

Action Note

Equity Research

October 5, 2020

Metals & Minerals

Denison Mines Corp.

(DML-T) C\$0.56

Highlights from the TD Virtual Uranium Roundtable

Craig Hutchison, P. Eng

Joel Brown, P.Eng. (Associate)

Event

In this note, we discuss industry and company-specific highlights from our annual TD Uranium Roundtable, which was held virtually on October 1, 2020.

Impact: NEUTRAL

- Tim Gabruch, Vice President of Commercial represented Denison at the day-long virtual roundtable.** Tim reminded investors that all key environmental and technical personnel have been retained through 2020 following the temporary suspension of Denison's Phoenix Environmental Assessment (EA) process due to COVID-19. In the interim, these key individuals have executed on other work items such as building additional confidence in the hydrogeological model through field work conducted over the summer that will help to support future activities in 2021.
- Denison is expected to provide an update on the resumption of the EA process in the coming weeks or months along with the company's plans for 2021.**
- Gryphon zone to be largely self-funded through cash flows from Phoenix -** As a reminder, the Wheeler River PFS included the development of the Gryphon zone as the second stage to the overall mine plan. Unlike Phoenix, Gryphon is expected to be a conventional underground mine that will be funded from the cash flows of Phoenix. The current FS will only include the Phoenix zone, which will therefore require the company to complete a separate FS on Gryphon at a later date.
- A PEA is expected on the Waterbury project before the end of the year.** Denison has recently completed a conceptual mine study of the J zone, looking to utilize ISR recovery methods. Given that Denison holds a minority stake in the McClean Lake mill that is in close proximity to the project, and the fact that the mill has excess capacity, management believes there is the potential to process material at that facility.

TD Investment Conclusion

We have maintained our \$0.85 target price and HOLD rating. Overall TD's Uranium conference was well attended by institutional investors who we believe are now starting to recognize that the market is transitioning away from substantial oversupply to one that is increasingly tight. That said, we still need to see further signs of market conditions improving before we upgrade Denison to a Speculative Buy.

Recommendation:	HOLD
Risk:	SPECULATIVE
12-Month Target Price:	C\$0.85
12-Month Dividend (Est.):	C\$0.00
12-Month Total Return:	51.8%

Market Data (C\$)

Current Price	C\$0.56
52-Week Range	\$0.24 - \$0.75
Mkt Cap (f.d.) (\$mm)	\$359.3
EV (\$mm)	\$374.2
Current Dividend	\$0.00
Dividend Yield	0.0%
Avg. Daily Trading Vol.	1,048,753

Financial Data (C\$)

Fiscal Y-E	December
Shares O/S (f.d.)(mm)	641.6
Float Shares (mm)	626.1
NAVPS	\$1.07
Working Cap (\$mm)	\$16.1

Estimates (C\$)

Year	2018A	2019A	2020E	2021E
EPS (f.d.)	(0.05)	(0.03)	(0.02)	(0.01)
CFPS (f.d.)	(0.04)	(0.04)	(0.02)	(0.02)

EPS (f.d.) Quarterly Estimates (C\$)

Year	2018A	2019A	2020E	2021E
Q1	(0.01)	(0.01)	(0.01)	-
Q2	(0.01)	(0.01)	0.00	-
Q3	(0.01)	(0.01)	(0.01)	-
Q4	(0.02)	0.00	(0.01)	-

Supplemental Data

Year	2018A	2019A	2020E	2021E
U3O8 (US\$/lb)	25	26	31	36

Note: Starting January 1, 2018, the company began reporting its financial results in CAD. 2017 financial results are presented in USD.

All figures in C\$, unless otherwise specified



Company Profile

Denison Mines Corp. has a diversified portfolio of uranium assets, including an interest in the McClean Lake milling operation; development projects; an environmental management division; and exploration properties located in Canada's Athabasca Basin.

Details

The company's independent proof of concept for ISR recovery on the Phoenix zone has been its most significant milestone of late. As a reminder, the proof of concept was based on a hydrogeological model that simulated a well field of 18 extraction wells and 33 injections wells over test areas 1 and 2. The model was optimized using ISR field testing results conducted by Denison. The proof of concept was determined by Petrotek Engineering Corp., a company with 20 years of experience in uranium mining projects, ranging from feasibility studies to facility operations. Petrotek is an expert in field operations of subsurface fluid flow and injection projects and has been involved with most of the ISR miners in the U.S. and with others in most of the countries that utilize the ISR method globally.

