

# Goodman Gold Challenge 2020



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Norman B. Keevil Mining Engineering

# Forward Looking Statements

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*Certain information set forth in this presentation contains “forward-looking information”, including “future oriented financial information” and “financial outlook”, under applicable securities laws (collectively referred to herein as forward-looking statements). Except for statements of historical fact, information contained herein constitutes forward-looking statements and includes, but is not limited to, the (i) projected financial performance of the Company; (ii) completion of, and the use of proceeds from, the sale of the shares being offered hereunder; (iii) the expected development of the Company’s business, projects and joint ventures; (iv) execution of the Company’s vision and growth strategy, including with respect to future M&A activity and global growth; (v) sources and availability of third-party financing for the Company’s projects; (vi) completion of the Company’s projects that are currently underway, in development or otherwise under consideration; (vi) renewal of the Company’s current customer, supplier and other material agreements; and (vii) future liquidity, working capital, and capital requirements. Forward-looking statements are provided to allow potential investors the opportunity to understand management’s beliefs and opinions in respect of the future so that they may use such beliefs and opinions as one factor in evaluating an investment.*

*These statements are not guarantees of future performance and undue reliance should not be placed on them. Such forward-looking statements necessarily involve known and unknown risks and uncertainties, which may cause actual performance and financial results in future periods to differ materially from any projections of future performance or result expressed or implied by such forward-looking statements.*

*Although forward-looking statements contained in this presentation are based upon what management of the Company believes are reasonable assumptions, there can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. The Company undertakes no obligation to update forward-looking statements if circumstances or management’s estimates or opinions should change except as required by applicable securities laws. The reader is cautioned not to place undue reliance on forward-looking statements.*



# Agenda

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Gold Outlook

Investment Proposal

Company Valuation

Transaction Opportunities

Team Overview



# Gold Outlook



# Gold Price History and Outlook

Gold rose **18%** in 2019, its best year since 2010

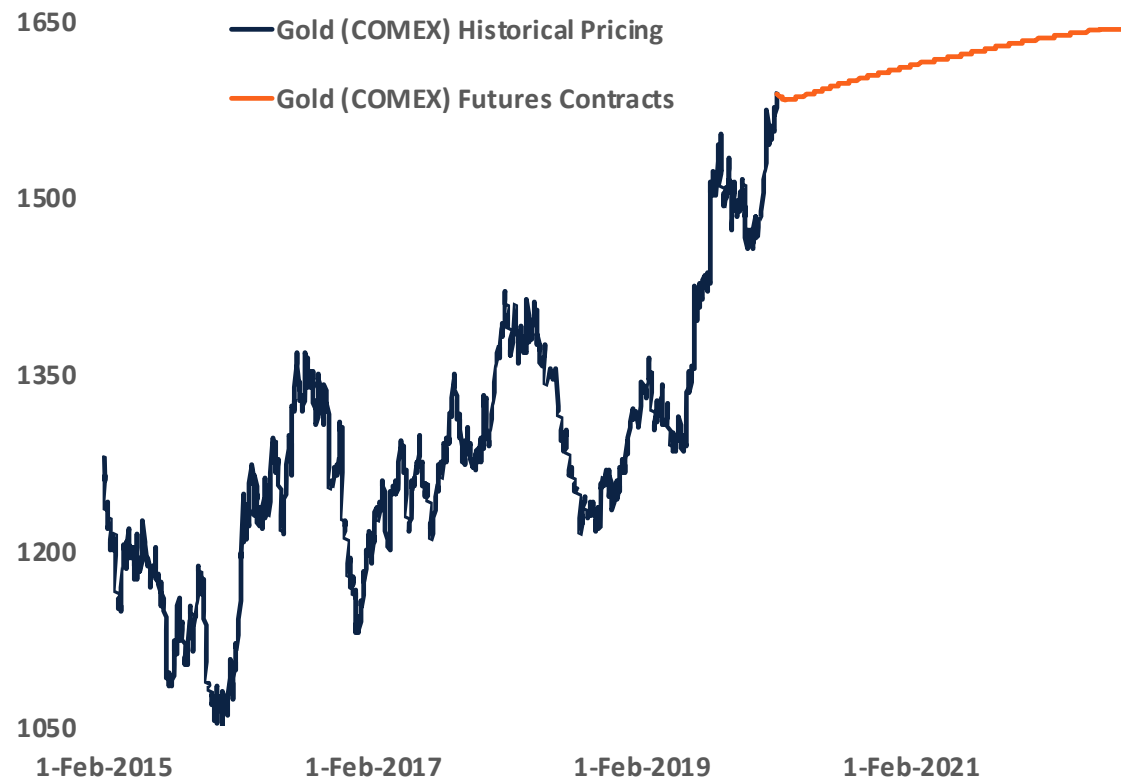
- On the back of the Fed easing monetary policy despite entering the year projecting an increase in interest rates

Price averaged at US\$1,392/oz (+10% y/y)

- Translated to **26% y/y average AISC margin** increase to US\$377/oz (Canaccord Genuity)

High levels expected to sustain through 2020 due to macroeconomic factors

- Negative real rates globally
- Global central bank easing
- Geopolitical instability



Source: S&P Capital IQ



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# Investment Proposal



# Client Profile

## Client Risk Appetite



**Jonathan Goodman**  
*Chairman and CEO*

Our research on the client's

- income status
- investment habits
- current portfolio

He can be identified as both having the **willingness and the ability** to take risk

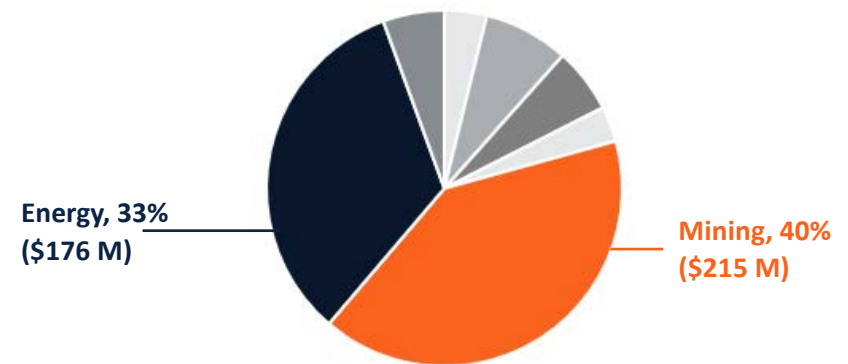
Therefore our investment policy allows us to take on moderate-high risks if it can be justified by long term return



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## Dundee Corporation Portfolio



Current corporate portfolio is heavily invested in the mining industry, indicating investor preference

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# Investment Universe

	 LUNDIN GOLD	 MARATHON GOLD	 MARITIME RESOURCES
Flagship Asset	Fruta Del Norte	Valentine Gold	Hammerdown
Jurisdiction	Ecuador	Canada (NL)	Canada (NL)
Project Stage	Pre-Production	PEA	PFS
Deposit Quality	5.02 Moz @ 8.74 g/t (Probable Reserves)	3.09 Moz @ 1.65 g/t (M&I Resources)	0.47 Moz @ 7.28 g/t (M&I Resources)
Market Capitalization	\$2,280M	\$272M	\$13.3M



# Investment Criteria

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## Investment Proposal



# Company Evaluation



# Marathon Gold - Overview



## Company Highlights



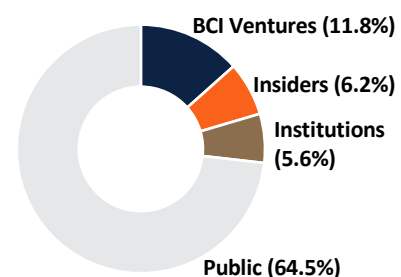
- Valentine Lake is a high grade, open pit gold exploration project
- Located in a premier mining jurisdiction
- Management overhaul signal of intent to move project into production
- Low cost profile - US\$666/oz AISC
- Approx. annual production – 220 koz Au

### Valentine Gold

Measured  
Indicated  
Total M&I

Tonnage (Mt)	Grade (g/t)	Contained Au (Moz)
31.69	1.86	1.90
23.17	1.60	1.19
<b>54.85</b>	<b>1.65</b>	<b>3.09</b>

## Market Data (TSX:MOZ)



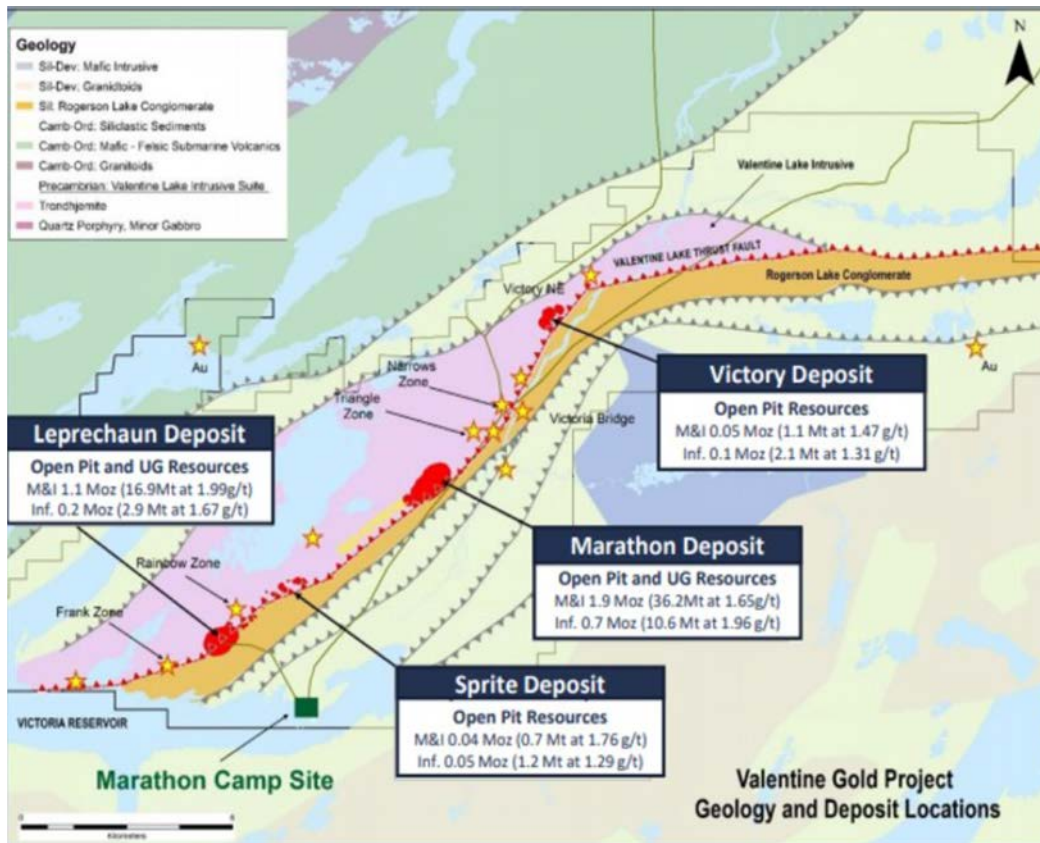
Share Price	\$1.53
Shares O/S	179 m
Market Cap	\$274 m
Debt	\$0.05 m
Cash	\$34 m
Enterprise Value	\$240 m



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# Marathon Gold - Valentine Gold Project



