the term of the agreement at a rate of 6.5% per annum. The RA includes customary covenants and conditions in favour of Denison, including certain restrictions on UI's ability to take on additional debt, in consideration for Denison's deferral of enforcement of the arbitration award while UI is in compliance with its obligations under the RA.

During the three and six months ended June 30, 2023, the Company received US\$200,000 and US\$400,000, respectively, from UI (June 30, 2022 - US\$100,000 and US\$2,200,000), of which a portion relates to reimbursement of legal and other expenses incurred by Denison. During the three and six months ended June 30, 2023, as a result of the payments received, the Company recorded gains related to the Mongolia sale receivable of \$266,000 and \$535,000, respectively (June 30, 2022 - \$127,000 and \$2,713,000). This receivable is recorded at fair value at each period end (June 30, 2023 and December 31, 2022 - \$nil).

***Foreign exchange losses***

During the three and six months ended June 30, 2023, the Company recognized foreign exchange losses of \$354,000 and \$191,000, respectively (June 30, 2022 - gains of \$487,000 and \$287,000). The foreign exchange losses in the three and six months ended June 30, 2023 are predominantly due the impact of the decrease in the US dollar to Canadian dollar exchange rate during the year on US dollar cash balances.

## EQUITY SHARE OF INCOME FROM JOINT VENTURES

During the three and six months ended June 30, 2023, the Company recorded its equity share of loss from JCU of \$2,461,000 and \$3,355,000, respectively (June 30, 2022 - \$812,000 and \$1,304,000). The Company records its share of income or loss from JCU one month in arrears, based on the most available financial information, adjusted for any subsequent material transactions that have occurred.

## LIQUIDITY AND CAPITAL RESOURCES

Cash and cash equivalents were \$46,500,000 at June 30, 2023 (December 31, 2022 – \$50,915,000).

The decrease in cash and cash equivalents of \$4,415,000 was predominantly due to net cash used in operations of \$17,212,000 and net cash used in investing activities of \$2,800,000, offset by net cash provided by financing activities of \$15,661,000.

Net cash used in operating activities of \$17,212,000 was predominantly due to net income for the period, and adjustments for non-cash items, including fair value adjustments.

Net cash used in investing activities of \$2,800,000 consists primarily of the Company's incremental investment in JCU, an increase in property plant & equipment, as well as an increase in restricted cash due to the Company's funding the Elliot Lake reclamation trust fund.

Net cash provided by financing activities of \$15,661,000 was mainly due to the net proceeds from the Company's At-The-Market ('ATM') equity program, as well as stock option exercises. See below for further details regarding the ATM program.

In September 2021, the Company filed a short form base shelf prospectus ('2021 Base Shelf Prospectus') with the securities regulatory authorities in each of the provinces and territories in Canada and in the United States. The 2021 Base Shelf Prospectus relates to the public offering for sale of securities, in amounts, at prices, and on terms to be determined based on market conditions at the time of sale and as set forth in the 2021 Shelf Prospectus and pursuant to a prospectus supplement, for an aggregate offering amount of up to \$250,000,000 during the 25 month period beginning on September 16, 2021.

Also in September 2021, Denison entered into an equity distribution agreement providing for an ATM equity offering program ('2021 ATM Program'), qualified by a prospectus supplement to the 2021 Base Shelf Prospectus. The 2021 ATM Program allows Denison, through its agents, to, from time to time, offer and sell, in Canada and the United States, such number of common shares as would have an aggregate offering price of up to US\$50,000,000.

During the three and six months ended June 30, 2023, the Company issued 8,481,060 shares under the 2021 ATM Program. The common shares were issued at an average price of \$1.85 per share for aggregate gross proceeds of \$15,653,000. The Company also recognized commission-related and other issue costs of \$314,000 related to its ATM share issuances. Since launching the 2021 ATM Program, the Company has issued 23,364,222 shares under the 2021 ATM Program at an average price of \$1.88 per share for aggregate gross proceeds of \$43,828,000.

Also during the six months ended June 30, 2023, the Company received share issue proceeds of \$452,000 related to the issuance of 666,714 shares upon the exercise of employee stock options.