Market Outlook

Common question during the roundtable was why are utilities not engaging in the term market more actively? We believe that there are several reasons: (1) The provisional agreement to extend the Russian Suspension Agreement ([see our detailed note here](#)) was only resolved a few weeks ago and U.S. utilities are only starting to understand the implications on medium to longer-term supply from Russia; (2) This year, nuclear utilities have been focused on managing through the COVID-19 pandemic; (3) Fuel buyers, in general, continue to receive multiple responses to RFPs suggesting to them that near-term supply remains plentiful; and (4) Utility requirements are well-covered for the next several years suggesting that a sense of urgency is lacking. All of that being said, both Kazatomprom and Cameco management indicated that interest in term contracting has improved over the past month particularly for deliveries beyond 2024/25 and some utilities require material in 2022/23 that was previously expected to be sourced from Russia.

Inventory drawdown accelerated; undisciplined supply shrinking. Earlier this year, Kazatomprom indicated that it would no longer sell material into the spot market and that its production going forward would be fully committed to term contracts. We also believe that the supply constraint over the past two years combined with the COVID-19-related shutdowns in 2020 sharply accelerated the drawdown of surplus inventory. There does remain undisciplined supply in the market, which we understand totals several hundred thousand pounds at any one time, suggesting to us that the spot market availability is not very deep, and a relatively small volume of material is dictating price formation, at least for now.

The stage is set for a rebound in term contracting activity with trade policy roadblocks largely out of the way, the uranium market in deficit, the two largest uranium producers exercising supply discipline, spot supply and inventories dwindling, and global nuclear generating capacity now above the levels achieved pre-Fukushima. As well, the large term contracts signed 10 years ago during the last uranium boom are starting to expire. The missing ingredient remains a sense of urgency by utilities to re-enter the market.

Uranium market in deficit. We are projecting that the uranium market will record a supply deficit of ~26Mlbs in 2020 and sustained deficits over the next several years. In our view, these deficits will be of sufficient magnitude to materially draw down surplus inventories that have been over-hanging the market.

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Exhibit 1. TD Securities Uranium Supply/Demand Model

	2015	2016	2017	2018	2019	2020E	2021E	2022E	2023E	2024E
Mine Supply - Western World (mm lbs U3O8)										
Total Mine Supply - Western World	106	104	100	83	85	75	81	80	85	88
Net Eastern Mine Supply (lbs U3O8)	57	62	54	54	55	44	49	60	60	66
Total World Mine Supply (mmlb U3O8)	163	166	154	138	140	120	130	140	145	154
YoY % change	12.2%	2.1%	-7.6%	-10.2%	1.7%	-14.7%	8.3%	7.8%	3.5%	6.8%
Secondary Supply										
Global underfeeding and tails re-enrichment*	20	18	19	18	18	16	16	15	15	14
Mixed Oxide Fuel (MOX)*	4	5	5	5	6	6	6	6	6	7
US government sales (DOE Proposed)*	7	4	3	2	2	1	0	0	0	0
Additional Russian secondary supply*	2	2	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
Total Secondary Supply (mmlb)	34	29	27	24	26	24	22	21	21	21
Secondary supply as % of global reactor demand	21%	17%	16%	14%	15%	13%	12%	12%	12%	11%
Mobilization of Commercial Inventory	8	7	7	7	7	7	7	7	7	7
Total Supply	205	202	187	169	173	150	159	168	173	183
Total World Demand										
Total World Nuclear Generating Capacity (MWe) *	345,377	351,271	358,819	368,571	372,978	374,420	384,508	385,211	389,242	394,906
Uranium requirements per MWe	464	474	472	472	472	472	472	472	472	472
Uranium demand (mmlb)	160	167	169	174	176	177	181	182	184	186
First Core Requirement (2 year lead)	-	-	-	-	-	-	-	-	-	-
Total World Demand (mmlbs U3O8)	160	167	169	174	176	177	181	182	184	186
YoY % change	3.4%	3.9%	1.7%	2.7%	1.2%	0.4%	2.7%	0.2%	1.0%	1.5%
Supply / Demand Balance (mmlb)	44	35	18	-5	-3	-26	-23	-14	-11	-4
Spot Uranium Price (US\$/lb U3O8)	\$36.89	\$26.57	\$22.12	\$24.82	\$25.94	\$31.30	\$36.00	\$37.50	\$40.00	\$40.00

* Source: World Nuclear Association - Nuclear Fuel Report 2019-2040 Reference Case

Note - TD LT price assumption starts in 2025; a flat US\$45/lb price is assumed for 2025 and beyond.