## Deposit Geology

Shear Zone Gold deposit across 20km vein

Extensional **Quartz-Tourmaline-Pyrite-Gold** veins

Adjacent to the Valentine Lake Thrust

## Land Package Deposits

**Marathon Deposit**

**Leprechaun Deposit**

Victory Deposit

Sprite Deposit

## Operational Highlights, PEA 2018

**Open Pit**

Estimated Mine Life

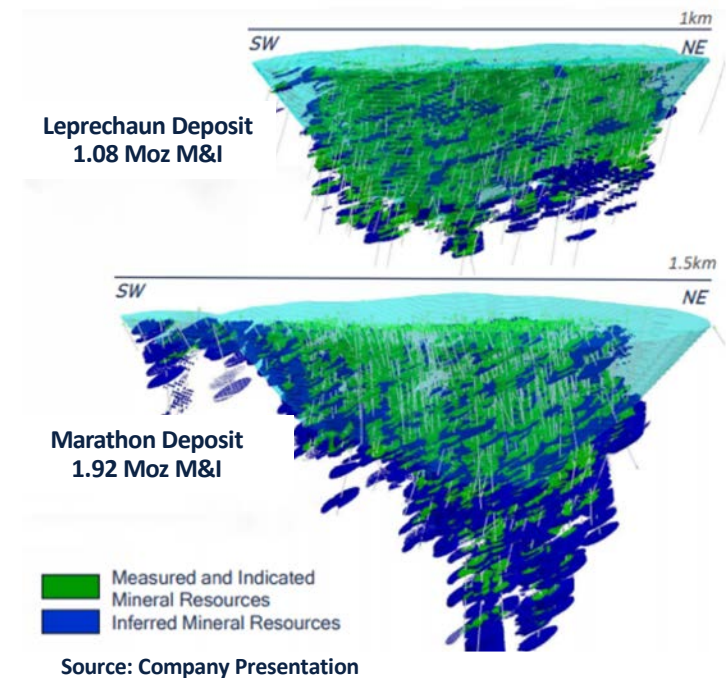
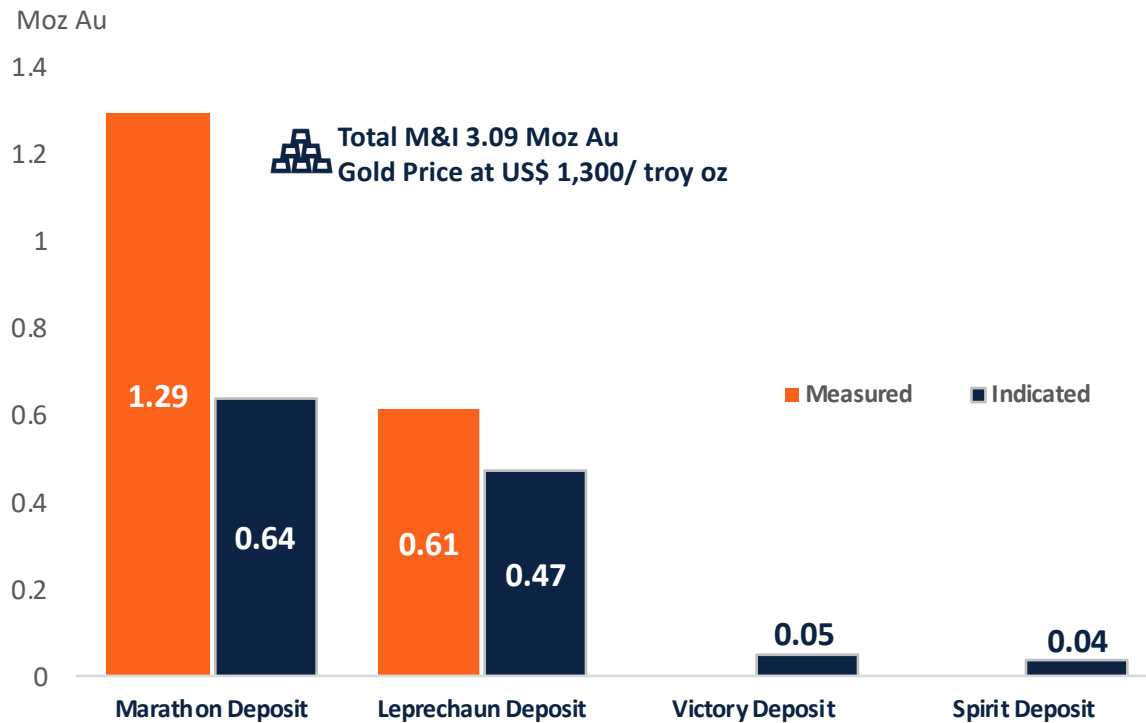
**225,100 oz Au per annum**



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# Valentine Gold Project - Total Resources



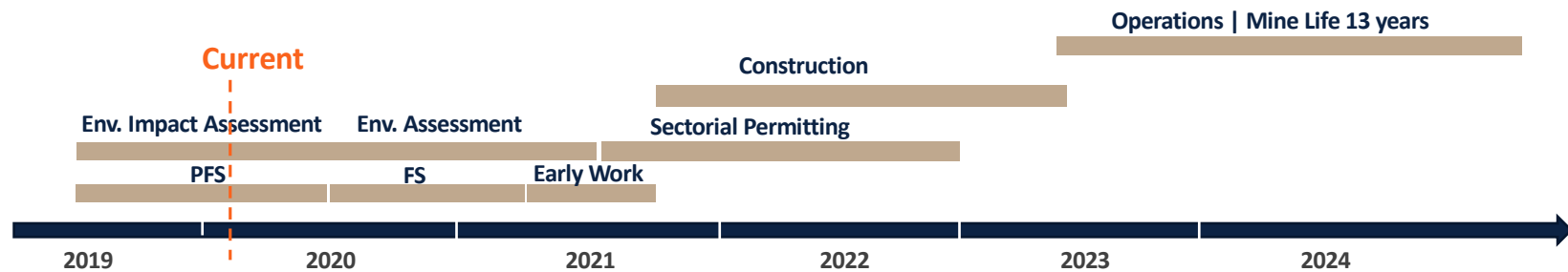
# Valentine Gold Project – Timeline



Pre-Feasibility Study  
Q2, 2020



Environmental Impact Assessment  
Q3, 2020



*\*Expectations delivery dates based on Oct 2018 PEA*



# Valentine Gold Project – Key Figures



## OCT 2018 PEA HIGHLIGHTS



LOM AVG. AISC  
US\$666/oz Au



After-Tax NPV  
US\$ 493M



Pay-Back Period  
2.5 Years



Pre-Production  
CAPEX US\$ 355M

## UPCOMING PFS (No Heap Leach) & 2020 STRATEGY



In Pit Leprechaun &  
Marathon Deposits



Minimizing Initial  
Capital Cost



Optimized Plan to  
Maximize ROR



Continued Focus  
on Exploration

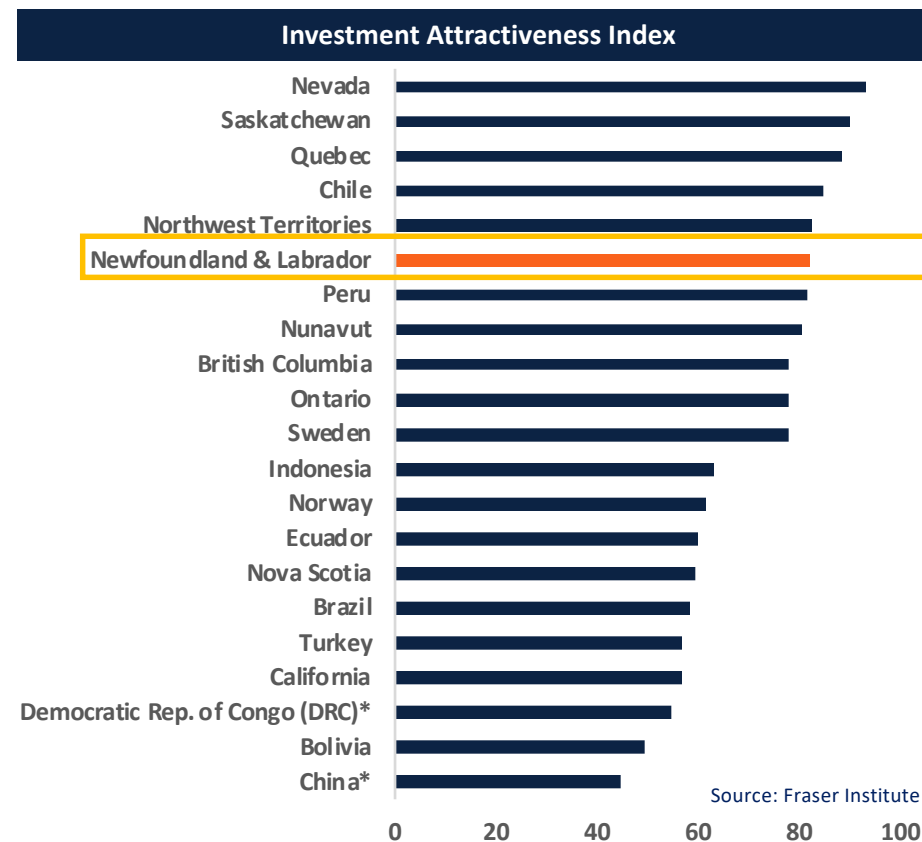
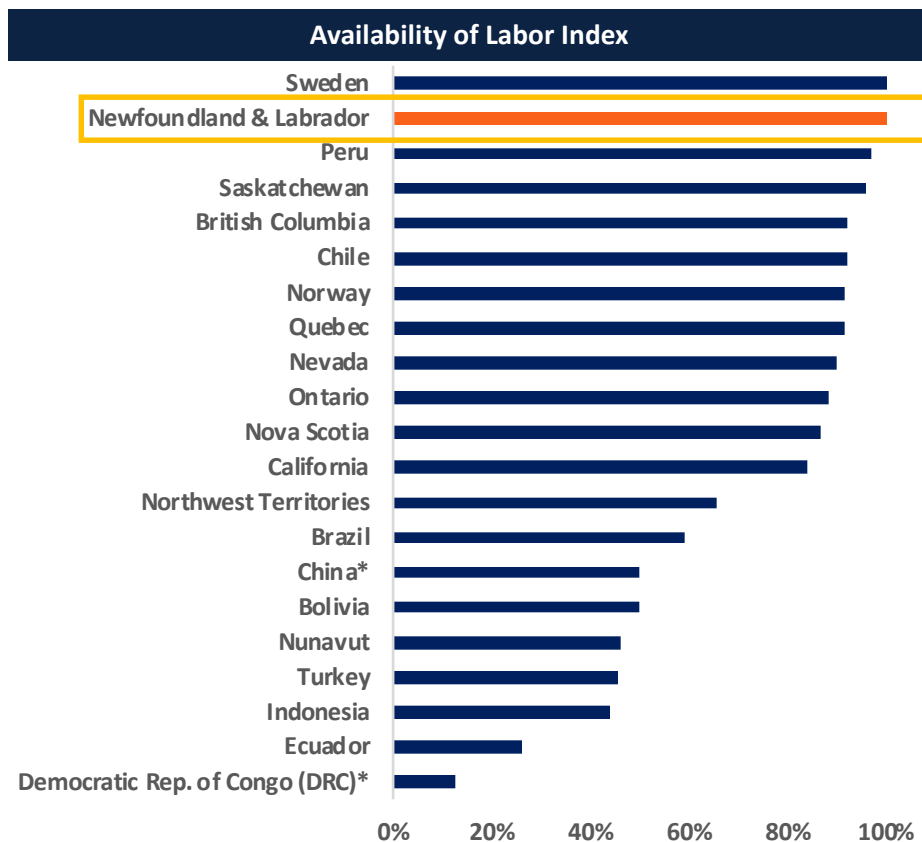


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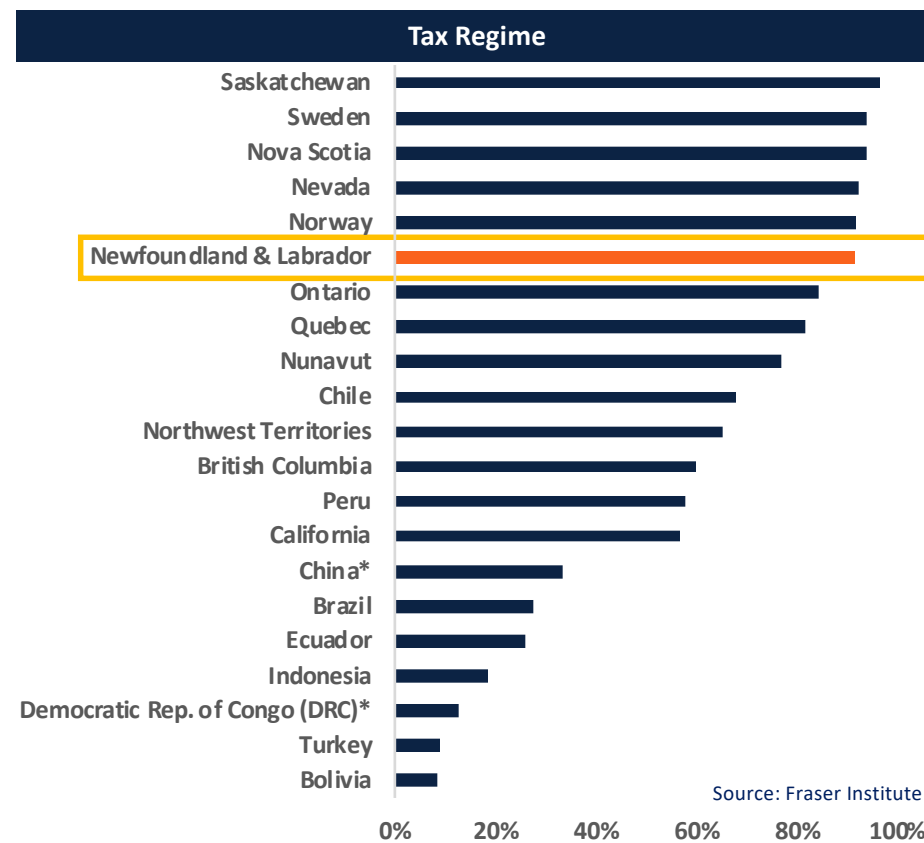
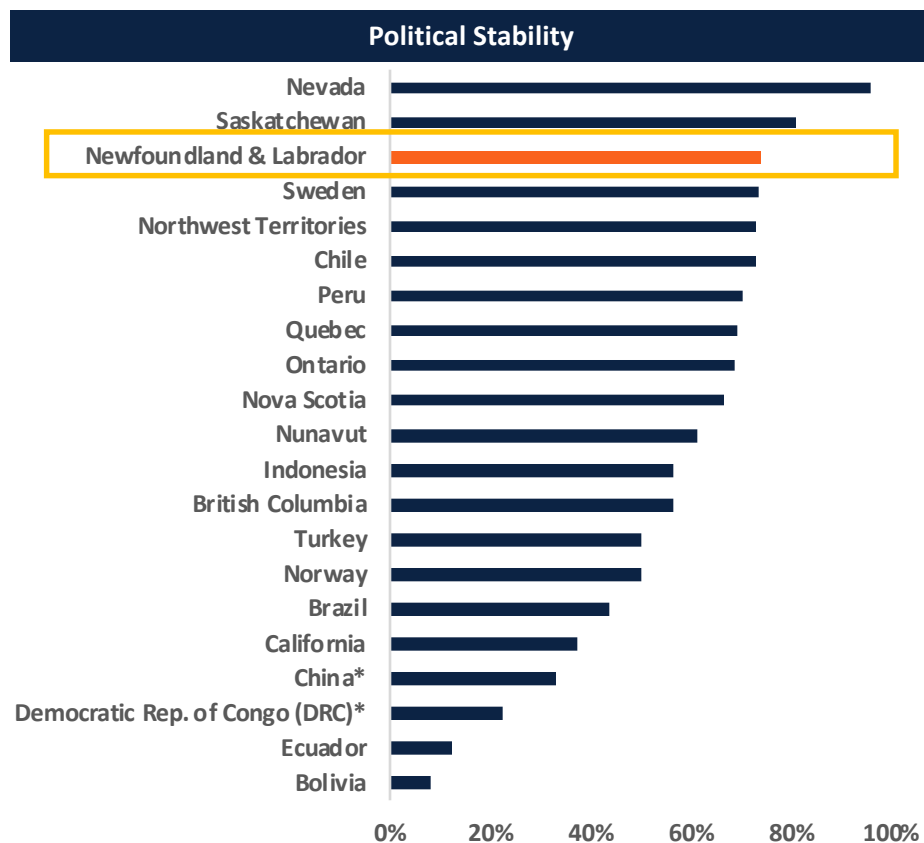
# Marathon Gold - Jurisdiction



