

MILLENNIUM MINERALS LTD (MOY)

Targeting 100koz in CY19 while adding mine life

Millennium (MOY) recently updated reserves and resource, and released CY19 production and cost guidance for its Nullagine gold project in WA.

Latest reserves are now **7.1Mt grading 1.6g/t Au for 375.3koz**, which is a 70% increase after mine depletion of 98.9koz. Pleasingly grade remains unchanged and based on the annualised ~100kozpa rate implies a mine life of just under 4 years. The latest reserve release includes a maiden reserve for Golden Gate (27.1koz grading 3.8g/t Au).

Resources have also been updated and now contain **22.9Mt grading 1.6g/t Au for 1.16Moz**, representing a 5% increase after mine depletion. The Company has 65% of resources in the higher Measured & Indicated categories and assuming a high conversion provides a mine life (from resources) of over 7 years. MOY is looking to sustain the +100kozpa rate over a minimum mine life of 5 years, which now appears more certain.

MOY has a strong exploration focus to grow and convert resources, and aims to increase the mill head grade through the addition of new underground mining opportunities (such as Golden Gate). The underground development of Golden Gates is expected to commence as early as the SepQ CY19, well timed for the second stage upgrade of the sulphide plant.

2-stage plant expansion expected to deliver more gold

Latest metallurgical results from sulphide ores tested at Nullagine, highlight the potential for improved recoveries via use of pressurised in-mill oxidation (PINOX). MOY is now planning to undertake a 2-stage expansion of the Nullagine plant which is forecast to cost A\$20M. **Stage 1** of the plant expansion involves in-mill oxidation (INOX) to process pyrite and arsenopyrite gold ores and is expected to cost ~A\$15M, with commissioning targeted for April'19. **Stage 2** of the expansion involves PINOX to process arsenopyrite (highly refractory) gold ores, and is expected to cost only A\$5M, and has potential commissioning in early CY20. Recoveries of +80% are anticipated for the pyrite-rich ores, ~70% are anticipated for the arsenopyrite-rich ores.

CY19 guidance for 90k-100koz at A\$1,300-1,375/oz AISC

Company production guidance for **CY19 is 90k-100koz at an AISC range of A\$1,300-1,375/oz**. We had an expectation for guidance around the 100koz mark with costs slightly improved on the recent CY18 result. Our forecast for CY19 is ~96koz at an AISC of ~A\$1,357/oz. In a recent corporate presentation, MOY flagged production growth in CY20, and is now forecasting 110k-120koz (no cost guidance provided). We model ~110.6koz at an AISC of A\$1,285/oz in CY20.

Low cash with more debt expected to be drawn, move **Neutral**

MOY had cash and bullion of only \$5.7M at DecQ end, and debt of A\$5M from the A\$17.5M Investec facility (A\$12.5M undrawn), for a Net Cash position of A\$0.7M at quarter end. We assume some additional debt will be drawn during the course of CY19 to complete the plant upgrade. Higher debt levels add some financial risks, but provides some certainty around more sustainable production levels over an anticipated longer mine life.

We move to a **Neutral** recommendation (from Accumulate), due to some potential commissioning and short-term financial risks. Our latest price target is 25cps (from 26cps), NAV of 20cps and spot NAV of 30cps (P/NAV 0.7x).

11 Feb 2019

Share Price	\$0.210
Valuation	\$0.20
Price Target (12 month)	\$0.25

Brief Business Description:

Gold producer in the Pilbara (Nullagine)

Hartleys Brief Investment Conclusion

WA gold producer with both production and mine life growth potential. Sulphide ore processing expansion (Stage 1) expected to be commissioned soon. First underground mine (Bartons) now delivering ore, with potential for a second underground mine (Golden Gate) in early CY20. Significant exploration upside.

Chairman & CEO

Greg Bittar (Non-Exec Chairman)
Peter Cash (CEO)

Top Shareholders

IMC Resource Investment Pty Ltd	47.8%
Board & Management	1.5%

Company Address

Unit 7, 140 Abernathy Road
Belmont, WA 6104

Issued Capital	795.2m
- fully diluted	839.5m

Market Cap	A\$167.0m
- fully diluted	A\$176.3m

Cash and Bullion (31 Dec 18a)	A\$5.7m
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Debt (31 Dec 18a)	A\$5.0m
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Undrawn Debt (31 Dec 18a)	A\$12.5m
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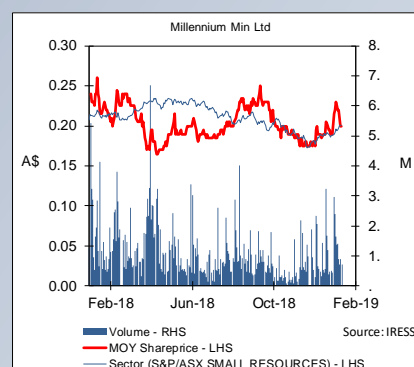
EV	A\$166.3m
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EV/Resource Au oz	143.5
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EV/Reserve Au oz	443.1
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Prelim. (A\$m)	CY18e	CY19e	CY20e
Prod (koz Au)	79.9	96.4	110.6
Op Cash Flw	29.1	41.1	52.1
Norm NPAT	-5.8	14.7	16.3
CF/Share (cps)	3.7	5.1	6.4
EPS (cps)	-0.6	1.4	2.0
P/E	-37.3	14.9	10.4