Source: UxC, Bloomberg, World Nuclear Association, TDS



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Exhibit 2. Wheeler River Assumptions

		Sep-2018 PFS	TDS
Ownership	%	90.0%	90%
Total Tonnes in the DCF	ktonnes	1,398	1,398
Total Resources Used in DCF, U3O8	mmlb	109.4	109.2
Life of Mine	years	14	13
Production Start-Up		2024	2025
Assumed LT Price, U3O8	US\$/lb	65.00	45.00
Assumed LT CAD/USD Exchange Rate		0.77	0.80
Average Head Grade	%	3.5%	3.5%
Average Recovery	%	100%	97%
Total U3O8 Production (100% basis)	mmlb	109.4	106.0
Annual Avg. Production (100% basis)	mmlb	7.8	8.2
Initial Capex (100% basis)	C\$ mm	323	350
Sustaining Capex & Closure Costs (100%)	C\$ mm	809	887
Total Capex (100% basis)	C\$ mm	1,132	1,237
Total Operating Costs (100% basis)	C\$ mm		1,294
Average Annual Operating Costs	US\$/lb		9.30
Average Annual Operating Costs	C\$/lb		11.62
Post Tax NPV-8% (90%)*	C\$ mm	755.9	558.1
NPV-10% (90%)	C\$ mm		416.4

* At fiscal 2021. TDS Discounted to 2020

Source: Company, TDS

Exhibit 3. Wheeler River Project Schedule

Description	2019 - 2021	2022	2023	2024	2025	2026	2027	2028	2029	2030-2033	2034	2035	2036	2037	2038-2039	2040-2043
Environmental Assessment	█															
Phoenix Feasibility Study and Detail Engineering	█	█														
Gryphon Feasibility Study and Detail Engineering			█	█	█	█	█	█	█							
Phoenix Construction		█	█	█	█	█	█	█	█							
Phoenix ISR Production				█	█	█	█	█	█	█	█	█	█	█	█	█
Phoenix Restoration												█	█	█	█	█
Gryphon Construction						█	█	█	█	█	█	█	█	█	█	█
Gryphon Production									█	█	█	█	█	█	█	█
Gryphon Restoration and Site Closure															█	█