Source: Fraser Institute Annual Survey of Mining Companies, 2018

Source: Fraser Institute

# Marathon Gold - Jurisdiction



Source: Fraser Institute Annual Survey of Mining Companies, 2018

Source: Fraser Institute

# Valentine Gold - Project Jurisdiction



Source: Company Website



## Road and Power

Year-round road access  
Substation ~30km away



## Job Opportunities

Operations: ~350 positions  
Construction: ~450 positions



## Developed Services

Regional mining centers



## Skilled Workforce

Pro-mining, experienced



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**“By 2030**, the provincial government **envision**s 5 new mines, sustainable direct employment of more than **6,200 people in operations**, doubling **annual exploration expenditures to C\$100m, C\$4bn in annual mineral shipments**, and a workforce that is more diverse and includes a minimum of 30% women – double the current level,”

**- Dwight Ball, Premier**



# Marathon Gold – Financing



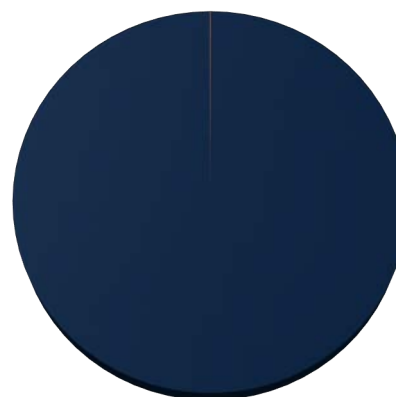
## Current Status

Debt Free  
\$33M Cash  
2% NSR with Franco-Nevada

## Financing Options

Equity Issuance  
Debt Financing  
Earn-in Ventures  
Joint Ventures  
Royalty Agreements

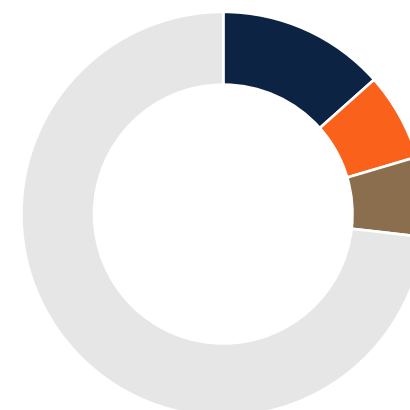
## Capital Structure



■ Equity

■ Debt

## Equity Ownership



■ BCI Ventures

■ Insiders

■ Other Institutions

■ Public

# Marathon Gold – Management



**Appointed in August 2019**

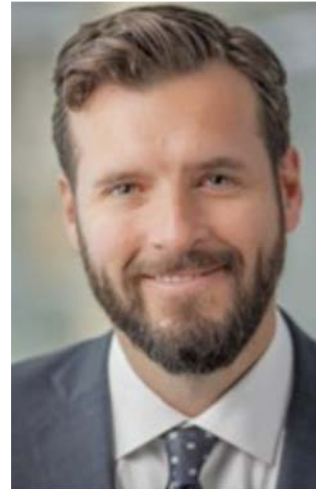
Led Financing and Developing of  
**C\$ 947M** Renard Mine

**US\$ 230M** Project Financing for  
Diavik Diamond Mine

**Matthew Manson**

CEO & President

B.Sc. Geophysics, PhD. Geology



**Appointed in October 2019**

Former **President & CEO** of New  
Gold

Financial Markets & Capital  
Markets experience

**Hannes Portman**

CFO & Business Development

B.A.Sc. ,MMPA & CPA

**Profile of recent appointments to C-Suite have very positive implications on firm's corporate direction**









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# Marathon Gold – Valuation

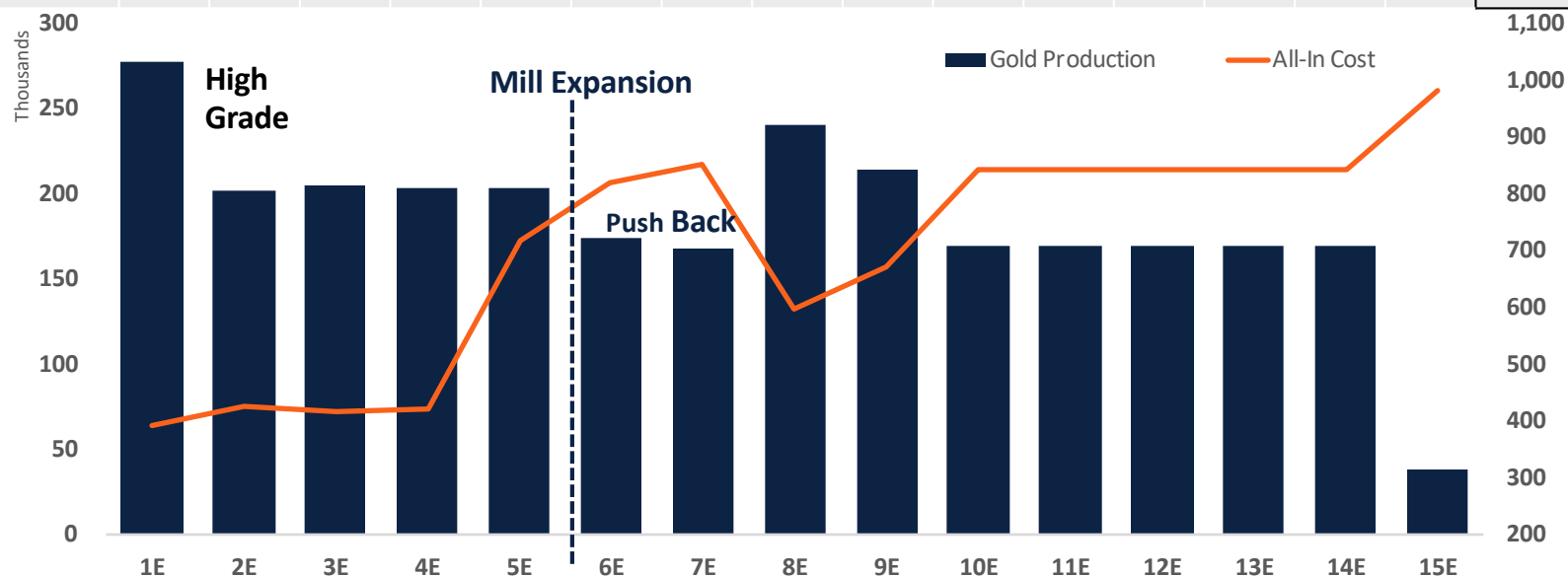


		PEA 2018	Modelled
	Heap leach	9000 tpd	Removed
	Mill feed	9000 tpd	7000 – 12000 tpd
	Mine Life	12Y	15Y
	Total Cost	100%	125%
	Royalty	None	2% NSR
	Price	\$1250/oz	\$1350/oz

# Marathon Gold – Valuation

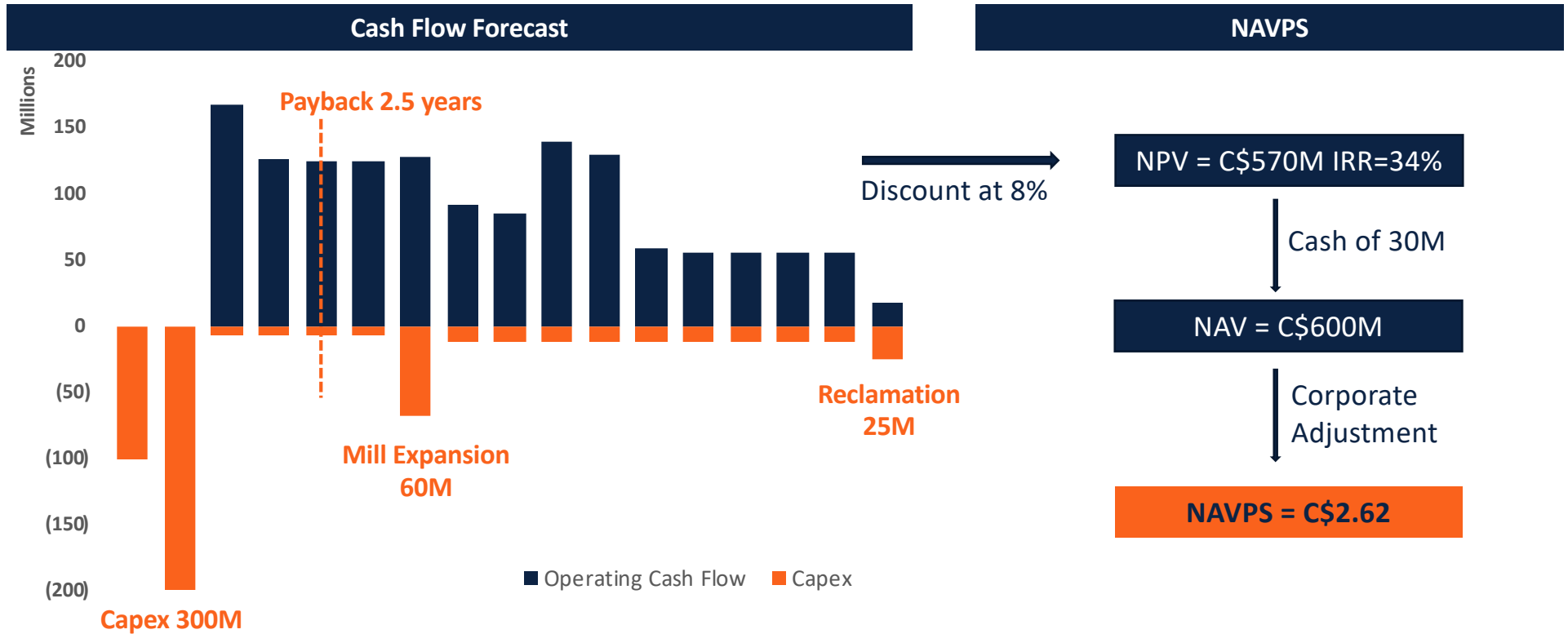


Operating Schedule																
	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Average
Gold Production (koz)	277	201	204	203	203	174	167	241	214	170	170	170	170	170	39	185
AISC (US\$/oz)	380	413	407	410	706	799	830	583	653	818	818	818	818	818	982	684

