

DENISON MINES CORP.

PEA for Wheeler River assigns economic variables at current uranium prices

EVENT

Denison Mines has announced the results from a Preliminary Economic Assessment (“PEA”) for its 60%-owned Wheeler River project located in the infrastructure-rich eastern side of the Athabasca Basin.

BOTTOM LINE

Neutral – On the strength of local infrastructure, 22.5% ownership of the McLean Lake Mill, and favourable CAD/USD exchange rates, Denison’s Wheeler River project posts a respectable base case pre-tax PEA figure under the current US\$44/lb long-term uranium price environment as of 2021. For conservatism we have applied more conservative estimates, have discounted our value to 2016 and have adjusted our valuation of the mill for its residual value. We maintain our Buy recommendation and \$1.85 target price.

FOCUS POINTS

- **Solid Current Economics:** Using the current long-term uranium price of US\$44/lb. U₃O₈, the Wheeler River PEA base case scenario reports a pre-tax IRR of 20.4%, a pre-tax NPV of C\$513M as at 2021 (Denison’s share C\$308M, and a three year payback).
- **Upside Potential:** Using a uranium price of US\$62.60/lb, the pre-tax IRR jumps to 34.1%, NPV of C\$1,420M as at 2021 (Denison’s share C\$852M), and an 18-month payback.
- **Our conservative adjustments:** Key assumption differences with our figures and the PEA (in parentheses) include: USD/CAD exchange rate averaging 1.11 (1.35), discount rate of 10% (8%), production start date of 2026 (2025), Gryphon OPEX C\$20.32/lb. (C\$19.28/lb.), Phoenix OPEX C\$32.39/lb. (C\$29.90/lb.), and total CAPEX of C\$1.15B (C\$1.10B).

Recommendation:

BUY

Symbol/Exchange: DML-TSX / DNN-NYSE
Sector: Metals & Mining
All dollar values in C\$ unless otherwise noted.
Current price: \$0.71; US\$0.54
One-year target: \$1.85
Return Target: 161%
Cash on hand: \$5.4M

Company Summary

Shares O/S (M)	518.4	52-week range	\$0.48 - \$1.17
Market cap (\$M)	\$368.1	Avg. weekly vol. (M)	3.0
Market float (\$M)	\$319.5	Fiscal year-end	31-Dec

Revenue Generating Assets

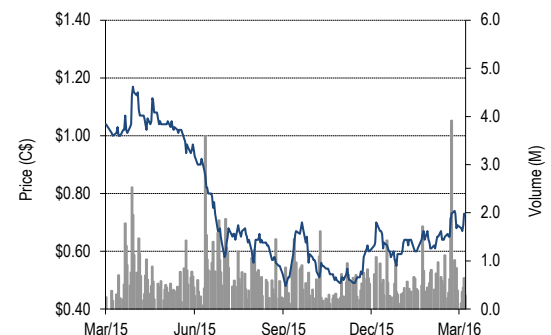
McLean Lake Mill

Uranium Participation Management Contract

Measured & Indicated Resource	Tonnes	U ₃ O ₈ Grade	Attrib Resource
McClean Lake Deposits	778,700	2.44%	4.06 M lbs
Midwest	818,000	4.91%	12.26 M lbs
Waterbury Lake	307,000	1.39%	6.17 M lbs
Wheeler River	166,000	19.13%	42.12 M lbs
Inferred Resource		U ₃ O ₈ Grade	Resource
McClean Lake Deposits	510,900	0.68%	1.70 M lbs
Midwest	34,200	6.25%	1.18 M lbs
Waterbury Lake	0	0.90%	1.65 M lbs
Wheeler River	843,000	2.30%	26.48 M lbs

(1) Corporate adjustments are as of last reported Financial Statements March 29, 2016

Source: Company reports and Cantor Fitzgerald estimates



Company profile: Denison Mines is a uranium exploration company with interests primarily focused in the Athabasca Basin, but also located in Zambia, Mali and Namibia.