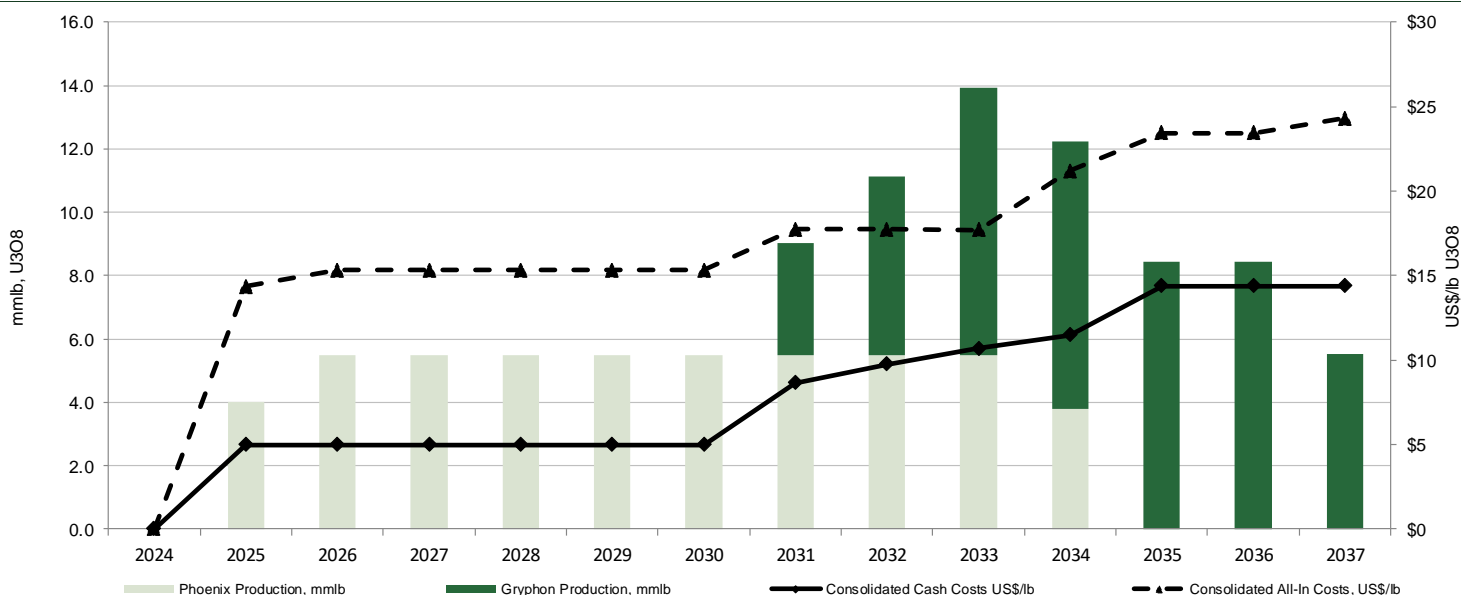
Source: Company

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Exhibit 4. Wheeler River Production and Cost Profile



Source: Company, TDS

Valuation

Denison is trading at 0.57x our 10%NAVPS estimate of \$1.07 (unchanged) versus the base metal developers in our coverage universe at 0.61x.

Justification of Target Price

Our \$0.85 target price (unchanged) is based on 0.80x our 10%NAVPS estimate (unchanged) weighted 100% using a 0.75 Canadian dollar/U.S. dollar exchange ratio.

Key Risks to Target Price

Relative to the other companies in our equity coverage universe, we believe that an investment in Denison Mines is subject to a SPECULATIVE level of risk. Our recommendation is subject to forecast, financial, technical, political, and deposit-size risks. These include risks related to uranium prices; fuel cost; the governing fiscal and legislative regimes in the countries it operates in; the timing of key developments; market conditions; capital and operating costs; foreign exchange rates; resources; access to capital; operating parameters; permitting; environment; indigenous people; and staffing and key personnel retention. Denison's assets could be negatively affected by the ongoing restrictions to travel, social-distancing measures, and other challenges related to the COVID-19 pandemic.

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Exhibit 5. Company Snapshot

Financial Data	2018A*	2019A	2020E	2021E
Average share price (C\$)	0.67	0.59	0.56	0.55
Wt. Avg. S/O (mm)	562.9	592.6	600.5	604.9
EPS (f.d.) (C\$/sh)	(0.05)	(0.03)	(0.02)	(0.01)
CFPS bf WC (C\$/sh)	(0.04)	(0.04)	(0.02)	(0.02)

Income Statement (C\$mm)	2018A*	2019A	2020E	2021E
Revenues	15.6	15.5	15.4	16.4
Operating Costs	15.9	14.4	12.5	11.6
Royalty	0.0	0.0	0.0	0.0
Depreciation	3.7	3.7	3.6	4.0
Exploration	15.5	15.2	7.0	9.0
Reclamation	0.0	0.0	0.0	0.0
G & A	5.4	2.6	3.2	3.2
Interest Expense	3.7	4.1	2.1	0.0
Realized Hedge Gain (loss)	0.0	0.0	0.0	0.0
UnRealized Hedge Gain (loss)	0.0	0.0	0.0	0.0
Other	(13.5)	1.0	(1.9)	0.0
EBITDA	(29.8)	(10.7)	(6.7)	(7.4)
EBIT	(33.5)	(14.4)	(10.3)	(11.4)
EBT	(37.2)	(18.5)	(12.4)	(11.4)
Taxes (recovery)	(8.3)	(5.4)	(0.9)	(3.4)
Effective tax rate	na	na	na	na
Minority interest	-	-	-	-
Reported net earnings	(33.8)	(18.1)	(14.0)	(8.0)
Adjusted net earnings	(27.7)	(18.1)	(14.0)	(8.0)
EPS Reported (C\$/sh.)	(0.06)	(0.03)	(0.02)	(0.01)
EPS (Adjusted) (C\$/sh.)	(0.05)	(0.03)	(0.02)	(0.01)

Revenues By Metal (C\$mm)	2018A*	2019A	2020E	2021E
Uranium/Tolling	4.2	4.2	4.0	5.8
Vanadium	0.0	0.0	0.0	0.0

Cash Flow Statement (C\$mm)	2018A*	2019A	2020E	2021E
Operating CF bf. ch. in WC	(21.3)	(21.1)	(11.8)	(9.8)
CF from operating activities	(21.0)	(18.8)	(13.4)	(9.8)
CF from financing activities	4.5	4.7	11.3	0.0
CF from investing activities	36.0	(0.9)	(0.3)	0.0
CAPEX	(1.6)	(0.9)	(0.1)	0.0
CFPS bf. ch. in WC (C\$/sh)	(0.04)	(0.04)	(0.02)	(0.02)