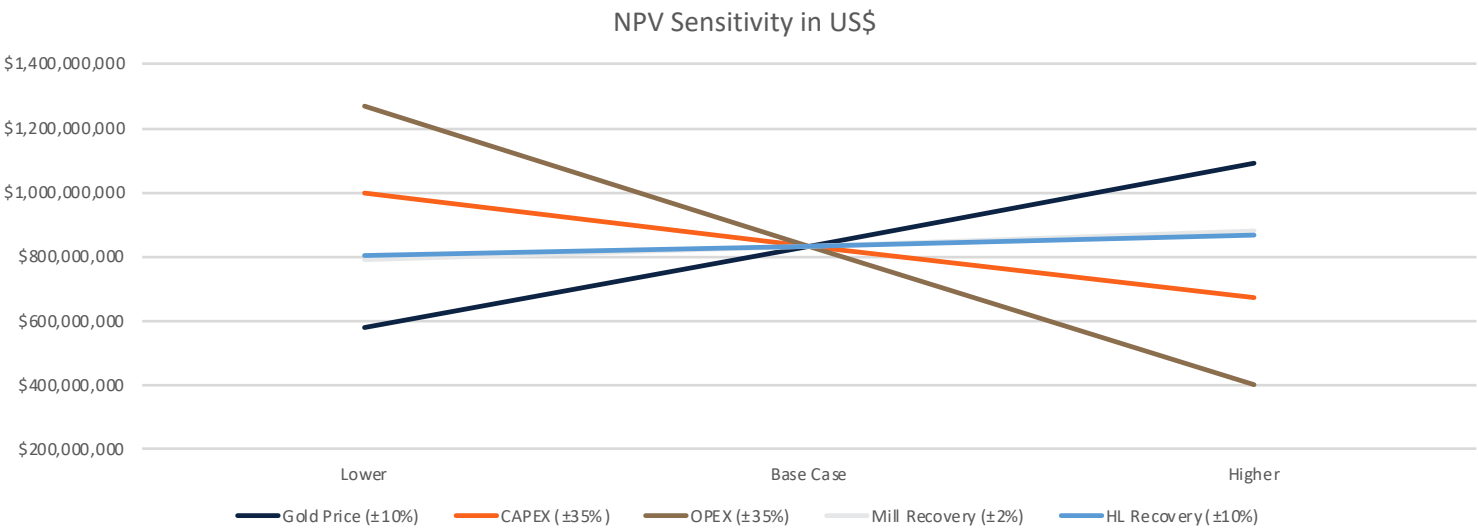




# Marathon Gold – Valuation

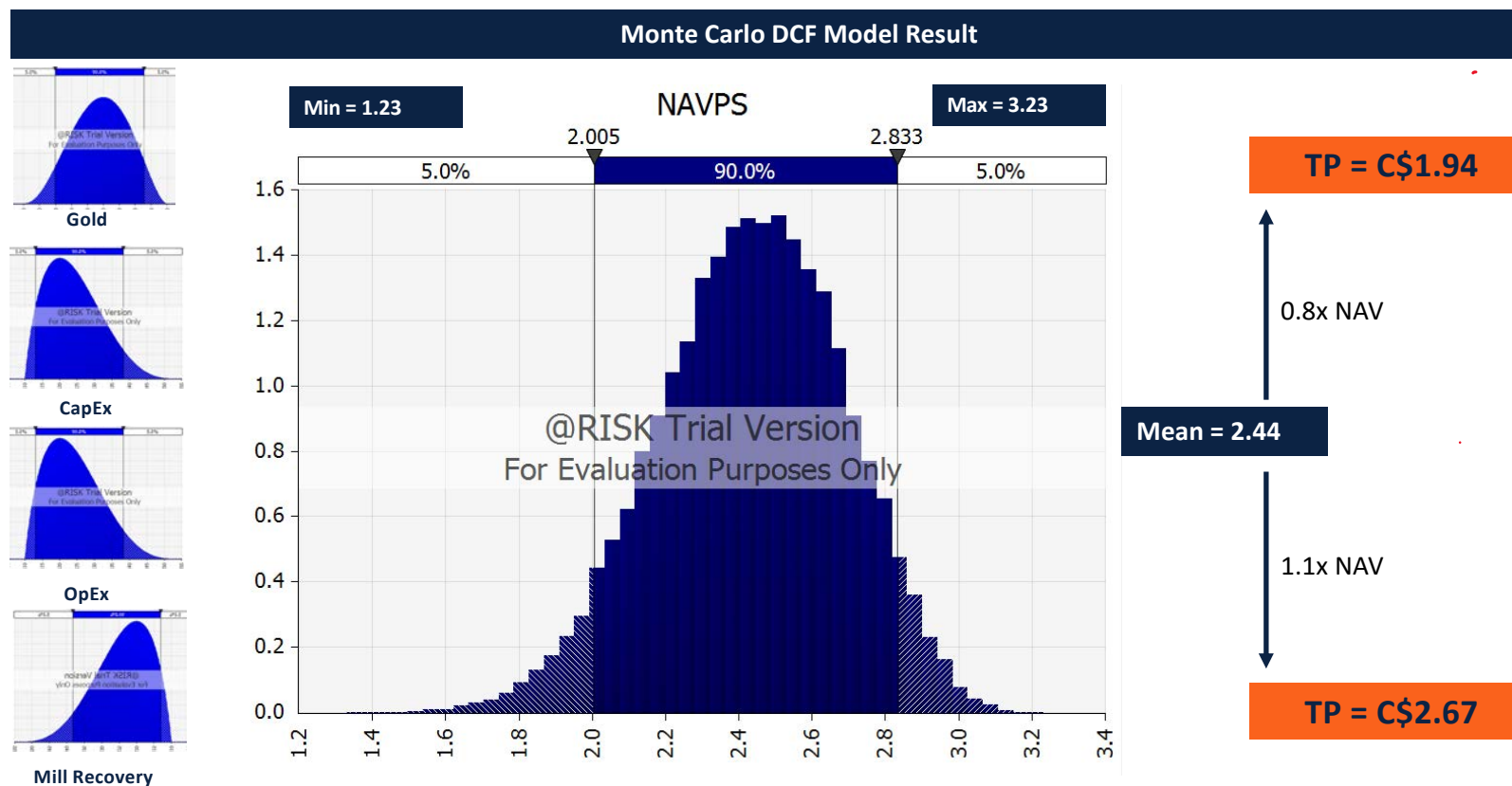


# Sensitivity Study



Source: Marathon Gold Company Presentation

# Marathon Gold – Valuation



# Marathon Gold – Valuation

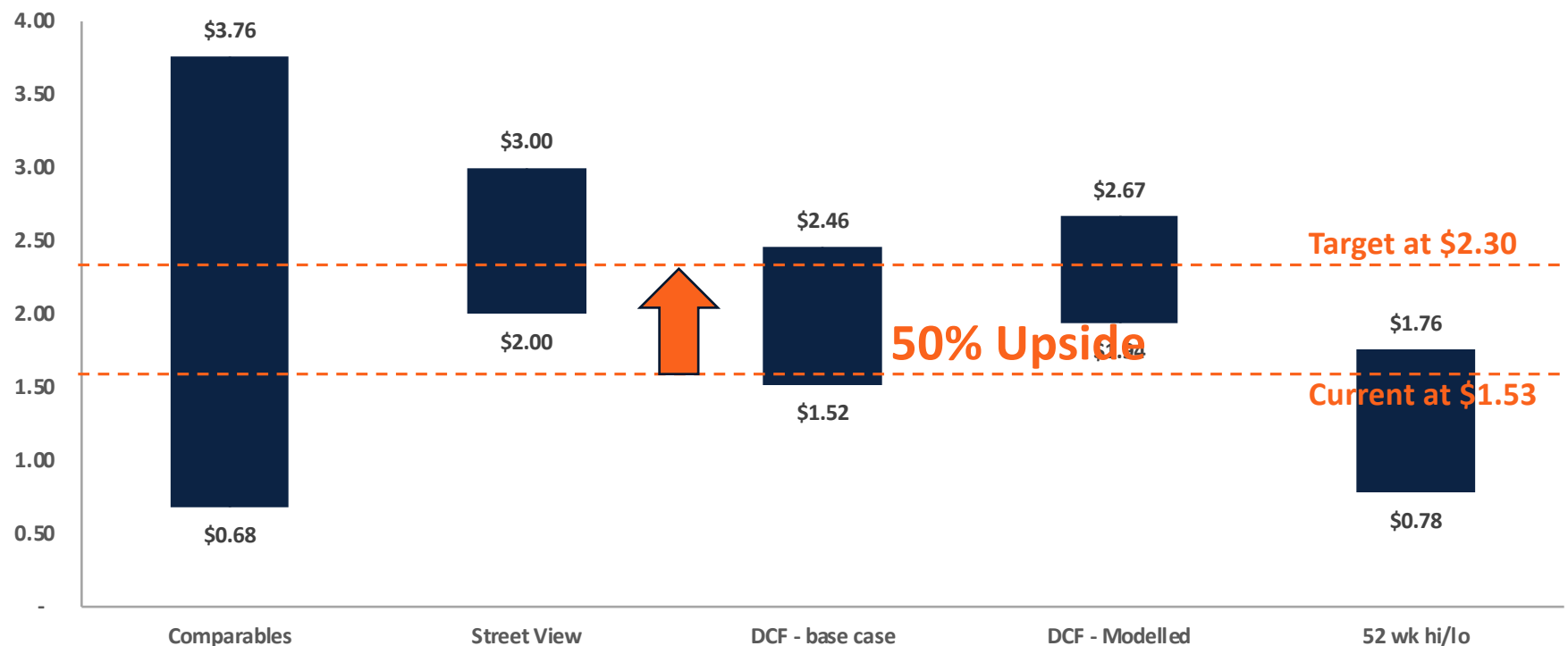
Comparable Valuation			
Company	Ticker	Au Moz	EV/oz Aueq
Liberty Gold Corp.	TSX:LGD	1.6	US\$143
Pure Gold Mining Inc.	TSXV:PGM	2.5	US\$60
Nighthawk Gold Corp.	TSX:NHK	2.6	US\$26
Osisko Mining Inc.	TSX:OSK	7.0	US\$110
<b>Average</b>			<b>US\$84.75</b>
Marathon Gold Corp.	TSX:MOZ	3.1	<b>US\$57</b>

Analysts Coverage	
Analyst Coverage	Targeted Price
Canaccord Genuity	C\$2.5
Haywood	C\$2.5
National	C\$2.0
RBC	C\$2.0
Laureation Bank	C\$3.0



# Marathon Gold – Valuation Result

Valuation Summary



# Marathon Gold – Growth Potential



## Other Areas of Growth

Satellite Deposits

Underground

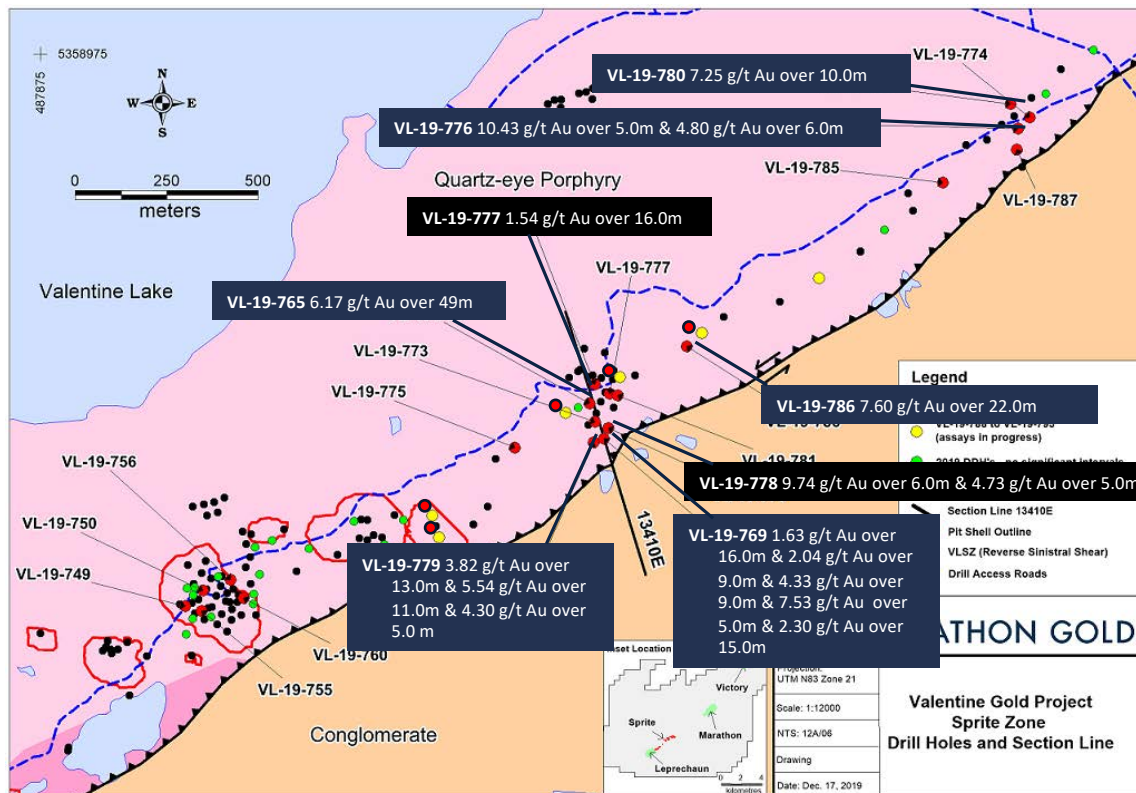
Additional Properties



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# Marathon Gold – Growth Potential