	Au
Resources (Moz)	1.16
Reserves (Moz)	0.38



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Resources Analyst

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SUMMARY MODEL

Millennium Min Ltd MOY					Share Price \$0.210	11-Feb-19 Neutral
Key Market Information						
Share Price					\$0.210	
Market Capitalisation - ordinary					A\$167m	
Net Debt (cash)					-\$1m	
Market Capitalisation - fully diluted					A\$176m	
EV					A\$176m	
Issued Capital					795.2m	
Options & Rights					44.3m	
Issued Capital (fully diluted inc. all options)					839.5m	
Issued Capital (fully diluted inc. all options and new capital)					839.5m	
Hedging					41.5koz @ A\$1,715/oz gold forward	
Valuation					\$0.20	
12month price target					\$0.25	
P&L	Unit	31 Dec 17	31 Dec 18	31 Dec 19	31 Dec 20	
Net Revenue	A\$m	115.6	137.1	166.9	192.9	
Total Costs	A\$m	-94.3	-116.0	-123.1	-131.7	
EBITDA	A\$m	21.3	21.1	43.8	61.2	
- margin		18%	15%	26%	32%	
Depreciation/Amort	A\$m	-25.3	-25.8	-31.7	-37.2	
EBIT	A\$m	-4.0	-4.7	12.1	23.9	
Net Interest	A\$m	-1.6	0.2	-0.8	-0.6	
Pre-Tax Profit	A\$m	-5.6	-4.5	11.3	23.3	
Tax Expense	A\$m	0.0	0.0	0.0	-7.0	
Normalised NPAT	A\$m	-7.3	-5.8	14.7	16.3	
Abnormal Items	A\$m	1.7	1.3	-3.4	0.0	
Reported Profit	A\$m	-5.6	-4.5	11.3	16.3	
Minority	A\$m	0.0	0.0	0.0	0.0	
Profit Attrib	A\$m	-5.6	-4.5	11.3	16.3	
Balance Sheet	Unit	31 Dec 17	31 Dec 18	31 Dec 19	31 Dec 20	
Cash	A\$m	17.9	5.7	10.8	18.4	
Other Current Assets	A\$m	21.5	11.7	14.2	16.3	
Total Current Assets	A\$m	39.3	17.4	25.0	34.7	
Property, Plant & Equip.	A\$m	19.5	25.3	33.6	16.4	
Exploration	A\$m	50.9	65.5	77.5	87.5	
Investments/other	A\$m	0.0	0.0	0.0	0.0	
Tot Non-Curr. Assets	A\$m	70.3	90.9	111.1	103.9	
Total Assets	A\$m	109.7	108.3	136.2	138.7	
Short Term Borrowings	A\$m	-	5.0	15.0	-	
Other	A\$m	21.0	10.6	11.2	11.9	
Total Curr. Liabilities	A\$m	21.0	15.6	26.2	11.9	
Long Term Borrowings	A\$m	-	-	-	-	
Other	A\$m	17.5	17.5	17.5	17.5	
Total Non-Curr. Liabil.	A\$m	17.5	17.5	17.5	17.5	
Total Liabilities	A\$m	38.6	33.1	43.7	29.4	
Net Assets	A\$m	71.1	75.2	92.5	109.3	
Net Debt	A\$m	-17.9	-0.7	4.2	-18.4	
Cashflow	Unit	31 Dec 17	31 Dec 18	31 Dec 19	31 Dec 20	
Operating Cashflow	A\$m	30.5	28.9	41.9	59.7	
Income Tax Paid	A\$m	0.0	0.0	0.0	-7.0	
Interest & Other	A\$m	0.3	0.2	-0.8	-0.6	
Operating Activities	A\$m	30.8	29.1	41.1	52.1	
Property, Plant & Equip.	A\$m	-2.1	-31.6	-40.0	-20.0	
Exploration and Devel.	A\$m	-23.3	-14.7	-12.0	-10.0	
Other	A\$m	-12.8	0.0	0.0	0.0	
Investment Activities	A\$m	-38.1	-46.3	-52.0	-30.0	
Net Borrowings	A\$m	0.0	5.0	15.0	-15.0	
Equity or "bc capital"	A\$m	0.1	0.0	1.0	0.4	
Dividends Paid	A\$m	0.0	0.0	0.0	0.0	
Financing Activities	A\$m	0.0	5.0	16.0	-14.6	
Net Cashflow	A\$m	-7.3	-12.2	5.1	7.6	
Shares	Unit	31 Dec 17	31 Dec 18	31 Dec 19	31 Dec 20	
Ordinary Shares - End	m	787.5	794.4	807.3	813.9	
Ordinary Shares - Weighted	m	784.2	791.0	800.8	810.6	
Diluted Shares - Weighted	m	783.5	788.9	791.9	791.9	
Ratio Analysis	Unit	31 Dec 17	31 Dec 18	31 Dec 19	31 Dec 20	
Cashflow Per Share	A\$ cps	3.9	3.7	5.1	6.4	
Cashflow Multiple	x	5.3	5.7	4.1	3.3	
Earnings Per Share	A\$ cps	-0.7	-0.6	1.4	2.0	
Price to Earnings Ratio	x	-29.4	-37.3	14.9	10.4	
Dividends Per Share	AUD	-	-	-	-	
Dividend Yield	%	0.0%	0.0%	0.0%	0.0%	