### Use of Proceeds

#### March 2021 Unit Financing

As disclosed in the Company's prospectus supplement to its 2020 base shelf prospectus dated March 17, 2021 ('March 2021 Prospectus Supplement'), the majority of the net proceeds of the equity financing from March 2021 were expected to be utilized to purchase physical uranium in the uranium spot market, with a target of acquiring approximately 2,500,000 pounds of U<sub>3</sub>O<sub>8</sub>, as well as general, corporate and administrative expenses, including storage costs for the purchased uranium. During 2021, the Company acquired 2,500,000 pounds of U<sub>3</sub>O<sub>8</sub> with a total cost of \$89,196,000. The remainder of the net proceeds of this financing will be utilized for general, corporate, and administrative expenses, in line with the use of proceeds disclosed in the March 2021 Prospectus Supplement.

### 2021 ATM Program Financing

As disclosed in the Company's prospectus supplement to the 2021 Base Shelf Prospectus dated September 28, 2021 ('September 2021 Prospectus Supplement'), the net proceeds raised under the 2021 ATM Program were expected to be utilized to potentially fund Wheeler River evaluation and detailed project engineering, long lead project construction items, as well as general, corporate and administrative expenses, subject to the actual amount raised. During the period from the closing of the financing in September 2021 to June 30, 2023, the Company's use of proceeds from this offering was in line with that disclosed in the September 2021 Prospectus Supplement.

### Revolving Term Credit Facility

On December 22, 2022, the Company entered into an agreement with the Bank of Nova Scotia ('BNS') to extend the maturity date of the Company's credit facility to January 31, 2024 ('2023 Credit Facility'). Under the 2023 Credit Facility, the Company increased the facility by \$992,000 to cover additional standby letters of credit with respect to environmental obligations related to the FFT activities at Wheeler River. The Company now has access to letters of credit of up to \$23,964,000, which is fully utilized for non-financial letters of credit in support of reclamation obligations. All other terms of the 2023 Credit Facility (tangible net worth covenant, pledged cash, investments amount and security for the facility) remain unchanged by the amendment – including a requirement to provide \$7,972,000 in cash collateral on deposit with BNS to maintain the current letters of credit issued under the 2023 Credit Facility.

## TRANSACTIONS WITH RELATED PARTIES

### Korea Electric Power Corporation ('KEPCO')

Denison and Korea Hydro Nuclear Power Canada ('KHNP Canada') (which is an indirect subsidiary of KEPCO through Korea Hydro Nuclear Power ('KHNP')) are parties to the KHNP Strategic Relationship Agreement, which provides for a long-term collaborative business relationship between the parties and includes a right of KHNP Canada to nominate one representative to Denison's Board of Directors provided that its shareholding percentage is at least 5%.

KHNP Canada is also the majority member of KWULP. KWULP is a consortium of investors that holds the non-Denison owned interests in Waterbury Lake Uranium Corporation and Waterbury Lake Uranium Limited Partnership ('WLULP'), entities whose key asset is the Waterbury Lake property.

## COMPENSATION OF KEY MANAGEMENT PERSONNEL

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Company, directly or indirectly. Key management personnel include the Company's executive officers, vice-presidents and members of its Board of Directors.

The following compensation was awarded to key management personnel:

(in thousands)	Three Months Ended		Six Months Ended	
	June 30, 2023	June 30, 2022	June 30, 2023	June 30, 2022
Salaries and short-term employee benefits	\$ (546)	\$ (545)	\$ (1,644)	\$ (2,168)
Share-based compensation	(659)	(825)	(1,473)	(1,648)
	\$ (1,205)	\$ (1,370)	\$ (3,117)	\$ (3,816)

The decrease in salaries and short-term employee benefits awarded to key management in the six months ended June 30, 2023 is predominantly driven by a decrease in bonus expense. During 2022, key management compensation included a special additional bonus award granted to certain key management personnel.

## OFF-BALANCE SHEET ARRANGEMENTS

The Company does not have any off-balance sheet arrangements.

## OUTSTANDING SHARE DATA

### Common Shares

At August 9, 2023, there were 835,875,854 common shares issued and outstanding and a total of 854,113,858 common shares on a fully-diluted basis.

### Stock Options and Share Units

At August 9, 2023, there were 9,289,500 stock options, and 8,948,504 share units outstanding.

## OUTLOOK FOR 2023

During the second quarter of 2023, the Company increased its outlook for exploration expenditures by \$784,000 predominantly due to the expanded drilling program for Moon Lake South (see above for further details). The remainder of the Company's plans for the year remain unchanged. Refer to the Company's annual MD&A for the year ended December 31, 2022 for a detailed discussion of the previously disclosed 2023 budget.