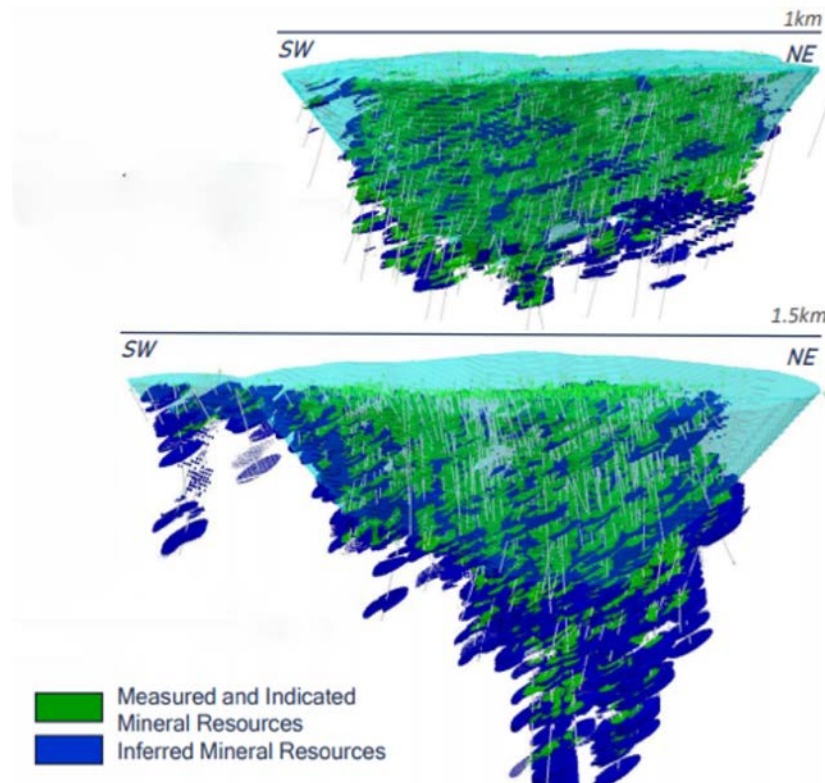
Other Areas of Growth

Satellite Deposits

Underground

Additional Properties

# Marathon Gold – Growth Potential



Source: Company Presentation

Other Areas of Growth

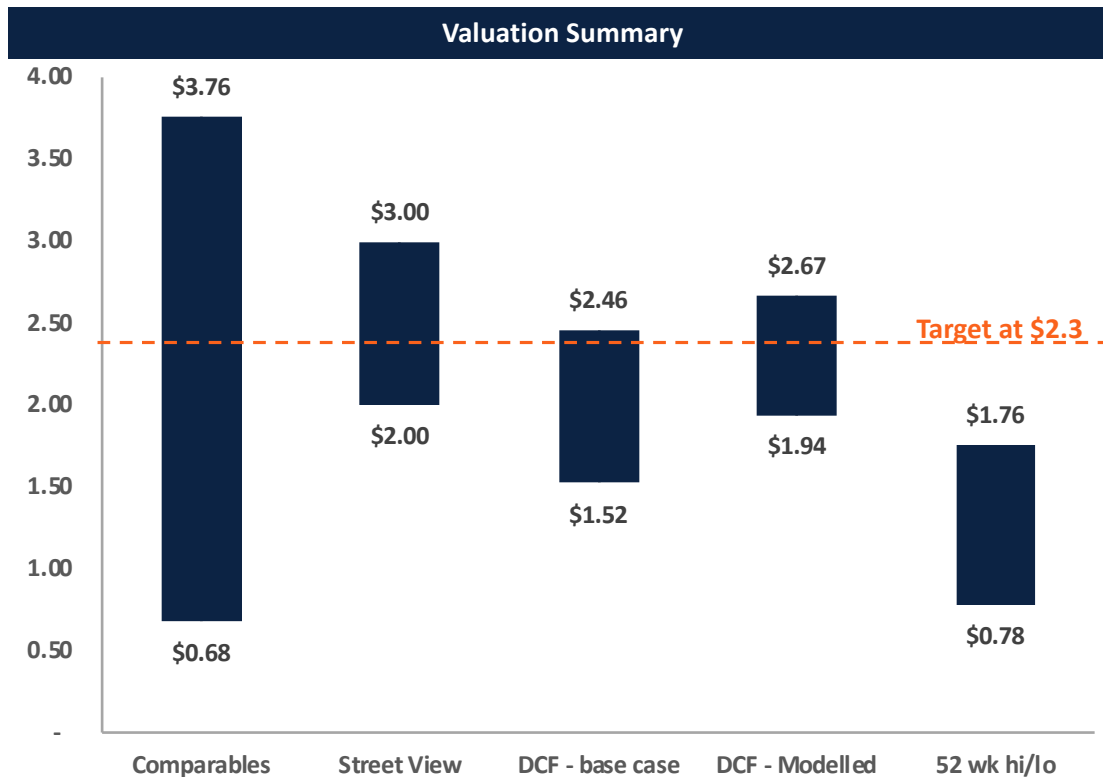
Satellite Deposits

Underground

Additional Properties



# Marathon Gold – Valuation Result



## Key Risk Factors

Risk	Description
Permits	Waiting for key permits, but chance of approval is high
Financing	C\$300M initial capital and C\$150M sustaining capital required

## Investment Decision

**High quality asset with low operating risk**

**Simplified** mining and processing

Moderate risk with **50%** potential return

**Recommended**



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# Lundin Gold - Overview

**LUNDINGOLD**

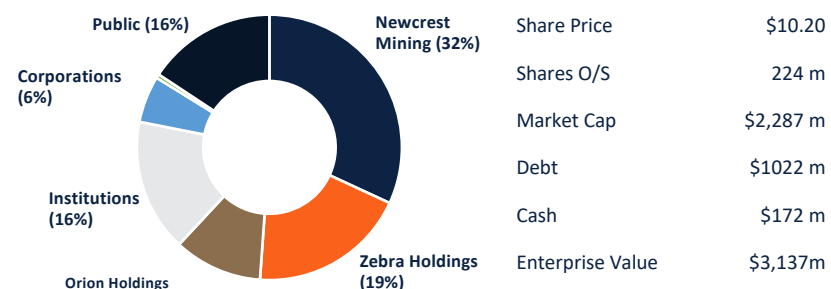
## Company Highlights



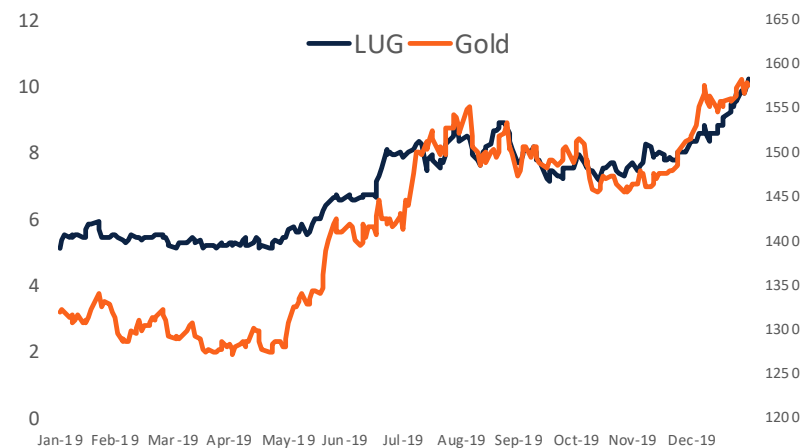
- Fruta Del Norte is one of the world's largest, high-grade undeveloped deposits
- Low cost: **\$621/oz AISC**
- Construction **99%** complete
- Expected commercial production **Q4/20**
- Annual guidance of **310 koz**
- Project fully permitted

	Tonnage (Mt)	Grade (g/t)	Contained Au (Moz)
<b>FDN</b>			
Probable Reserves	15.49	9.67	4.82
Indicated Resources	23.80	9.61	7.35

## Market Data | TSX:LUG



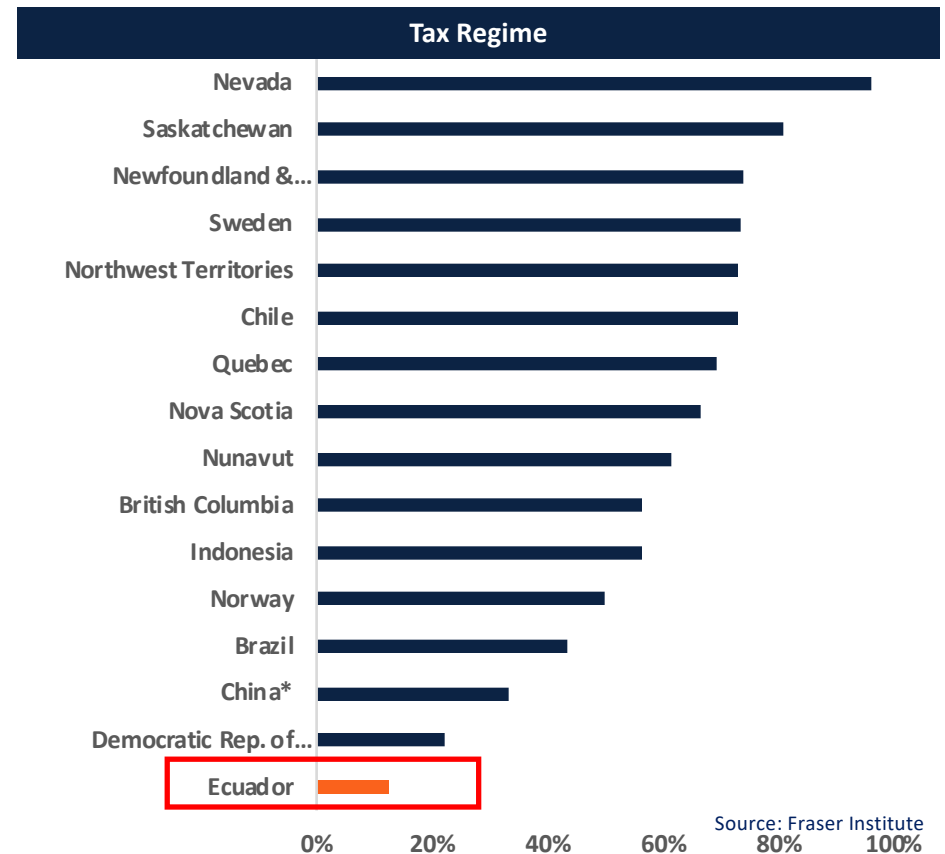
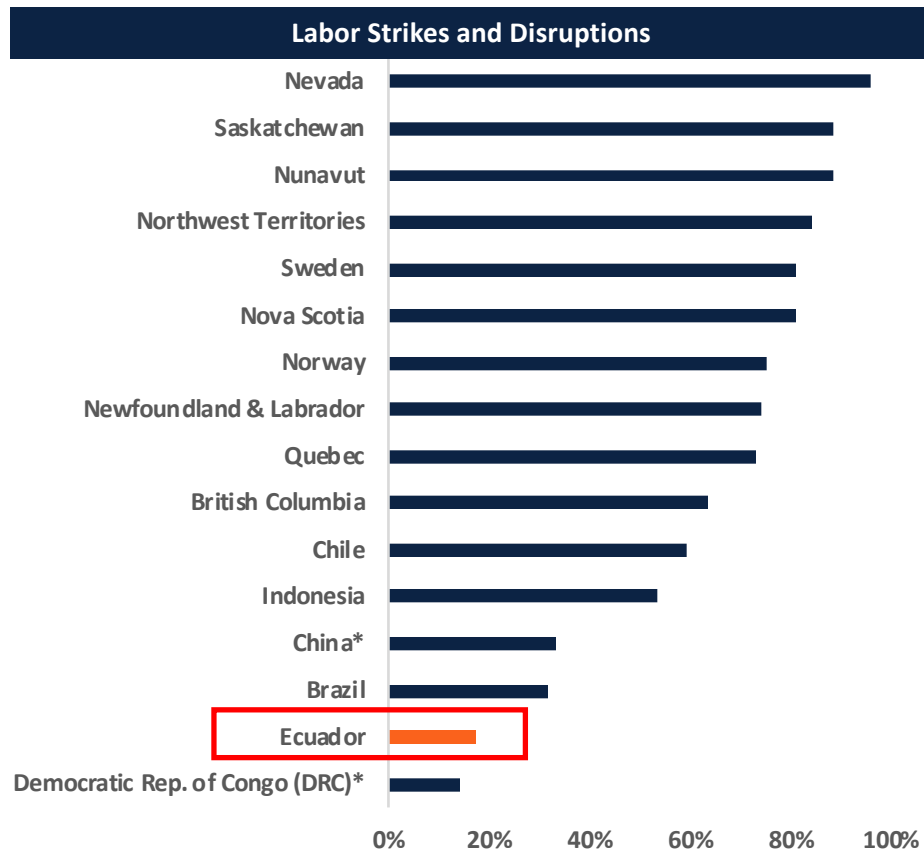
Share Price	\$10.20
Shares O/S	224 m
Market Cap	\$2,287 m
Debt	\$1022 m
Cash	\$172 m
Enterprise Value	\$3,137m



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# Lundin Gold - Jurisdiction

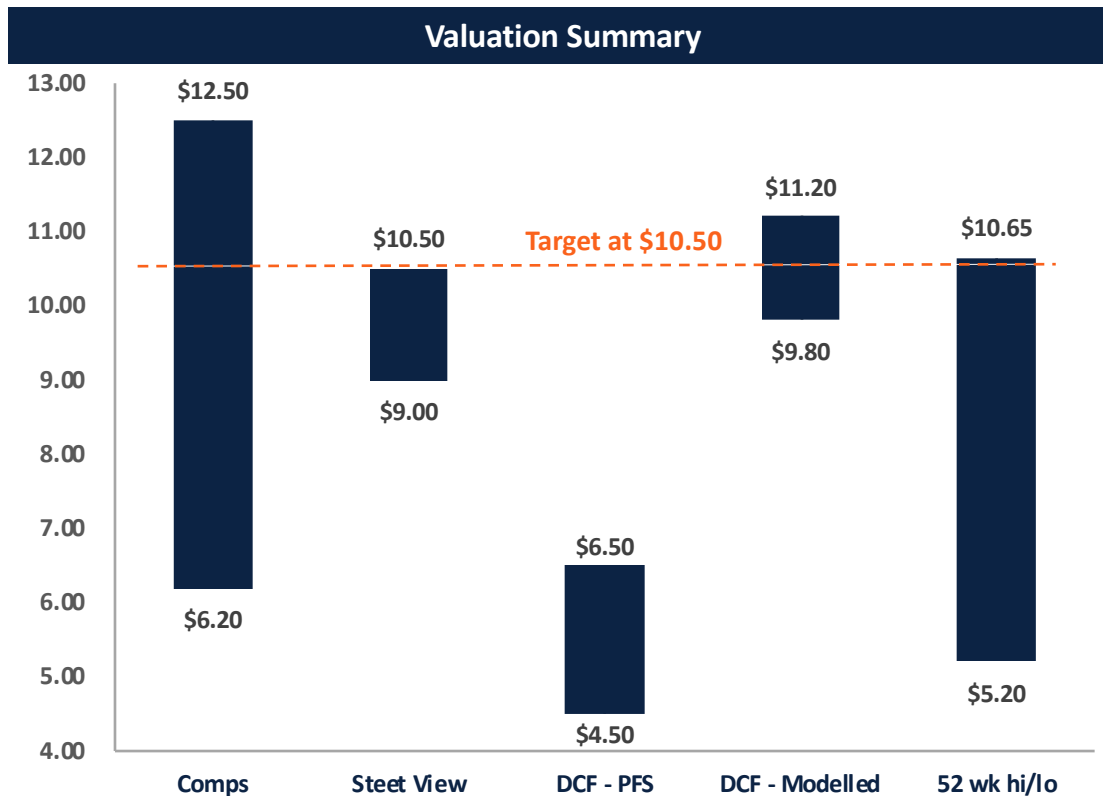


Source: Fraser Institute

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# Lundin Gold - Summary

**LUNDINGOLD**



Key Risk Factors	
<b>Jurisdiction</b>	Recent civil unrest and history of labor strikes in Ecuador
<b>Tax</b>	Complex, multi-layer tax structure
<b>Geotech.</b>	Weak ground conditions in certain areas of deposit pose operational hazards and potential higher costs
<b>Operational</b>	Construction of ventilation raise bottleneck to full production
Investment Decision	