Balance Sheet (C\$mm)	2018A*	2019A	2020E	2021E
Cash	23.2	8.2	5.8	(4.1)
Current assets	31.7	16.5	23.5	13.7
Total assets	312.2	300.0	291.7	277.9
Current liabilities	12.5	14.9	9.3	9.3
Long term debt	0.0	0.0	0.0	0.0
Total liabilities	89.9	89.8	83.1	77.2
Non Controlling Interest	0.0	0.0	0.0	0.0
Working Capital	19.2	1.6	14.2	4.4
Shareholders' equity	222.2	210.1	208.6	200.6

*Historic financial results (prior to January 1, 2018) are presented in U.S. dollars.



Realized Metal Prices & Costs	2018A*	2019A	2020E	2021E
Uranium, U3O8 (US\$/lb)	24.86	25.94	31.30	36.00
Forex CAD to USD	0.77	0.75	0.74	0.75

Production and Sales	2018A*	2019A	2020E	2021E
Total U3O8 Production ('000' lbs)	0	0	0	0

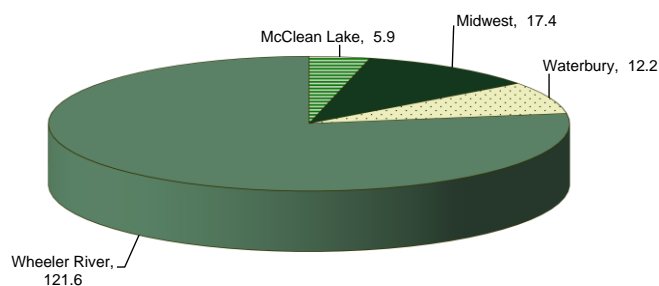
NAV Analysis	8% Discount		10% Discount	
	US\$mm	US\$/sh	US\$mm	US\$/sh
Mining Assets				
McClellan Mill Complex (22.5%)	66.7	0.10	66.7	0.10
Athabasca Basin Resources (22.5% to 60%)	169.1	0.26	169.1	0.26
Phoenix (90%)	496.6	0.77	397.7	0.62
Gryphon (90%)	61.6	0.10	18.7	0.03
Hook-Carter Property	4.0	0.01	4.0	0.01
Total Project NAV	798.0	1.24	656.2	1.02
Other Tangible Assets				
Investment - GoviEx	8.6	0.01	8.6	0.01
Skyharbour Resources	1.0	0.00	1.0	0.00
Corporate Adjustments				
Working Capital	16.1	0.03	16.1	0.03
Long Term Debt	0.0	-	0.0	-
In the Money Options/Warrants	2.9	0.00	2.9	0.00
Estimated Working Capital Additions	4.8	0.01	4.8	0.01
Estimated Debt Additions	0.0	-	0.0	-
Total Net Asset Value US\$/sh.	623.4	0.97	517.1	0.81
Total Net Asset Value C\$/sh.		1.30		1.07

Asset	Tonnes kt	Grade %	Interest %	Contained mmlb
McClellan Lake - Athabasca Basin	977	1.24	22.5	6
Midwest Deposit - Athabasca Basin	1865	1.68	25.17	17
Wheeler River - Athabasca	1891	3.24	90.0	122
Waterbury - Athabasca	291	1.50	65.9	12
Total Resources (all categories, M+I+I)	5,025	2.17		157

US\$ EV/lb Athabasca Basin and categories (M+I+I) **\$1.61**

Resources

Resources by Asset (mm lb U3O8)



Source: Company, TDS



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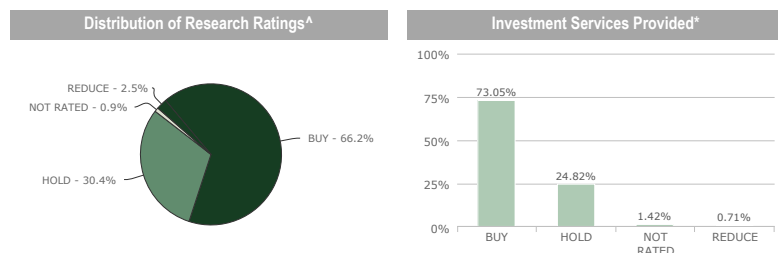
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Denison Mines Corp.	DML-T	1, 2, 4

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Current as of: October 5, 2020

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Action Note

Equity Research

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