Rob Chang, MBA

rchang@cantor.com
(416) 849-5008

Michael Wichterle, MBA, CAIA

mwichterle@cantor.com
(416) 849-5005

Sales/Trading — Toronto: (416) 363-5757, (866) 442-4485

See disclosure and a description of our recommendation structure at the end of this report.

RESPECTABLE ECONOMICS AT CURRENT URANIUM PRICING

According to the PEA, using the current long-term uranium price of US\$44/lb U₃O₈, as a base case the Wheeler River PEA base case scenario reports a pre-tax IRR of 20.4%, a pre-tax NPV of C\$513M as at 2021 (Denison's share C\$308M, and a three year payback). This provides excellent "worst case scenario" protection as we believe its production case using US\$62.60/lb is the more likely outcome since our forecast uranium price for the same period is US\$80/lb. As such, using the production case price of US\$62.60/lb, notable changes include: a pre-tax IRR of 34.1%, NPV of C\$1,420M (Denison's share C\$852M), and an 18-month payback.

Cantor Fitzgerald Canada Research uses a long-term uranium price of US\$80/lb. while arriving at a post-tax NPV_{10%} of C\$305M (C\$508M on a 100%-basis). Deviations between our estimates and the PEA will be highlighted through this report.

In both of Denison's pricing scenarios, the basement-hosted Gryphon deposit will be mined first as it will be lower cost and will produce 40.7M lbs U₃O₈ over a seven year period (~6M lbs per year). The Phoenix deposit, which is at the unconformity, will produce 64M lbs U₃O₈ over a nine year life (~7M lbs per year). Cash operating costs at Gryphon is expected to be C\$19.28/lb U₃O₈ and C29.90/lb. at Phoenix.

We forecast that 31.8M lbs will be produced from the Gryphon deposit and 44.2M lbs will be mined from the Phoenix deposit over six and seven years, respectively. Cash costs at Gryphon are forecast at C20.32/lb. and at Phoenix C\$32.39/lb.

Additional points:

- Estimated total CAPEX of C\$1.10B (Denison's share C\$660M). The PEA assumes the use of Denison's 22.5%-owned McLean Lake Mill, which is expected to operate with about 6M lbs of annual excess capacity
 - CFCC estimates total CAPEX at C\$1.15B (Denison's share C\$690M).
- The calculations use a CAD/USD exchange rate of 1.35 over the life of the mines.
 - Cantor Fitzgerald Canada's current CAD/USD exchange rate estimate averages 1.11 during the same period.
- Recall that Wheeler River is 60%-owned by Denison Mines with 30% owned by Cameco Corporation and 10% owned by JCU (Canada) Exploration Company.

Exhibit 1. PEA Summary Assumptions & Financial Highlights

Assumption / Financial Results	Base Case	Production Case
Uranium Price per lb U ₃ O ₈	US\$44.00	US\$62.60
Exchange Rate (CAD:USD)	1.35	1.35
Net Sask. Royalties ⁽¹⁾	7.25%	7.25%
Discount Rate	8.00%	8.00%
Initial Capital Costs		CAD\$560M
Sustaining Capital Costs		CAD\$543M
Average Operating Cost per lb U ₃ O ₈ - CAD		CAD\$25.67
Average Operating Cost per lb U ₃ O ₈ - USD		USD\$19.01
Pre-Tax IRR ⁽²⁾	20.4%	34.1%
Pre-Tax NPV ⁽²⁾ @ 100%	CAD\$513M	CAD\$1,420M
Payback Period ⁽³⁾	~3 years	~18 months

(1) Net Sask. royalties are included in the Pre-Tax NPV and consist of the following: (a) resource surcharge (3%), (b) basic uranium royalty (5%) and offset by (c) resource credit of (0.75%). The profit from operations is subject to an additional uranium profit royalty, which is treated as an income tax.

(2) NPV and IRR are calculated to the start of pre-production activities in 2021.

(3) Payback period is stated as number of years to pay-back from the start of commercial production.

Source: Denison Mines

The PEA benefits from the infrastructure-rich nature of the eastern side of the basin as it capitalizes on items such as the existence of excess mill capacity, provincial highways, and provincial power grid.