Project is fully permitted, but **significant** jurisdiction risk

Current price indicates market valuation reflects intrinsic valuation, **low potential returns**

**Not Recommended**



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# Maritime Resources - Overview



## Company Highlights



- Own the Hammerdown Mine, a high grade, open pit and underground mine
- Brownfield deposit, operated between 2000-2004
- Fully reclaimed site with pit and UG workings
- Premier mining jurisdiction

### Hammerdown

P&P Reserves

M&I Resources

Tonnage (kt)

Grade (g/t)

Contained Au (koz)

700.6

7.96

179.4

2,022

7.28

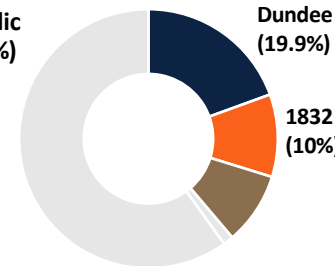
473.2

## Market Data | TSX-V: MAE

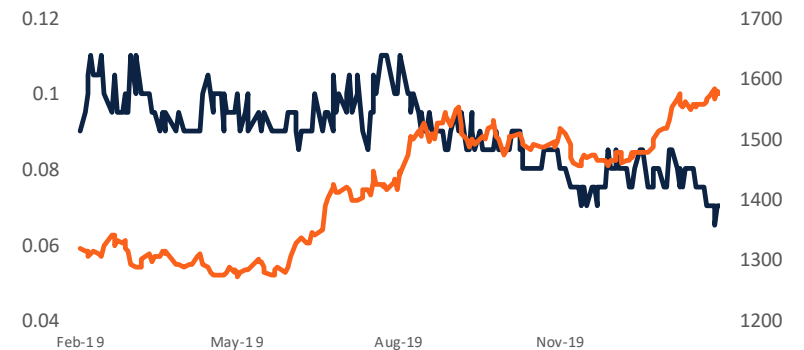
Public  
(60%)

Dundee  
(19.9%)

Share Price	\$0.07
Shares Outstanding	189.8m
Market Cap	\$12.3 m
Debt	\$0 m
Cash	\$3.5 m
Enterprise Value	\$9.76m



MAE Gold



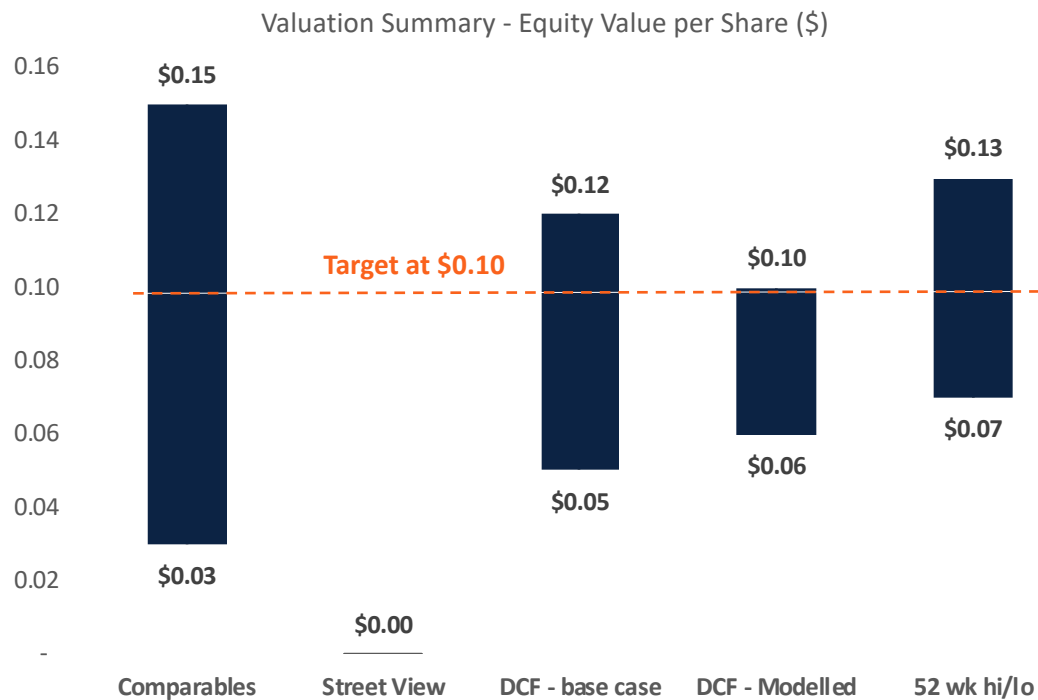
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# Maritime Resources - Summary



## Valuation Summary



## Key Risk Factors

<b>Permitting</b>	Early stage, obtaining permits is uncertain
<b>Operational</b>	Re-accessing old workings could lead to worse than expected working conditions
<b>Liquidity</b>	Low liquidity poses investment risk
<b>Financing</b>	Low cash on balance sheet

## Investment Decision

High operating and financing risk

Return is not adequate

**Not Recommended**



# Investment Decision

## Deposit Quality

### Risk Rating: Moderate

- Open Pit
- Low Cost
- Resource Conversion Risk

## Operating Risk Profile

### Risk Rating: Moderate - High

- Pro-mining jurisdiction
- Permitting awaiting
- Proximity to large water bodies
- Long time till construction

## Financing Risk Profile

### Risk Rating: Moderate

- Qualified management
- Strong balance sheet

Overall Risk Rating:  
**Moderate - High**



## Growth Potential

### Return Rating: Moderate

- Numerous satellite deposits
- Updated resource estimates positive

## Relative Valuation Upside

### Return Rating: High

- Currently trading at far below peer average EV/Aueq
- New PFS expected in Q2/20
- High gold prices expected to sustain
- NAVPS higher than 52 week high/low

Overall Return  
Rating: **High**

## Investment Decision

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### Final Investment Decision



**Rating: BUY**  
**Target Price: \$2.30**



# Transaction Opportunities



## Strategic Review and Opportunities

Accumulate Shares From Open Market

Subscribe to Private Placement

Net Smelter Return Agreement



# Team Overview



# Investment Banking Team

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**Yunlu Ma**  
Team Lead  
Quantitative Analyst



**Safwaan Hassan**  
Risk  
Specialist



**Adnan Mortaza**  
Processing  
Specialist



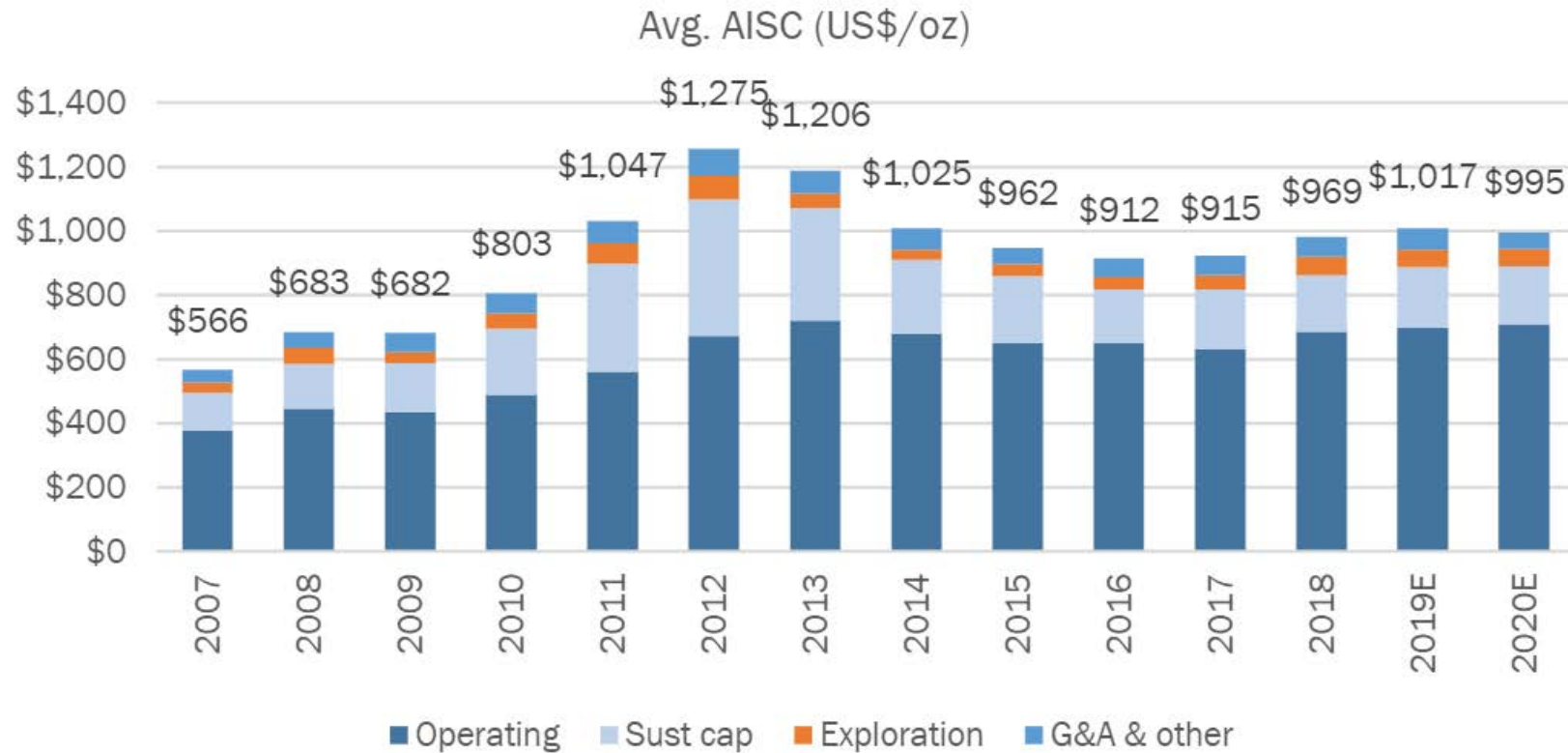
**Zahid Ahmed**  
Operation  
Specialist



# Appendices



# AISC



Source: Capital IQ, Canaccord Genuity

# Marathon Gold - Mine Schedule

LIVE SCENARIO 3		Units	Aug	2016-01-01 Total	2020-12-31 2020E	2021-12-31 2021E	2022-12-31 2022E	2023-12-31 2023E	2024-12-31 2024E	2025-12-31 2025E	2026-12-31 2026E	2027-12-31 2027E	2028-12-31 2028E	2029-12-31 2029E	2030-12-31 2030E	2031-12-31 2031E	2032-12-31 2032E	2033-12-31 2033E	2034-12-31 2034E	2035-12-31 2035E	2036-12-31 2036E	2037-12-31 2037E	2038-12-31 2038E
Balance Sheet Check					(4)	(3)	(2)	(1)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Spot				3																			
Gold					1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300
Silver					18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Active Price Deck in Model				Spot																			
Gold				3	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300
Silver					18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Production Schedule					2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
2018 PEA Mine Plan p.45	Ore Milled	tonnes		53,195,000	-	-	-	-	2,555,000	2,555,000	2,555,000	2,555,000	2,555,000	4,380,000	4,380,000	4,380,000	4,380,000	4,380,000	4,380,000	4,380,000	4,380,000	4,380,000	1,000,000
	Grade	g/t		1.71	-	-	-	-	3.55	2.58	2.62	2.60	2.60	1.30	1.25	1.80	1.60	1.27	1.27	1.27	1.27	1.27	1.27
	Recovery	%			0.0%	0.0%	0.0%	0.0%	85.0%	95.0%	85.0%	95.0%	85.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%
	% of mine life				0.0%	0.0%	0.0%	0.0%	8.4%	9.2%	10.1%	11.3%	12.7%	25.0%	33.3%	50.0%	100.0%	50.0%	33.3%	25.0%	20.0%	16.7%	3.7%
Reserves & Resources																							
M&I statement 2020	Gold				Tonnes	Grade (g/t)	Contained (oz)																
	High grade				30,628,815	2.62	2,580,000																
	Low Grade				22,500,387	0.47	340,000																
	M&I total				53,129,002	1.71	2,920,000																
Silver					Tonnes	Grade (g/t)	Contained (oz)																
Ratio				0	53,129,002	-	-																
Strip Ratio				6.0x					4	4	4	5	5	12	11	6	6	6	6	6	6	6	6