Net Debt / Net Debt + Equity	%	-34%	-1%	4%	-20%	
Interest Cover	x	na	21.7	15.1	39.9	
Return on Equity	%	na	na	16%	15%	
Directors	Company Information					
Greg Bittar (Non-Exec Chairman)	Unit 7, 140 Abernathy Road					
Peter Cash (CEO)	Belmont, WA 6104					
Peter Lester (Non-exec Director)	+61 8 9216 9011					
Tim Kennedy (Non-Exec Director)	+61 8 9481 0288					
Bruno Lorenzon (Non-Exec Director)	www.millenniumminerals.com.au					
Ray Parry (CFO and Comp Sec)	Michael Poepeja (BD and Tech Services)					
Jason Robertson (GM Operation)						
Top Shareholders		m shares	%			
IMC Resource Investment Pty Ltd		380.1	47.8%			
Board & Management		12.0	1.5%			
Reserves & Resources		Mt	g/t Au	Koz		
TOTAL RESOURCE & RESERVE						
Measured		5.7	1.6	288		
Indicated		9.2	1.5	462		
Inferred		8.0	1.6	410		
Resource (Total)		22.9	1.6	1,159	Dec-18	
Reserve		7.1	1.6	375	Dec-18	
Bartons UG		0.7	3.0	65	Dec-18	
Golden Gate UG		0.2	3.8	27	Dec-18	
Production Summary	Unit	Dec 17	Dec 18	Dec 19	Dec 20	
Mill Throughput	Mt	1.9	1.9	1.7	1.7	
Strip Ratio	x	8.2	7.7	6.0	6.0	
Mined grade	g/t	1.3	1.5	2.1	2.30	
Combined Recovery & Payability	%	88%	85%	86%	88%	
Gold Prod	(Koz)	72.9	79.9	96.4	110.6	
Gold Sold	(Koz)	70.2	80.9	96.4	110.6	
M & I Resource Conversion	Mt	49.7%	46.0%	30.3%	30.3%	
Modelled Mining Inventory	Mt	12.3	10.4	8.5	6.8	
Modelled Mine Life	yr	5.5	5.5	6.3	5.3	
Costs	Unit	Dec 17	Dec 18	Dec 19	Dec 20	
Cost per milled tonne	\$/t	47.8	55.4	65.2	69.5	
EBITDA / tonne milled ore	\$/t	11.1	11.1	25.8	36.0	
Total cash costs	\$/oz	1,293	1,452	1,277	1,190	
C1: Operating Cash Cost = (a)	\$/oz	1,303	1,296	1,150	1,068	
(a) + Royalty = (b)	\$/oz	1,359	1,354	1,206	1,125	
C2: (a) + depreciation & amortisation = (c)	\$/oz	1,663	1,615	1,479	1,405	
(a) + actual cash for development = (d)	\$/oz	1,484	1,869	1,689	1,340	
C3: (c) + Royalty	\$/oz	1,719	1,673	1,535	1,462	
(d) + Royalty	\$/oz	1,540	1,354	1,206	1,125	
All In Sustaining Cost (AISC)	\$/oz	1,372	1,446	1,357	1,285	
Price Assumptions	Unit	Dec 17	Dec 18	Dec 19	Dec 20	
AUDUSD	A\$/US\$	0.77	0.73	0.76	0.77	
Gold	US\$/oz	1277	1263	1309	1335	
Gold	A\$/oz	1649	1720	1731	1742	
Hedging		Dec 17	Dec 18	Dec 19	Dec 20	
Hedges maturing?		No	No	Yes	No	
Sensitivity Analysis	Valuation	CY19 NPAT				
Base Case	0.20	11.3				
Spot Prices	0.30 (49.1%)	6.4 (-43.4%)				
Spot USD/AUD 0.71, Gold \$1311/oz.						
AUDUSD +/-10%	0.13 / 0.29 (-34.2% / 44.1%)	-3.4 / 29.2 (-130.0% / 158.9%)				
Gold +/-10%	0.28 / 0.13 (39.7% / -37.9%)	27.4 / -4.9 (143.0% / -143.0%)				
Production +/-10%	0.29 / 0.12 (44.8% / -43.1%)	28.0 / -5.4 (147.9% / -147.9%)				
Operating Costs +/-10%	0.15 / 0.26 (-26.4% / 28.2%)	0.2 / 22.4 (-98.1% / 98.1%)				
Unpaid Capital	Options and Rights					
Year Expires	No. (m)	\$m	Avg price	% ord		
31-Dec-19	17.1	1.0	0.06	2%		
31-Dec-20	2.4	0.4	0.18	0%		
31-Dec-21	24.7	1.1	0.04	3%		
TOTAL	44.3	2.5	0.06	6%		
Share Price Valuation (NAV)	Riskd Est. A\$m	Est. A\$/share				
100% Nullagine (pre-tax NAV at disc. rate of 8%)	182.2	0.22				
Other Exploration	50.0	0.06				
Forwards	0.0	0.00				
Corporate Overheads	-38.2	-0.05				
Net Cash (Debt)	0.7	0.00				
Tax (NPV future liability)	-23.9	-0.03				
Options & Other Equity	0.7	0.00				
Hedges	-0.6	0.00				
Total	170.9	0.20				
1.1x NAV		0.22				