Of note is the statement that management believes the Gryphon deposit will be more profitable despite the higher grade at Phoenix due to the low capital and development costs associated with a basement hosted deposit. Indeed, unconformity-style deposits are substantially more expensive to mine due in large part to water control measures. Cameco's McArthur River and Cigar Lake mines are only low-cost on a per pound basis due to the ultra-high grade of those world-class deposits (proven and probable grades of 10.9% and 16.7%, respectively).

PRODUCTION PLAN WELL ALIGNED WITH PLANS FOR THE MCCLEAN LAKE MILL

The production plan for the Gryphon and Phoenix deposits aligns well with the current production plan for the McClean Lake mill. The mill is currently in the final stages of an upgrade that is expected to increase the facility's annual production capacity to 24M lbs U₃O₈, which will enable processing of up to 18M lbs U₃O₈ per year from the Cigar Lake mine (under a toll milling agreement) and up to 6M lbs U₃O₈ from other mine feeds. Based on the current schedule, Cigar Lake Phase 1 ore feed is expected to peak at 18M lbs U₃O₈ and decreases towards the end of Phase 1 in the late 2020s. Co-milling of Wheeler River and Cigar Lake ore feeds are expected to utilize the full capacity of the mill and improve processing economics for both feed sources. As mentioned, the PEA envisions a seven year mine life at Gryphon (6M lbs U₃O₈/year at 399T/day), followed by a nine year mine life at Phoenix (7M lbs U₃O₈/year at 73T/day).

The preliminary metallurgical test results from both Gryphon and Phoenix composite samples indicated the mineralization is amenable to processing at any of the existing uranium mills in the eastern Athabasca Basin. Overall, uranium process recovery has been estimated at 97.0% for Gryphon, and 98.1% for Phoenix. Cantor Fitzgerald Canada is modelling recovery rates of 96% and 95%, respectively.

In order to co-mill the full tonnage of the Gryphon deposit feed with the Cigar Lake Phase 1 feed, the PEA has incorporated the costs of an expansion to the #1 leaching circuit at the McClean Lake mill, as well as increasing the capacities of the solid/liquid separation circuits and installation of piping to transfer slurry to the #1 leach circuit from the slurry load-out facilities. Overall the expected modifications to the mill are minor in nature and in areas that are not used for Cigar Lake processing.

CAPITAL & OPERATING COSTS

Total capital costs are estimated at C\$1,103M, which includes a contingency of 26%. Initial capital costs are based on the five-year period from January 1, 2021 through to December 31, 2025, and sustaining capital costs are for the period from January 1, 2026 through to decommissioning in 2045. Cantor Fitzgerald Canada estimates total capital costs of C\$1.15B from 2022 through to 2026.

Operating costs have been estimated separately for each deposit, based on the differences in geology and mining methods selected. For the Gryphon and Phoenix deposits, operating costs are estimated at C\$19.28/lb U₃O₈ and C\$29.90/lb U₃O₈, respectively (Cantor C\$20.32/lb and C\$32.39/lb.). The combined average operating cost of both deposits is estimated to be C\$25.67 or US\$19.01/lb U₃O₈. Cantor estimate C\$26.82/lb. or US\$19.75/lb, using a 1.35 CAD/USD exchange rate.

Exhibit 2. Capital & Operating Cost Estimates

Capital Costs (CAD\$ millions)	Initial	Sustaining	Total
Surface Infrastructure	\$166	\$7	\$174
Mine	\$220	\$334	\$554
Mineral Processing	\$19	\$60	\$79
Owners Costs	\$25	\$0	\$25
Decommissioning	\$0	\$40	\$40
<i>Subtotal</i>	<i>\$429</i>	<i>\$442</i>	<i>\$871</i>
Contingency	\$131	\$101	\$232
Total Capital	\$560	\$543	\$1,103

Operating Costs (CAD\$/lb U ₃ O ₈)	Gryphon	Phoenix
Mining	\$3.45	\$17.45
Surface Transportation	\$1.63	\$0.85
Mineral Processing (including toll mill fees)	\$10.03	\$8.03
General & Administration	\$4.17	\$3.57
Total (CAD \$/lb U₃O₈)	\$19.28	\$29.90
Total (USD \$/lb U₃O₈)	\$14.28	\$22.15

Source: Denison Mines

VALUATION & RECOMMENDATION

We are maintaining our BUY recommendation and target price of C\$1.85 per share. Our target price continues to be derived by applying a 1.0x multiple to NAV.