(in thousands)	2023 BUDGET	2023 OUTLOOK	Actual to June 30, 2023 <sup>(2)</sup>
<b>Mining Segment</b>			
Development & Operations	(1,695)	(1,695)	(704)
Exploration	(7,964)	(8,748)	(5,668)
Evaluation	(27,260)	(27,260)	(8,710)
JCU Cash Contributions	(3,146)	(3,146)	(1,100)
	(40,065)	(40,849)	(16,182)
<b>Closed Mines Segment</b>			
Closed Mines Environmental Services	873	873	551
	873	873	551
<b>Corporate and Other Segment</b>			
Corporate Administration & Other	(4,476)	(4,476)	(3,827)
	(4,476)	(4,476)	(3,827)
<b>Total<sup>(1)</sup></b>	<b>\$ (43,668)</b>	<b>\$ (44,452)</b>	<b>\$ (19,458)</b>

Notes:

1. Only material operations shown.

2. The budget is prepared on a cash basis. As a result, actual amounts represent a non-GAAP measure. Compared to segment loss as presented in the Company's unaudited interim consolidated financial statements for the six months ended June 30, 2023, actual amounts reported above includes capital additions of \$1,283,000, \$535,000 in repayments from UI, and excludes \$1,910,000 net impact of non-cash items and other adjustments.

## ADDITIONAL INFORMATION

### QUALIFIED PERSON

Chad Sorba, P.Geol., Denison's Director Technical Services, who is a 'Qualified Person' within the meaning of this term in NI 43-101, has prepared and/or reviewed and confirmed the scientific and technical disclosure pertaining to the Company's evaluation programs.

Andy Yackulic, P.Geol., Denison's Director Exploration, who is a 'Qualified Person' within the meaning of this term in NI 43-101, has prepared and/or reviewed and confirmed the scientific and technical disclosure pertaining to the Company's exploration programs.

For more information regarding each of Denison's material projects discussed herein, you are encouraged to refer to the applicable technical reports available on the Company's website and under the Company's profile on SEDAR+ ([www.sedarplus.com](http://www.sedarplus.com)) and EDGAR ([www.sec.gov/edgar.shtml](http://www.sec.gov/edgar.shtml)):

- For the Wheeler River project, the 'Technical Report for the Wheeler River project titled 'NI 43-101 Technical Report on the Wheeler River Project, Athabasca Basin, Saskatchewan, Canada' with an effective date of June 23, 2023;
- For the Waterbury Lake project, '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;
- For the Midwest project, 'Technical Report with an Updated Mineral Resource Estimate for the Midwest Property, Northern Saskatchewan, Canada' dated March 26, 2018; and
- For the McClean Lake project, (A) the 'Technical Report on the Denison Mines Inc. Uranium Properties, Saskatchewan, Canada' dated November 21, 2005, as revised February 16, 2006, (B) the 'Technical Report on the Sue D Uranium Deposit Mineral Resource Estimate, Saskatchewan, Canada' dated March 31, 2006, and (C) the 'Technical Report on the Mineral Resource Estimate for the McClean North Uranium Deposits, Saskatchewan' dated January 31, 2007.

### ASSAY PROCEDURES AND DATA VERIFICATION

The Company reports preliminary radiometric equivalent grades ('eU<sub>3</sub>O<sub>8</sub>'), derived from a calibrated down-hole total gamma probe, during or upon completion of its exploration programs and subsequently reports definitive U<sub>3</sub>O<sub>8</sub> assay grades following sampling and chemical analysis of the mineralized drill core. Uranium assays are performed on split core samples by the Saskatchewan Research Council ('SRC') Geoanalytical Laboratories using an ISO/IEC 17025:2005 accredited method for the determination of U<sub>3</sub>O<sub>8</sub> weight %. Sample preparation involves crushing and pulverizing core samples to 90% passing -106 microns. The resultant pulp is digested using aqua-regia and the solution analyzed for U<sub>3</sub>O<sub>8</sub> weight % using ICP-OES. Geochemical results from composite core samples are reported as parts per million ('ppm') obtained from a partial HNO<sub>3</sub>:HCl digest with an ICP-MS finish. Boron values are obtained through NaO<sub>2</sub>/NaCO<sub>3</sub> fusion followed by an ICP-OES finish. All data are subject to verification procedures by qualified persons employed by Denison prior to disclosure. For further details on Denison's sampling, analysis, quality assurance program and quality control measures and data verification procedures please see Denison's Annual Information Form dated March 27, 2023 available on the Company's website and filed under the Company's profile on SEDAR+ ([www.sedarplus.com](http://www.sedarplus.com)) and in its Form 40-F available on EDGAR at [www.sec.gov/edgar.shtml](http://www.sec.gov/edgar.shtml).

### CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

Certain information contained in this MD&A constitutes 'forward-looking information', within the meaning of the applicable United States and Canadian legislation concerning the business, operations and financial performance and condition of Denison.

Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as 'plans', 'expects', 'budget', 'scheduled', 'estimates', 'forecasts', 'intends', 'anticipates', or 'believes', or the negatives and/or variations of such words and phrases, or state that certain actions, events or results 'may', 'could', 'would', 'might' or 'will be taken', 'occur', 'be achieved' or 'has the potential to'.

In particular, this MD&A contains forward-looking information pertaining to the following: the results of, and estimates and assumptions within, the Phoenix FS and the Gryphon PFS Update, including the estimates of Denison's mineral reserves and mineral resources, and statements regarding anticipated budgets, fees, expenditures and timelines; Denison's plans and objectives for 2023 and beyond; exploration, development and expansion plans and objectives, including Denison's planned engineering, environmental assessment and other evaluation programs; statements regarding Denison's EA plans and objectives; expectations regarding Denison's community engagement activities and related agreements; expectations regarding Denison's joint venture ownership interests and the continuity of its agreements with its partners; expectations regarding the toll milling of Cigar Lake ores, including projected annual production volumes; expectations regarding revenues and expenditures from its Closed Mines operations; and the annual operating budget and capital expenditure programs, estimated exploration and development expenditures and reclamation costs and Denison's share of same. Statements relating to 'mineral reserves' or 'mineral resources' are deemed to be forward-looking information, as they involve the implied assessment, based on certain estimates and assumptions that the mineral reserves and mineral resources described can be profitably produced in the future.

Forward looking statements are based on the opinions and estimates of management as of the date such statements are made, and they are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of Denison to be materially different from those expressed or implied by such forward-looking statements. For example, the results of the Denison's studies, including the Phoenix FS, trade-off study, and field work, may not be maintained after further testing or be representative of actual mining plans for the Phoenix deposit after further design and studies are completed. In addition, Denison may decide or otherwise be required to discontinue testing, evaluation and development work at Wheeler River or other projects or its exploration plans if it is unable to maintain or otherwise secure the necessary resources (such as testing facilities, capital funding, regulatory approvals, etc.) or operations are otherwise affected by regulatory or public health restrictions or requirements.

Denison believes that the expectations reflected in this forward-looking information are reasonable but no assurance can be given that these expectations will prove to be accurate and results may differ materially from those anticipated in this forward-looking information. For a discussion in respect of risks and other factors that could influence forward-looking events, please refer to the factors discussed in Denison's Annual Information Form dated March 27, 2023 under the heading 'Risk Factors'. These factors are not, and should not be construed as being exhaustive.

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

**Cautionary Note to United States Investors Concerning Estimates of Measured, Indicated and Inferred Mineral Resources and Proven and Probable Mineral Reserves:** This MD&A may use the terms 'measured', 'indicated' and 'inferred' mineral resources. United States investors are advised that while such terms have been prepared in accordance with the definition standards on mineral reserves of the Canadian Institute of Mining, Metallurgy and Petroleum referred to in Canadian National Instrument 43-101 Mineral Disclosure Standards ('NI 43-101') and are recognized and required by Canadian regulations. Effective February 2019, the United States Securities and Exchange Commission ('SEC') adopted amendments to its disclosure rules to modernize the mineral property disclosure requirements for issuers whose securities are registered with the SEC under the Exchange Act and as a result, the SEC now recognizes estimates of "measured mineral resources", "indicated mineral resources" and "inferred mineral resources". In addition, the SEC has amended its definitions of "proven mineral reserves" and "probable mineral reserves" to be "substantially similar" to the corresponding definitions under the CIM Standards, as required under NI 43-101. However, information regarding mineral resources or mineral reserves in Denison's disclosure may not be comparable to similar information made public by United States companies.

United States investors are also cautioned that while the SEC now recognizes 'indicated mineral resources' and 'inferred mineral resources', **United States investors are cautioned not to assume that all or any part of measured or indicated mineral resources will ever be converted into mineral reserves. United States investors are also cautioned not to assume that all or any part of an inferred mineral resource exists, or is economically or legally mineable.**