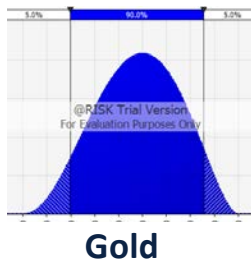
Tech Report p 248 Update p 185	<b>Mill Capacity</b>	Y1-Y5	Y10																			
	Tonnes/day	7,000	12,000																			
	Tonnes/year	2,555,000	4,380,000																			
Tech Report p 428	<b>Royalties</b>																					
	Franco-Nauri	2.0%																				
	-	0.0%																				
	Overall	2.0%																				
Tech Report p 430	<b>Payability</b>																					
	Gold	99.9%																				
	Silver	99.0%																				
Tech Report p 402	<b>Mine Operating Costs</b>			New Cost																		
	Mining	\$/t milled	15.00																			
	Processing	\$/t milled	11.00																			
	Transport & Refining	\$/t milled	1.00																			
	General & Admin	\$/t milled	2.00																			
	Total	\$/t milled	29.00																			
Financials	Corporate G&A	\$/oz	10.00																			
	Exploration	\$/oz	10.00																			
Tech Report p 433	<b>Capital Costs</b>			2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	Sustaining Capital	150,000,000	-	-	-	-	-	7,204,624	7,204,624	7,204,624	7,204,624	7,204,624	12,350,785	12,350,785	12,350,785	12,350,785	12,350,785	12,350,785	12,350,785	12,350,785	12,350,785	2,819,814
	Sustaining C/tonnes	53,195,000	0%	0%	0%	0%	0%	5%	5%	5%	5%	5%	8%	8%	8%	8%	8%	8%	8%	8%	8%	2%
Tech Report p 435	<b>Reclamation</b>																					
	Total Reclamation Costs	22,200,000																				
Filings	<b>Financial</b>																					
	PP&E Opening Balance	85,800,000																				
	Taxes	40%																				
	Cash and ST	34,869,215																				
	Debt	0.00																				
Assumptions	<b>Working Capital</b>																					
	Accounts Receivable days	15	Days in period	365																		
	Accounts Payable days	30																				
	Inventory Days	20																				
	<b>Discount Rate</b>	8%																				
	Initial Capital Cost	0	0	100,000,000	200,000,000	0	0	0	0	60,000,000	0	0	0	0	0	0	0	0	0	0	0	22,200,000





LIVE SCENARIO		Units	Avg	2016-01-01 Total	2020-12-31 2020E	2021-12-31 2021E	2022-12-31 2022E	2023-12-31 2023E	2024-12-31 2024E	2025-12-31 2025E	2026-12-31 2026E	2027-12-31 2027E	2028-12-31 2028E	2029-12-31 2029E	2030-12-31 2030E	2031-12-31 2031E	2032-12-31 2032E	2033-12-31 2033E	2034-12-31 2034E	2035-12-31 2035E	2036-12-31 2036E	2037-12-31 2037E	2038-12-31 2038E
Balance Sheet Check					(4)	(3)	(2)	(1)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Metal Prices																							
Gold	\$/oz	1,300	na	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300
Silver	\$/oz	18	na	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Payable Metal																							
Gold	oz	184,740	2,771,101	0	0	0	0	0	278,854	201,207	204,326	202,767	202,767	173,800	167,115	240,646	213,908	169,789	169,789	169,789	169,789	169,789	38,785
Silver	oz	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tonnage																							
Mill Feed	t	3,546,333	53,195,000	0	0	0	0	0	2,555,000	2,555,000	2,555,000	2,555,000	2,555,000	4,380,000	4,380,000	4,380,000	4,380,000	4,380,000	4,380,000	4,380,000	4,380,000	4,380,000	1,000,000
Financial Statements																							
Gross Revenue																							
Gold	\$	240,162,090	3,602,431,355	-	-	-	-	-	359,910,813	261,568,985	265,624,318	263,596,651	263,596,651	225,939,987	217,249,987	312,839,982	278,079,984	220,726,987	220,726,987	220,726,987	220,726,987	220,726,987	60,394,061
Silver	\$	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Revenue	\$	240,162,090	3,602,431,355	-	-	-	-	-	359,910,813	261,568,985	265,624,318	263,596,651	263,596,651	225,939,987	217,249,987	312,839,982	278,079,984	220,726,987	220,726,987	220,726,987	220,726,987	220,726,987	60,394,061
Royalties																							
Average	\$	2.0%	72,048,627	-	-	-	-	-	7,198,216	5,231,380	5,312,486	5,271,933	5,271,933	4,518,800	4,345,000	6,256,800	5,561,600	4,414,520	4,414,520	4,414,520	4,414,520	4,414,520	1,007,881
Total Royalties	\$	4,803,242	72,048,627	-	-	-	-	-	7,198,216	5,231,380	5,312,486	5,271,933	5,271,933	4,518,800	4,345,000	6,256,800	5,561,600	4,414,520	4,414,520	4,414,520	4,414,520	4,414,520	1,007,881
Unit Operating Costs																							
Mining	\$/tonne	15.00	na	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Processing	\$/tonne	11.00	na	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
Transport & Refining	\$/tonne	1.00	na	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
General & Admin	\$/tonne	2.00	na	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Total	\$/tonne	29.00	na	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00
Total Operating Costs																							
Mining	\$	53,195,000	797,925,000	-	-	-	-	-	38,325,000	38,325,000	38,325,000	38,325,000	38,325,000	65,700,000	65,700,000	65,700,000	65,700,000	65,700,000	65,700,000	65,700,000	65,700,000	65,700,000	15,000,000
Processing	\$	39,009,667	585,145,000	-	-	-	-	-	28,105,000	28,105,000	28,105,000	28,105,000	28,105,000	48,180,000	48,180,000	48,180,000	48,180,000	48,180,000	48,180,000	48,180,000	48,180,000	48,180,000	11,000,000
Transport & Refining	\$	3,546,333	53,195,000	-	-	-	-	-	2,555,000	2,555,000	2,555,000	2,555,000	2,555,000	4,380,000	4,380,000	4,380,000	4,380,000	4,380,000	4,380,000	4,380,000	4,380,000	4,380,000	1,000,000
General & Admin	\$	7,952,667	106,390,000	-	-	-	-	-	5,110,000	5,110,000	5,110,000	5,110,000	5,110,000	8,760,000	8,760,000	8,760,000	8,760,000	8,760,000	8,760,000	8,760,000	8,760,000	8,760,000	2,000,000
Total	\$	102,843,667	1,542,655,000	-	-	-	-	-	74,095,000	74,095,000	74,095,000	74,095,000	74,095,000	127,020,000	127,020,000	127,020,000	127,020,000	127,020,000	127,020,000	127,020,000	127,020,000	127,020,000	29,000,000
Total Operating Costs (By-Product)		102,843,667	1,542,655,000	-	-	-	-	-	74,095,000	74,095,000	74,095,000	74,095,000	74,095,000	127,020,000	127,020,000	127,020,000	127,020,000	127,020,000	127,020,000	127,020,000	127,020,000	127,020,000	29,000,000
Capital Costs																							
Development Capital	\$	5,480,000	382,200,000	-	-	100,000,000	200,000,000	-	-	-	-	-	60,000,000	-	-	-	-	-	-	-	-	-	22,200,000
Sustaining Capital	\$	10,000,000	150,000,000	-	-	-	-	-	7,204,624	7,204,624	7,204,624	7,204,624	7,204,624	12,350,785	12,350,785	12,350,785	12,350,785	12,350,785	12,350,785	12,350,785	12,350,785	12,350,785	2,819,814
Total Capital Costs	\$	15,480,000	532,200,000	-	-	100,000,000	200,000,000	-	7,204,624	7,204,624	7,204,624	7,204,624	67,204,624	12,350,785	12,350,785	12,350,785	12,350,785	12,350,785	12,350,785	12,350,785	12,350,785	12,350,785	25,019,814
All-In Costs																							
By-Product Cash Cost	\$/oz	589	8,831	-	-	-	-	-	267.83	368.25	362.83	365.42	365.42	730.84	780.07	527.83	593.81	748.10	748.10	748.10	748.10	748.10	748.10
Total Capital	\$/oz	115	1,727	-	-	-	-	-	26.02	35.81	35.26	35.26	35.53	331.44	73.91	51.32	57.74	72.74	72.74	72.74	72.74	72.74	645.43
Corporate G&A	\$/oz	10	150	-	-	-	-	-	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Exploration	\$/oz	10	150	-	-	-	-	-	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
All-In Costs	\$/oz	724	10,858	-	-	-	-	-	314	424	418	421	717	822	854	699	672	841	841	841	841	841	1,414
EBITDA	\$	132,515,182	1,987,727,728	-	-	-	-	-	278,617,596	182,242,605	186,216,832	184,229,718	184,229,718	94,401,187	85,884,988	179,563,182	145,498,384	89,291,467	89,291,467	89,291,467	89,291,467	89,291,467	20,386,180
Depreciation																							
% of production	%	0	na	0.0%	0.0%	0.0%	0.0%	0.0%	8.4%	9.2%	10.1%	11.3%	12.7%	25.0%	33.3%	50.0%	100.0%	50.0%	33.3%	25.0%	20.0%	16.7%	3.7%
Opening Balance	\$	169,664,855	na	85,800,000	85,800,000	85,800,000	185,800,000	385,800,000	359,859,656	333,255,728	305,920,897	277,772,840	301,071,067	235,098,389	184,944,783	88,647,784	-	6,175,392	12,350,785	18,526,177	24,701,570	30,876,962	30,876,962
Add Capital Expenditure	\$	15,480,000	232,200,000	-	-	100,000,000	200,000,000	7,204,624	7,204,624	7,204,624	7,204,624	67,204,624	12,350,785	12,350,785	12,350,785	12,350,785	12,350,785	12,350,785	12,350,785	12,350,785	12,350,785	25,019,814	25,019,814
Subtotal	\$	185,144,855	na	85,800,000	85,800,000	185,800,000	385,800,000	393,004,624	367,064,281	340,460,353	313,125,521	344,977,284	313,421,852	247,417,174	177,295,567	100,998,569	18,526,177	24,701,570	30,876,962	37,052,355	55,896,778	55,896,778	
Less Depreciation	\$	37,010,148	564,152,226	-	-	-	-	33,144,968	33,808,552	34,539,456	35,352,881	43,906,187	78,355,463	82,472,391	88,647,784	100,998,569	6,175,392	6,175,392	6,175,392	6,175,392	6,175,392	2,049,002	2,049,002
Closing Balance	\$	147,534,507	na	85,800,000	85,800,000	185,800,000	385,800,000	359,859,656	333,255,728	305,920,897	277,772,840	301,071,067	235,098,389	184,944,783	88,647,784	-	6,175,392	12,350,785	18,526,177	24,701,570	30,876,962	53,847,774	
EBIT	\$	94,905,033	1,423,575,502	-	-	-	-	-	245,472,628	148,434,053	151,677,376	148,876,837	140,323,621	16,045,724	3,412,596	90,915,399	44,499,816	83,116,075	83,116,075	83,116,075	83,116,075	83,116,075	18,337,178
Taxes	\$	40%	395,863,180	FALSE	FALSE	FALSE	FALSE	FALSE	98,189,051	59,373,621	60,670,950	59,550,735	56,129,408	6,418,290	1,365,039	36,368,159	17,799,926	33,246,430	33,246,430	33,246,430	33,246,430	33,246,430	7,334,871
Net Income	\$	45,676,521	593,794,770	-	-	-	-	-	147,283,577	89,060,432	91,006,425	89,326,102	84,194,113	9,627,435	2,047,558	54,549,239	26,699,889	49,869,645	49,869,645	49,869,645	49,869,645	49,869,645	11,002,307
Asset Level Balance Sheet Items																							
Accounts Receivable				-	-	-	-	-	14,760,855.31	10,749,410.34	10,916,067.86	10,832,739.10	10,832,739.10	9,285,204.94	8,928,081.68	12,856,4							

# Monte Carlo Simulation Parameters



10 Year Gold Price in USD/oz

High: 1889.70 Low: 1050.80 ▲502.90 47.19%

Last Close: 1568.60



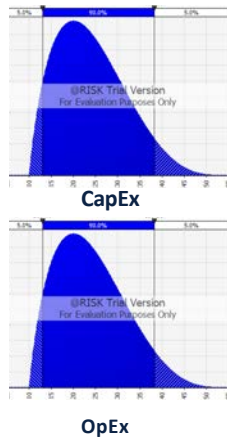
<https://goldprice.org/gold-price-history.html>



# Monte Carlo Simulation Parameters

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J. Bertisen and G. A. Davis



**Table 1. Key statistics of the capital cost ratios for 63 mining projects**

Actual Cost as Percentage of Estimate	
Mean	1.25
Median	1.16
Mode	1.00
Standard Deviation	0.30
Minimum	0.93
Maximum	2.14
Number of Projects	63
–Underestimated CAPEX	44
–Overestimated CAPEX	7
–Correctly Estimated CAPEX	12

Monte Carlo software @RISK shows that the capital cost ratios behave as a Pareto (shape = 3.74, origin = +0.93) or inverse Gaussian (mean = 0.36, shape = 0.37, shift = +0.89) distribution. A shifted lognormal