Our NAV valuation for Wheeler River decreases from US\$480.2M to US\$232.7M due to the transition from an in-situ multiple valuation for the Wheeler River project to a conservative discounted cash flow based model.

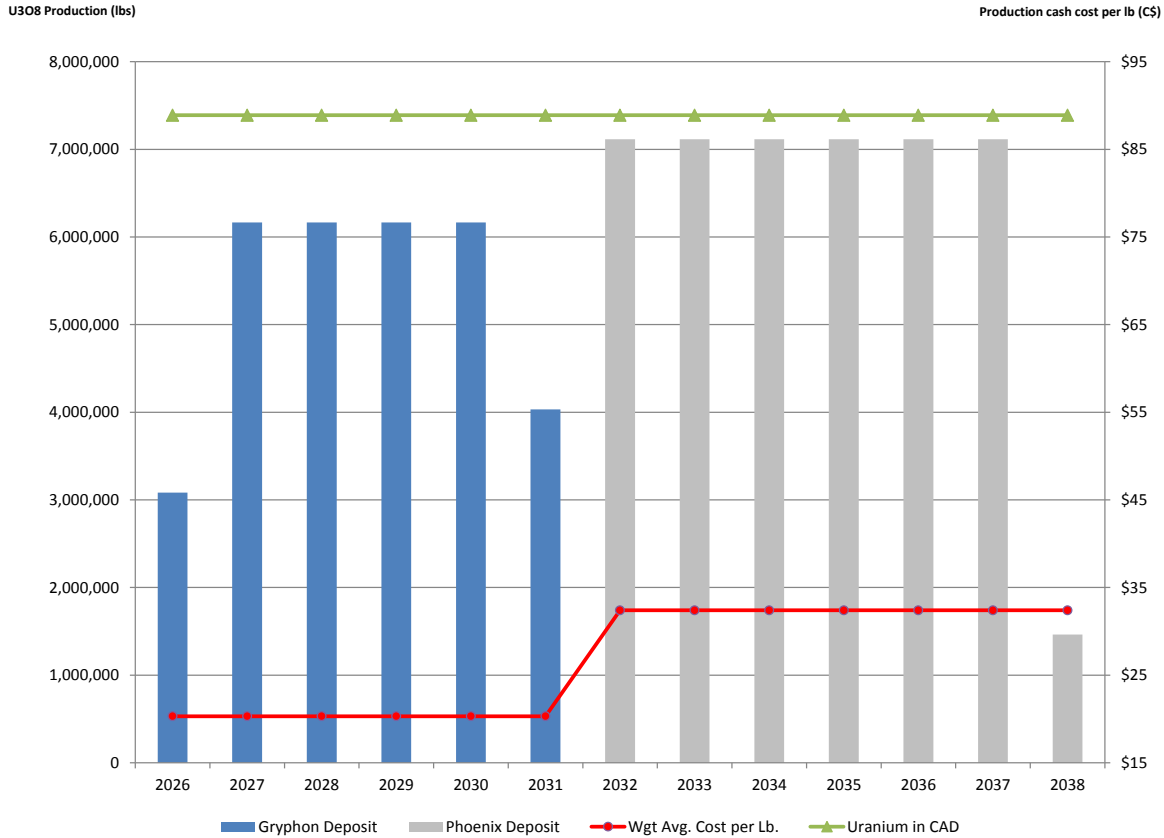
Along with the key differences highlighted throughout this report, our NAV model also discounts the value of Wheeler River project to 2016 (the PEA did so to 2021), applied a tax rate of 20% (quoted PEA figures were pre-tax), and applied a more conservative discount rate of 10% (versus 8%). The negative impact of these changes were offset by an assumed increase in McClean Lake revenues as Denison's 22.5% share will net proportional cash flow from a toll milling agreement that would be similar to what is currently being paid by Cameco for Cigar Lake feed. We have also recognized the long-term strategic value of the McClean Lake Mill and have factored in a residual value of C\$1B as it is a state of the art mill that will be likely the preferred destination for any ore produced in the eastern side of the Basin once Cigar Lake feed is exhausted. Moreover, its replacement value is likely at least C\$1B.

