



Denison Mines Corp.

{DML-T, DNN-US}

SECTOR: Mining

STOCK PRICE	\$0.64
RATING	BUY
TARGET PRICE	\$1.60
RISK	Very High

INTERNAL CONCEPTUAL ISR MINING STUDY OF J-ZONE LEADS TO INITIATION OF PEA

Denison to Study Potential Economics of ISR Mining J-Zone in 2020 PEA

OUR TAKE: This morning, Denison announced plans to release a PEA studying the potential to apply ISR mining techniques to the J-Zone deposit (Figure 1) at its 66.7%-owned Waterbury Lake project following completion of an internal mining concept study, introducing an unexpected H2/2020 catalyst for the stock. The J-Zone at Waterbury is an unconformity style deposit in the eastern Athabasca Basin, hosted in a setting not dissimilar to that of DML's Phoenix deposit at Wheeler River, where DML has undertaken advanced study (PFS-level) of the technical and economic aspects of applying the ISR mining approach to Phoenix. DML is leveraging the knowledge and internal resources gained in the development of ISR work at Phoenix to potentially unlock resources at the J-Zone, which hosts ~12.8Mlb U₃O₈ at average grade of ~2.0% U₃O₈ (Figure 2).

KEY HIGHLIGHTS

- ◆ **Decision to initiate PEA on J-Zone taken following completion of internal conceptual ISR mining study.**
 - **Internal Study must be Compelling.** Denison's internal technical team has evaluated the potential for this approach and has elected to move forward with a PEA, with the obvious takeaway being that they believe the deposit can be economically mined by ISR methods.
 - **New Catalyst for H2/2020.** Expect a first look at preliminary economics under this novel approach to be delivered H2/2020.
 - **Leveraging Knowledge Gained from Technical Work at Phoenix.** The Waterbury Lake project currently makes up ~5% of our corporate NAV. J-Zone's value potential was previously held back by its size relative to the economic hurdle of conventional mining in the Basin and required delineation of additional resource to scale. J-Zone is located at/near the unconformity and is "variably fractured, broken and desilicified..." which is favourable for the transmission of recovery fluids through the deposit. As an unconformity deposit, J-Zone sits just atop the Athabasca Basin basement rocks, which are consolidated, relatively impermeable and expected to be appropriate for lower containment of recovery fluids, similar to the Phoenix concept. As such, it sets up well to be ISR amenable on initial data.
 - **Unlocking Value.** Successfully demonstrating the economics of this deposit by this novel (to the Basin) ISR approach could unlock significant value for shareholders at a much lower cost than exploring/drilling/delineating additional pounds to achieve economic scale at J-Zone via conventional mining methods. ISR mining could be a game changer for J-Zone and other smaller, but high-grade deposits in the basin with the right setting.

RECOMMENDED ACTION

We recommend adding exposure to Denison as it continues to de-risk Phoenix and add catalysts, leveraging its technical team

- ◆ **Attractive entry point as risk/reward proposition improving on ISR concept at Phoenix while leveraging knowledge gained and applying across assets.** Denison is applying its growing in-house ISR skill set, unique in the Athabasca Basin, to another deposit, potentially unlocking value in a project 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 Denison works to uncover additional value in its extensive portfolio of other projects. With two of the world's largest mines currently offline, the uranium market is in fundamental deficit. We believe these projects will remain offline until uranium prices climb, which will be a major catalyst for high torque names like Denison.

KEY STATISTICS AND METRICS

52-Week High/Low	\$0.68/\$0.24
YTD Performance	518.5%
Dividend Yield	N/A
Shares O/S	626M
Market Capitalization	\$401M
Cash	\$4.9M
Debt	NIL
Enterprise Value	\$397M
Daily Volume (3 mos.)	402,360
Currency	CAD

HAYWOOD ESTIMATES (CAD)

	2018A	2019A	2020E
Revenue (\$M)	\$15.6	\$15.5	\$10.5
U ₃ O ₈ Production	-	-	-
EBITDA (\$M)	(\$15.5)	(\$14.9)	(\$6.1)
CFPS (\$/share)	(\$0.04)	(\$0.03)	(\$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_{10%} assessment of future production from the Wheeler River project and other credits. Net of corporate adjustments, our NAV is \$1.0 billion, or \$1.60 per share.

Figure 1. Denison’s Suite of Assets in the Athabasca Basin, Waterbury highlighted



Source: Denison Mines

Figure 2. Waterbury Lake NI 43-101 Resource Estimate (2018)

J Zone, Waterbury Lake NI 43-101 Resources December 2018 (100%-Basis)

Project	Ownership	Category	Mt	U ₃ O ₈ Grade (%)	Contained U ₃ O ₈ (Mlb)	Cut-off Grade (% U ₃ O ₈)	
Waterbury Lake	66.71%	J Zone	Indicated	0.291	2.00%	12.8	0.10%

Source: Denison Mines, Haywood presentation



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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

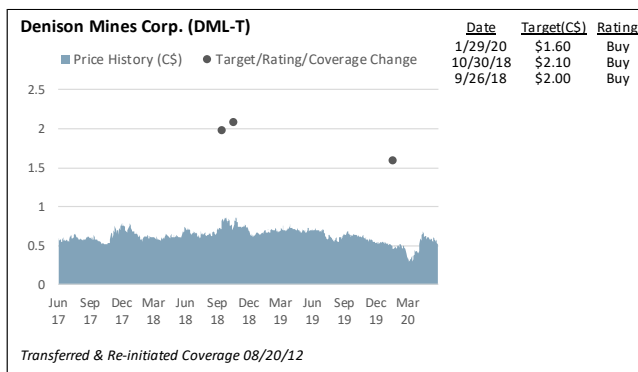
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- ◆ Haywood Securities Inc. or one of its subsidiaries has managed or co-managed or participated as selling group in a public offering of securities for Denison Mines Corp. (DML-T) in the past 12 months.

Distribution of Ratings (as of July 28, 2020)

	%	#	IB Clients (TTM)
Buy	70.8%	68	83.3%
Hold	6.3%	6	5.6%
Sell	0.0%	0	0.0%
Tender	0.0%	0	0.0%
UR (Buy)	1.0%	1	0.0%
UR (Hold)	0.0%	0	0.0%
UR (Sell)	0.0%	0	0.0%
Dropped (TTM)	21.9%	21	11.1%

Price Chart, Rating and Target Price History (as of July 28, 2020)



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

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