

## PROGRESS UPDATE ON INSTALLATION OF ISR TEST PATTERN AT WHEELER RIVER

# 2021 ISR Field Program on Track for Active Year of De-risking

**OUR TAKE:** This morning, Denison provided a progress update on its 2021 ISR field program currently underway at its 90%-owned Wheeler River Project. The Company announced that 4 of the planned 5 commercial scale wells have been installed since the program commenced in early April, with the last one expected to be completed within the next week to represent a five-spot test pattern of an ISR production well grouping at Phoenix (see Figure 1). DML plans to use these commercial scale wells to perform a true lixiviant injection test in 2022. This would serve to further de-risk the Company's innovative plan to ISR mine the ultra high-grade Phoenix deposit and would be a major milestone for the Company. Prior to a potential lixiviant injection test, DML plans to utilize these commercial scale wells to **perform approximately 25 hydrogeological tests examining many of the dynamic aspects of the orebody and providing ample news flow over the summer months.** The tests will examine permeability enhancement techniques such as MaxPERF/permeability enhancement tunnels that will assist developing permeability models and controlling production rates in the future as DML refines techniques to control fluid movement/contact within the production areas and reduces the technical risk to future mining. **Denison continues to be rated as one of our top-picks in the uranium space largely underpinned by our thesis that recent de-risking work at Wheeler River regarding the ISR mining approach to the ultra-high-grade Phoenix deposit is going under-appreciated by the market. We expect ongoing and future work to further demonstrate the viability of this low-cost mining approach and believe that it will translate into outperformance for DML shares.** Please note, Denison was highlighted in our Haywood 2021 Top Picks Report [<Link to Haywood 2021 Top-Picks report. DML details on p.30>](#).

### HIGHLIGHTS

- ◆ **Five-spot Commercial Scale Well Test Pattern:** As mentioned, since work commenced weeks ago, four commercial scale wells have been drilled to target depths, cased, and cemented into position, with the fifth and final planned well currently being installed and expected to be completed within the next week (see Figure 1 and 2). Denison will use the CSW test pattern to further evaluate the ISR mining conditions at Phoenix, with a planned lixiviant injection test earmarked for 2022. This work sets up for some major milestones for the Company as it uses information gathered to incorporate into its detailed mine planning that is expected to be completed as part of a future Feasibility Study for the Project.
- ◆ **Extensive Hydrogeologic Testing:** The Company anticipates completing approximately 25 hydrogeological tests during its 2021 ISR field program to examine many of the dynamic aspects of the orebody, including:
  - evaluate baseline conditions,
  - evaluate the effectiveness of permeability enhancement tools deployed on an individual well basis, and
  - assess the Test Pattern's total permeability on a full commercial scale basis.
 Additionally, according to the Company "ion tracer tests using inorganic salts are expected to be conducted on the full Test Pattern to establish breakthrough times for each [commercial scale well] and confirm sub-surface pathways" which will be used to gain a better understanding of the deposits hydrogeologic characteristics and to support the permitting and design of its anticipated lixiviant test.
- ◆ **Installation of 11 Additional Monitoring Wells:** Denison plans to install an additional eleven monitoring wells in its Phase 1 area to encompass the Test Pattern in order to facilitate detailed monitoring of pressure changes and observations of fluid flow patterns during active hydrogeological tests (see Figure 1 and 2).

### RECOMMENDED ACTION

*We recommend adding exposure as Phoenix continues to be de-risked and sector fundamentals improve...*

- ◆ **Attractive entry point as risk/reward proposition improving.** A core strength of Denison remains its ability to leverage its technical team and knowledge gained in studying ISR and its applicability to unconformity-hosted uranium deposits in the Basin. Denison continues to demonstrate this as it applies its growing in-house ISR skill set, unique in the Athabasca Basin and refined studying the Phoenix Deposit 'use case' at its flagship Wheeler River project, to other deposits within its portfolio as well, potentially unlocking value in smaller projects that would otherwise likely require significant scaling to be economic by conventional mining techniques. We recommend buying Denison to gain leverage to the uranium sector and potentially ultra low cost future production from Wheeler River while it works to uncover additional value in its extended portfolio.