Exhibit 3. Denison Mines Net Asset Value

Asset	Attributable		Value US(\$M)	Per share	Ownership	Notes
	M Lbs U ₃ O ₈	EV/Lb				
Revenue Generating Assets						
Wheeler River Project			\$232.8	\$0.45	60%	NPV @ 10%. Cameco 30% & JCU 10%
McClean Lake Mill			\$227.2	\$0.44	22.5%	7% DCF for processing Cigar Lake and Wheeler River feed; C\$1B Residual value
UPC Contract Value			\$42.7	\$0.08		Minimum annual fee at a 5% Discount Rate
In-Situ Valuation						
McClean Lake Deposits	5.9	\$7.00	\$41.6	\$0.08	22.5%	McLean Lake, McLean Lake North, & Sue D; Areva 70% & OURD 7.5%
Midwest	13.4	\$7.00	\$94.1	\$0.18	25.17%	Areva 69.16% & OURD 5.67%; Development on hold reviewed every 6 months
Waterbury Lake	7.8	\$7.00	\$54.7	\$0.11	60%	40% KEPCO
Other Assets						
25% stake in GoviEx Uranium			\$2.6	\$0.005		80% of the market value for conservatism
Working Capital Net of Cash			\$7.4	\$0.01		As of Q4/15 Financials
Cash + proceeds from options and warrants			\$5.3	\$0.01		As of Q4/15 Financials
Valuation			\$708.4	\$1.37		
Valuation in CAD			\$927.7	\$1.79		in CAD

Source: Cantor Fitzgerald Research

Exhibit 4. Wheeler River Production Schedule



Source: Cantor Fitzgerald Research

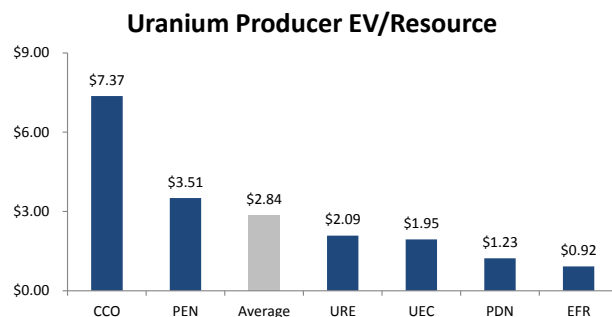
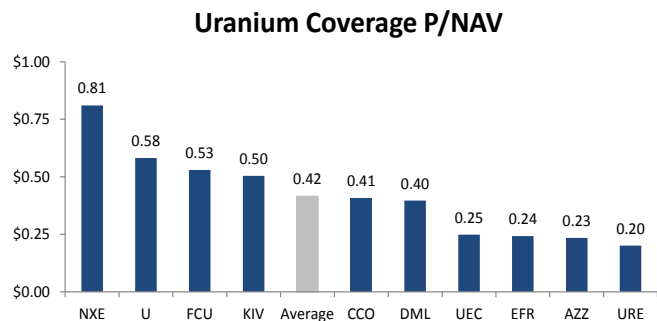
Exhibit 5. Peer Comparables