# P/NAV multiple

Figure 1: Rating and target price revisions

Company	Analyst	Currency	Close 13-Jan-20	Rating		Target		Target % Change	Dividend Yield	Total Implied Return	Target NAV Multiple (Old)	Target NAV Multiple (New)	Target EBITDA Multiple (Old)	Target EBITDA Multiple (New)	Current P/NAV
				Previous	New	Previous	New								
ROYALTY															
Franco-Nevada	CM	C\$	\$132.31	BUY	BUY	\$148.00	\$146.00	-1%	1.0%	11%	2.30	2.30	26.00	26.00	2.08
Wheaton Precious Metals	CM	C\$	\$35.84	BUY	BUY	\$51.00	\$51.00	0%	1.3%	44%	2.20	2.20	24.00	24.00	1.49
Royal Gold	CM	US\$	\$111.18	HOLD	HOLD	US\$125.00	US\$125.00	0%	1.0%	13%	2.00	2.00	19.00	19.00	1.83
Osisko Gold Royalties	CM	C\$	\$11.93	BUY	BUY	\$18.00	\$17.00	-6%	1.7%	44%	1.30	1.30	20.00	20.00	0.90
Sandstorm Gold	CM	C\$	\$8.73	BUY	BUY	\$11.00	\$11.00	0%	0.0%	26%	1.70	1.70	nm	nm	1.09
Average								-1%	1%	28%	1.90	1.90	22.25	22.25	1.48
SENIOR PRODUCERS															
Newmont Goldcorp	CM	US\$	\$42.45	BUY	BUY	US\$55.00	US\$56.00	2%	2.4%	34%	1.15	1.15	9.50	9.50	0.91
Barick Gold	CM	C\$	\$22.78	BUY	BUY	\$27.00	\$27.00	0%	1.1%	20%	1.15	1.15	8.50	8.50	0.94
Agnico Eagle Mines	CM	C\$	\$75.94	BUY	BUY	\$95.00	\$95.00	-3%	1.2%	26%	1.50	1.50	12.00	12.00	1.29
Kirkland Lake Gold	TG	C\$	\$57.10	HOLD	HOLD	\$55.00	\$53.00	-4%	0.4%	-7%	1.00	1.00	8.00	8.00	1.29
Kinross Gold	CM	C\$	\$5.69	BUY	BUY	\$9.00	\$9.25	3%	0.0%	63%	0.90	0.90	6.00	6.00	0.64
Pan American Silver	DB	US\$	\$21.99	BUY	BUY	US\$22.50	US\$26.00	16%	0.6%	19%	1.25	1.40	5.50	6.50	1.25
Yamana Gold	CM	C\$	\$4.68	BUY	BUY	\$6.50	\$6.25	-4%	1.3%	35%	1.00	1.00	7.00	7.00	0.86
B2Gold	CM	C\$	\$5.06	BUY	BUY	\$7.00	\$7.00	0%	1.0%	39%	1.20	1.20	6.50	6.50	0.95
Average								1%	1.1%	29%	1.14	1.16	7.88	8.00	1.02
JUNIOR/INTERMEDIATE PRODUCERS															
Detour Gold	CM	C\$	\$24.91	BUY	BUY	\$27.50	\$27.50	0%	0.0%	10%	1.00	1.00	9.00	9.00	0.77
Pretium Resources	KM	C\$	\$13.60	SPEC BUY	SPEC BUY	\$18.00	\$18.50	3%	0.0%	36%	0.80	0.80	nm	nm	0.74
Centerra Gold	DB	C\$	\$9.58	BUY	BUY	\$12.50	\$12.50	0%	0.0%	30%	1.10	1.10	4.00	4.00	0.73
Hecla Mining	DB	US\$	\$3.05	SELL	SELL	US\$1.80	US\$2.75	53%	0.3%	-10%	1.50	2.00	7.00	9.00	2.50
SSR Mining	DB	C\$	\$22.70	BUY	BUY	\$25.00	\$27.00	8%	0.0%	19%	1.10	1.20	6.50	6.50	1.22
Alamos Gold	DB	C\$	\$7.10	BUY	BUY	\$11.50	\$11.50	0%	0.7%	63%	1.00	1.00	7.00	7.00	0.67
Coeur Mining	DB	US\$	\$6.43	HOLD	HOLD	US\$5.50	US\$7.00	27%	0.0%	9%	1.20	1.40	5.00	6.00	1.36
Eldorado Gold	CM	C\$	\$9.41	HOLD	HOLD	\$12.00	\$10.50	-13%	0.0%	12%	0.65	0.60	nm	nm	0.54
New Gold	DB	C\$	\$1.24	HOLD	BUY	\$1.40	\$1.60	14%	0.0%	29%	1.00	1.00	4.00	4.00	0.78
Torex Gold	KM	C\$	\$19.33	BUY	BUY	\$24.50	\$23.50	-4%	0.0%	22%	0.85	0.85	nm	nm	0.82
IAMGOLD	CM	C\$	\$4.31	HOLD	HOLD	\$5.50	\$5.25	-5%	0.0%	22%	0.50	0.50	4.00	4.00	0.41
Teranga Gold	CM	C\$	\$7.00	BUY	BUY	\$11.50	\$11.50	0%	0.0%	64%	0.80	0.80	4.50	4.50	0.58
Wesdome Gold Mines	TG	C\$	\$9.68	BUY	HOLD	\$9.00	\$10.00	11%	0.0%	3%	1.20	1.30	nm	nm	0.96
Seabridge Gold	DB	C\$	\$16.70	SPEC BUY	SPEC BUY	\$23.00	\$22.00	-4%	0.0%	32%	0.75	0.70	nm	nm	0.61
Dundee Precious Metals	DB	C\$	\$5.58	BUY	BUY	\$8.50	\$8.50	0%	0.0%	52%	0.70	0.70	4.00	4.00	0.51
Fortuna Silver	DB	C\$	\$4.79	BUY	BUY	\$6.00	\$7.00	17%	0.0%	46%	0.80	1.20	4.00	4.00	0.87
TMAC Resources	TG	C\$	\$3.02	SPEC BUY	SPEC BUY	\$7.50	\$5.75	-23%	0.0%	90%	0.80	0.80	4.00	5.00	0.33
Premier Gold	TG	C\$	\$1.70	BUY	BUY	\$5.00	\$4.25	-15%	0.0%	150%	1.00	1.00	nm	nm	0.39
Argonaut Gold	TG	C\$	\$2.02	BUY	BUY	\$4.00	\$3.50	-13%	0.0%	73%	0.85	0.80	6.00	5.00	0.57
Average								3%	0.5%	40%	0.93	0.99	5.31	5.54	0.81

Source: Company Reports, Canaccord Genuity estimates

Source: Capital IQ, Canaccord Genuity



THE UNIVERSITY OF BRITISH COLUMBIA

Norman B. Keevil Mining Engineering

# Maritime Model

Category	Deposit	Vein	Tonnes (t)	Gold (g/t)	Ounces ('000 oz)
<b>Measured</b>	Hammerdown / Rumbullion / Muddy Shag	All	372,170	12.09	144.7
	Measured Total		372,170	12.09	144.7
<b>Indicated</b>	Hammerdown / Rumbullion / Muddy Shag	All	553,500	9.60	170.9
	Orion	Main	206,600	4.18	27.8
		DISV	889,900	4.53	129.6
		EMS	-	-	-
		All Orion total	1,096,500	4.47	157.6
<b>Indicated Total</b>		-	<b>1,650,000</b>	<b>6.19</b>	<b>328.5</b>
<b>Measured and Indicated Total</b>		<b>ALL</b>	<b>2,022,170</b>	<b>7.28</b>	<b>473.2</b>
<b>Inferred</b>	Hammerdown / Rumbullion / Muddy Shag	All	1,557,000	7.53	376.8
	Orion	Main	387,000	6.91	86.0
		DISV	737,000	4.67	110.7
		EMS	164,000	5.39	28.4
		All Orion	1,288,000	5.44	225.1
<b>Inferred Total</b>		<b>ALL</b>	<b>2,845,000</b>	<b>6.58</b>	<b>601.9</b>

# Risk Matrix

Likelihood	Almost Certain	Class II	Class III	Class IV	Class IV	Class IV
	Likely	Class II	Class III	Class III	Class IV	Class IV
	Possible	Class I	Class II	Class III	Class IV	Class IV
	Unlikely	Class I	Class I	Class II	Class III	Class IV
	Rare	Class I	Class I	Class II	Class III	Class III
		Very Low	Low	Moderate	High	Very High
Consequence						



# Marathon Gold – Deposit Quality

Likelihood	Almost Certain	Class II	Class III	Class IV	Class IV	Class IV
	Likely	Class II	Class III	Class III	Class IV	Class IV
	Possible	Class I	Class II	Class III	Class IV	Class IV
	Unlikely	Class I	Class I	Class II	Class III	Class IV
	Rare	Class I	Class I	Class II	Class III	Class III
		Very Low	Low	Moderate	High	Very High
Consequence						

## Risk 1 – Resource Conversion Risk

**Likelihood:** Rare

**Consequence:** High

**Risk Rating:** Class III

## Overall Deposit Quality Risk

**Class III, Moderate**



# Marathon Gold – Operating Risk

Likelihood	Almost Certain	Class II	Class III	Class IV	Class IV	Class IV
	Likely	Class II	Class III	Class III	Class IV	Class IV
	Possible	Class I	Class II	Class III	Class IV	Class IV
	Unlikely	Class I	Class I	Class II	Class III	Class IV
	Rare	Class I	Class I	Class II	Class III	Class III
		Very Low	Low	Moderate	High	Very High
Consequence						

## Risk 1 – Permitting Risk

**Likelihood:** Unlikely

**Consequence:** Very High

**Rating:** Class IV

## Risk 2 – Environmental Risk (with heap leach)

**Likelihood:** Likely

**Consequence:** High

**Rating:** Class IV

## Risk 2 – Environmental Risk (without heap leach)

**Likelihood:** Unlikely

**Consequence:** Moderate

**Rating:** Class III

## Overall Operating Risk Rating

**Class III – IV, Moderate - High**



# Marathon Gold – Financing Risk

Likelihood	Almost Certain	Class II	Class III	Class IV	Class IV	Class IV
	Likely	Class II	Class III	Class III	Class IV	Class IV
	Possible	Class I	Class II	Class III	Class IV	Class IV
	Unlikely	Class I	Class I	Class II	Class III	Class IV
	Rare	Class I	Class I	Class II	Class III	Class III
		Very Low	Low	Moderate	High	Very High
Consequence						

## Risk 1 – Capital Raising Risk

**Likelihood:** Unlikely

**Consequence:** High

**Risk Rating:** Class III

## Overall Financing Risk

**Class III, Moderate**

# Lundin Gold – Deposit Quality Risk Matrix

Likelihood	Almost Certain	Class II	Class III	Class IV	Class IV	Class IV	None Identified
	Likely	Class II	Class III	Class III	Class IV	Class IV	
	Possible	Class I	Class II	Class III	Class IV	Class IV	
	Unlikely	Class I	Class I	Class II	Class III	Class IV	
	Rare	Class I	Class I	Class II	Class III	Class III	
		Very Low	Low	Mode-rate	High	Very High	
Consequence							

# Lundin Gold – Operating Risk

Likelihood	Almost Certain	Class II	Class III	Class IV	Class IV	Class IV
	Likely	Class II	Class III	Class III	Class IV	Class IV
	Possible	Class I	Class II	Class III	Class IV	Class IV
	Unlikely	Class I	Class I	Class II	Class III	Class IV
	Rare	Class I	Class I	Class II	Class III	Class III
		Very Low	Low	Moderate	High	Very High
Consequence						

## Risk 1 – Labor Risk

**Likelihood:** Likely

**Consequence:** Moderate

**Rating:** Class III

## Risk 2 – Geopolitical Risk

**Likelihood:** Unlikely

**Consequence:** Very High

**Rating:** Class IV

## Risk 3 – Tax Risk

**Likelihood:** Unlikely

**Consequence:** Very High

**Rating:** Class III

## Overall Operating Risk Rating

**Class III – IV, Moderate - High**

# Lundin Gold – Financing Risk Matrix

Likelihood	Almost Certain	Class II	Class III	Class IV	Class IV	Class IV
	Likely	Class II	Class III	Class III	Class IV	Class IV
	Possible	Class I	Class II	Class III	Class IV	Class IV
	Unlikely	Class I	Class I	Class II	Class III	Class IV
	Rare	Class I	Class I	Class II	Class III	Class III
		Very Low	Low	Moderate	High	Very High
Consequence						

## Risk 1 – Interest Rate Risk

**Likelihood:** Possible

**Consequence:** High

**Rating:** Class IV

## Overall Financing Risk Rating

**Class IV, Moderate - High**

# Maritime Resources – Deposit Quality Risk

Likelihood	Almost Certain	Class II	Class III	Class IV	Class IV	Class IV
	Likely	Class II	Class III	Class III	Class IV	Class IV
	Possible	Class I	Class II	Class III	Class IV	Class IV
	Unlikely	Class I	Class I	Class II	Class III	Class IV
	Rare	Class I	Class I	Class II	Class III	Class III
		Very Low	Low	Moderate	High	Very High
Consequence						

## Risk 1 – Exploration Risk

Likelihood: Possible

Consequence: High

Rating: Class IV

## Overall Deposit Quality Rating

Class IV, Moderate - High

# Maritime Resources – Operating Risk

Likelihood	Almost Certain	Class II	Class III	Class IV	Class IV	Class IV
	Likely	Class II	Class III	Class III	Class IV	Class IV
	Possible	Class I	Class II	Class III	Class IV	Class IV
	Unlikely	Class I	Class I	Class II	Class III	Class IV
	Rare	Class I	Class I	Class II	Class III	Class III
		Very Low	Low	Moderate	High	Very High
Consequence						

## Risk 1 – Geotechnical Stability Risk

**Likelihood:** Unlikely

**Consequence:** High

**Rating:** Class III

## Risk 2 – Permitting Risk

**Likelihood:** Unlikely

**Consequence:** Very High

**Rating:** Class IV

## Overall Operating Risk Rating

**Class IV, Moderate - High**

# Maritime Resources – Financing Risk

Likelihood	Almost Certain	Class II	Class III	Class IV	Class IV	Class IV	None Identified
	Likely	Class II	Class III	Class III	Class IV	Class IV	
	Possible	Class I	Class II	Class III	Class IV	Class IV	
	Unlikely	Class I	Class I	Class II	Class III	Class IV	
	Rare	Class I	Class I	Class II	Class III	Class III	
		Very Low	Low	Mode-rate	High	Very High	
Consequence							