#### KEY STATISTICS AND METRICS

52-Week High/Low	\$2.29/\$0.41
YTD Performance	51%
Dividend Yield	N/A
Shares O/S	803.9M
Market Capitalization	\$1,021M
Cash	\$150M
Debt	NIL
Enterprise Value	\$871M
Daily Volume (3 mos.)	3,208,410
Currency	C\$ unless noted

#### HAYWOOD ESTIMATES (CAD)

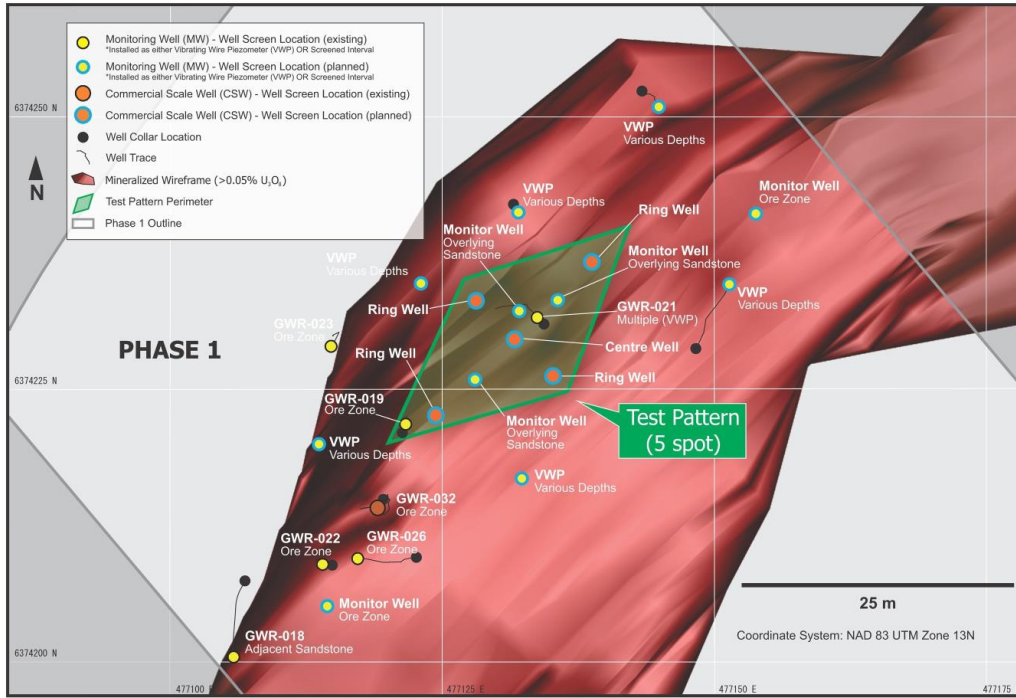
	2019A	2020A	2021E
Revenue (\$M)	\$15.5	\$14.4	\$13.5
U <sub>3</sub> O <sub>8</sub> Production	-	-	-
EBITDA (\$M)	(\$14.8)	(\$7.2)	(\$15.1)
CFPS (\$/share)	(\$0.03)	(\$0.02)	(\$0.02)

#### VALUATION

**Our target** is based on a corporate NAV sum-of-parts assessment of Denison's full suite of interests, including a DCF<sub>6%</sub> assessment of future production from the Wheeler River project and other credits.