Uranium Producer Company Name	Stage	Stock Price (Local \$)	Market Cap (\$'000)	Enterprise Value (\$'000)	NI43-101 Resources/JORC (M lbs)				MKT / LB	EV / LB	Est. Cash Cost / LB	
					Avg Grade	P&P	M&I	Inferred				Total
Cameco Corporation (TSX:CCO)	Production	16.00	6,332,680.4	7,364,572.4	7.576%	465.1	245.9	288.8	999.8	\$6.33	\$7.37	\$27.82
Energy Fuels Inc. (TSX:EFR)	Production	2.88	156,746.2	139,492.0	0.085%	0.0	106.7	45.1	151.8	\$1.03	\$0.92	\$34.60
Paladin Energy Ltd (ASX:PDN)*	Production	0.23	390,237.0	642,181.6	0.079%	174.3	193.6	153.8	521.7	\$0.75	\$1.23	\$27.82
Peninsula Energy Ltd. (ASX:PEN)*	Production	0.94	164,285.1	166,155.5	0.050%	0.0	17.2	30.2	47.4	\$3.47	\$3.51	\$30.00
Uranium Energy Corp. (NYSE:UEC)*	Production	0.73	111,273.6	133,804.7	0.062%	0.0	32.4	36.3	68.7	\$1.62	\$1.95	n/a
UR-Energy Inc. (TSX:URE)	Production	0.65	93,154.8	93,650.0	0.080%	0.0	34.5	10.3	44.9	\$2.08	\$2.09	\$20.51
Producer Average			\$1,208,062.8	\$1,423,309.4		106.6	105.1	94.1	305.7	\$2.55	\$2.84	\$28.15

*Market Cap and Enterprise value for Paladin Energy, Peninsula Energy and Uranium Energy Corp. has been converted to \$CAD at the prevailing \$AUD/\$CAD or \$USD/\$CAD market exchange rates

Uranium Explorer/Developer Company Name	Stage	Stock Price (\$Local)	Market Cap (C\$'000)	Enterprise Value (C\$'000)	NI43-101 Resources (M lbs)				MKT / LB	EV / LB	
					Avg Grade	M&I	Inferred	Total			
Hathor Exploration (Acquired)	Exploration	4.70	654,240.0	581,240.0	8.628%	17.2	40.7	57.9	112.8	\$11.29	\$10.03
Denison Mines (TSX:DML)	Exploration	0.71	368,091.5	269,055.7	2.29%	102.0	97.6	199.7	399.3	\$1.84	\$1.35
Fission Uranium Corp. (TSX:FCU)	Exploration	0.65	314,551.0	310,303.9	1.51%	79.6	25.9	105.5	205.5	\$2.98	\$2.94
NexGen Energy (TSXV:NXE)*	Exploration	1.97	585,342.7	551,038.7	2.63%	0.0	201.9	201.9	403.8	\$2.90	\$2.73
Kivalliq Energy Corp. (TSXV:KIV)	Exploration	0.09	18,429.8	17,144.6	0.69%	0.0	43.3	43.3	86.6	\$0.43	\$0.40
UEX Corp. (TSX:UEX)	Exploration	0.22	58,523.3	51,954.0	0.84%	68.2	16.5	84.7	169.4	\$0.69	\$0.61
Azarga Uranium (TSX:AZZ)	Development	0.30	18,319.6	16,296.3	0.17%	18.1	5.7	23.8	47.6	\$0.77	\$0.69
Average			\$288,214.0	\$256,719.0		40.7	61.7	102.4	266.8	\$2.99	\$2.68

** Market Cap and Enterprise value for Peninsula Energy has been converted to \$CAD at the prevailing \$AUD/\$CAD market exchange rate



Source: Cantor Fitzgerald Research; Bloomberg

RISKS

Investing in mining and exploration companies is inherently risky. Commodity, geological, operational, regulatory, or financing risks on projects could result in delays in development or production, impact economics or disrupt shipment schedules.

DISCLAIMERS AND DISCLOSURES

Disclaimers

The opinions, estimates and projections contained in this report are those of Cantor Fitzgerald Canada Corporation. ("CFCC") as of the date hereof and are subject to change without notice. CFCC makes every effort to ensure that the contents have been compiled or derived from sources believed to be reliable and that contain information and opinions that are accurate and complete; however, CFCC makes no representation or warranty, express or implied, in respect thereof, takes no responsibility for any errors and omissions which may be contained herein and accepts no liability whatsoever for any loss arising from any use of or reliance on this report or its contents. Information may be available to CFCC that is not herein.

This report is provided, for informational purposes only, to institutional investor clients of CFCC, and does not constitute an offer or solicitation to buy or sell any securities discussed herein in any jurisdiction where such offer or solicitation would be prohibited. This report is issued and approved for distribution in Canada, CFCC, a member of the Investment Industry Regulatory Organization of Canada ("IIROC"), the Toronto Stock Exchange, the TSX Venture Exchange and the CIPF. This report is has not been reviewed or approved by Cantor Fitzgerald USA., a member of FINRA. This report is intended for distribution in the United States only to Major Institutional Investors (as such term is defined in SEC 15a-6 and Section 15 of the Securities Exchange Act of 1934, as amended) and is not intended for the use of any person or entity that is not a major institutional investor. Major Institutional Investors receiving this report should effect transactions in securities discussed in the report through Cantor Fitzgerald USA.

Non US Broker Dealer 15a-6 disclosure: This report is being distributed by (CF Canada/CF Europe/CF Hong Kong) in the United States and is intended for distribution in the United States solely to "major U.S. institutional investors" (as such term is defined in Rule15a-6 of the U.S. Securities Exchange Act of 1934 and applicable interpretations relating thereto) and is not intended for the use of any person or entity that is not a major institutional investor. This material is intended solely for institutional investors and investors who CFCC reasonably believes are institutional investors. It is prohibited for distribution to non-institutional clients including retail clients, private clients and individual investors. Major Institutional Investors receiving this report should effect transactions in securities discussed in this report through CFCC This report has been prepared in whole or in part by research analysts employed by non-US affiliates of Cantor Fitzgerald & Co that are not registered as broker-dealers in the United States. These non-US research analysts are not registered as associated persons of Cantor Fitzgerald & Co. and are not licensed or qualified as research analysts with FINRA or any other US regulatory authority and, accordingly, may not be subject (among other things) to FINRA's restrictions regarding communications by a research analyst with a subject company, public appearances by research analysts, and trading securities held by a research analyst account.

Potential conflicts of interest

The author of this report is compensated based in part on the overall revenues of CFCC, a portion of which are generated by investment banking activities. CFCC may have had, or seek to have, an investment banking relationship with companies mentioned in this report. CFCC and/or its officers, directors and employees may from time to time acquire, hold or sell securities mentioned herein as principal or agent. Although CFCC makes every effort possible to avoid conflicts of interest, readers should assume that a conflict might exist, and therefore not rely solely on this report when evaluating whether or not to buy or sell the securities of subject companies.

Disclosures as of April 5, 2016

CFCC *has not* provided investment banking services or received investment banking related compensation from Denison within the past 12 months.

The analysts responsible for this research report *do have*, either directly or indirectly, a long or short position in the shares or options of Denison.

The analyst responsible for this report *has* visited the material operations of Denison. No payment or reimbursement was received for the related travel costs.

Analyst certification

The research analyst whose name appears on this report hereby certifies that the opinions and recommendations expressed herein accurately reflect his personal views about the securities, issuers or industries discussed herein.

Definitions of recommendations

BUY: The stock is attractively priced relative to the company's fundamentals and we expect it to appreciate significantly from the current price over the next 6 to 12 months.

BUY (Speculative): The stock is attractively priced relative to the company's fundamentals, however investment in the security carries a higher degree of risk.

HOLD: The stock is fairly valued, lacks a near term catalyst, or its execution risk is such that we expect it to trade within a narrow range of the current price in the next 6 to 12 months. The longer term fundamental value of the company may be materially higher, but certain milestones/catalysts have yet to be fully realized.

SELL: The stock is overpriced relative to the company's fundamentals, and we expect it to decline from the current price over the next 6 to 12 months.

TENDER: We believe the offer price by the acquirer is fair and thus recommend investors tender their shares to the offer.

UNDER REVIEW: We are temporarily placing our recommendation under review until further information is disclosed.

Member-Canadian Investor Protection Fund.

Customers' accounts are protected by the Canadian Investor Protection Fund within specified limits. A brochure describing the nature and limits of coverage is available upon request.