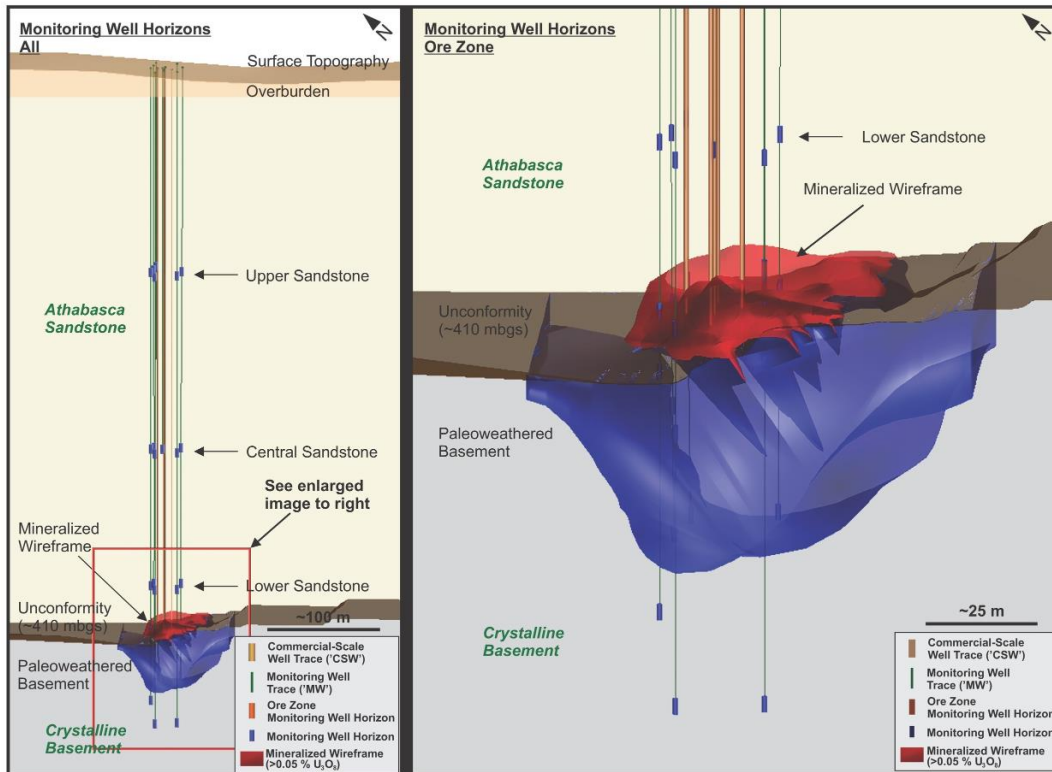
Net of corporate adjustments, our NAV is \$1.9 billion, or \$2.18 per fully diluted share.

Figure 1: Phoenix Deposit Phase 1- Well Screen Location Plan View



Source: Denison Mines

Figure 2: 3D Isometric Views of the Phoenix Deposit (Phase 1) – ISR Test Pattern Showing Locations of Monitoring Well Horizons



Source: Denison Mines



## Important Information and Legal Disclosures

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### Analyst Certification

I, Colin Healey, hereby certify that the views expressed in this report (which includes the rating assigned to the issuer's shares as well as the analytical substance and tone of the report) accurately reflect my/our personal views about the subject securities and the issuer. No part of my/our compensation was, is, or will be directly or indirectly related to the specific recommendations.

### Important Disclosures

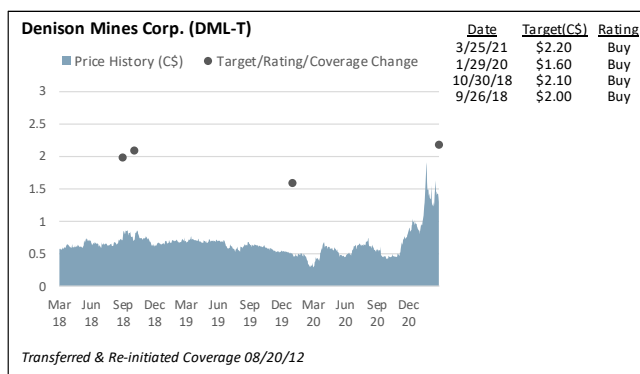
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- ◆ Haywood Securities, Inc. has reviewed lead projects of Denison Mines Corp. (DML-T) and a portion of the expenses for this travel have been reimbursed by the issuer.
- ◆ Haywood Securities Inc. or one of its subsidiaries has managed or co-managed or participated as selling group in a public offering of securities for Denison Mines Corp. (DML-T) in the past 12 months.

### Distribution of Ratings (as of April 21, 2021)

	%	#	IB Clients (TTM)
<b>Buy</b>	82.1%	78	91.4%
<b>Hold</b>	7.4%	7	8.6%
<b>Sell</b>	0.0%	0	0.0%
<b>Tender</b>	1.1%	1	0.0%
<b>UR (Buy)</b>	0.0%	0	0.0%
<b>UR (Hold)</b>	0.0%	0	0.0%
<b>UR (Sell)</b>	0.0%	0	0.0%
<b>Dropped (TTM)</b>	9.5%	9	0.0%

### Price Chart, Rating and Target Price History (as of April 21, 2021)



B: Buy; H: Hold; S: Sell; T: Tender; UR: Under Review  
Source: Capital IQ and Haywood Securities

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