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*"bc capital" could be equity or debt. Our valuation is risk-adjusted for how this may be obtained.

Sources: IRESS, Company Information, Hartleys Research

Last Updated: 11/02/2019

EARNINGS CHANGES

Fig. 1: Earnings Changes

Financial Performance	Unit	CY17a	CY18e			CY19e			CY20e		
		Actual	Old	New	% chg	Old	New	% chg	Old	New	% chg
Production	(koz)	72.9	79.9	79.9	0.0%	96.4	96.4	0.0%	115.3	110.6	-4.0%
Net Revenue	A\$m	115.6	137.1	137.1	0.0%	171.5	166.9	-2.7%	209.6	192.9	-8.0%
Total Costs	A\$m	(94.3)	(116.0)	(116.0)	0.0%	(123.3)	(123.1)	-0.1%	(132.2)	(131.7)	-0.4%
EBITDA	A\$m	21.3	21.1	21.1	0.0%	48.3	43.8	-9.2%	77.4	61.2	-21.0%
- margin		0.2	0.2	0.2	0.0%	0.3	0.3	-6.7%	0.4	0.3	-14.1%
Depreciation/Amort	A\$m	(25.3)	(25.8)	(25.8)	0.0%	(31.0)	(31.7)	2.4%	(34.2)	(37.2)	8.9%
EBIT	A\$m	(4.0)	(4.7)	(4.7)	0.0%	17.3	12.1	-30.1%	43.2	23.9	-44.6%
Net Interest	A\$m	(1.6)	0.2	0.2	na	(0.6)	(0.8)	na	(0.4)	(0.6)	50.0%
Pre-Tax Profit	A\$m	(5.6)	(4.5)	(4.5)	0.0%	16.7	11.3	-32.4%	42.8	23.3	-45.5%
Tax Expense	A\$m	-	-	-	0.0%	-	-	0.0%	(2.5)	(7.0)	178.7%
Normalised NPAT	A\$m	(7.3)	(5.8)	(5.8)	0.0%	21.7	14.7	-32.4%	50.6	16.3	-67.7%
Abnormal Items	A\$m	1.7	1.3	1.3	0.0%	(5.0)	(3.4)	0.0%	(10.3)	-	na
Reported Profit	A\$m	(5.6)	(4.5)	(4.5)	0.0%	16.7	11.3	-32.4%	40.3	16.3	-59.4%
Minority	A\$m	-	-	-	0.0%	-	-	0.0%	-	-	0.0%
Profit Attrib	A\$m	(5.6)	(4.5)	(4.5)	0.0%	16.7	11.3	-32.4%	40.3	16.3	-59.4%

Source: Hartleys Estimates; Millennium Minerals Ltd (actuals)

NULLAGINE PRODUCTION – CY18 & CY19 GUIDES

MOY reported **CY18 production of 79,891oz at an AISC of A\$1,463/oz** (gold sold of 80,869oz at an AISC of A\$1,446/oz) which compares to guidance of 75k-80koz within at an AISC range of A\$1,280-1,350/oz.

The Nullagine operations produced 24,514oz in the DecQ (up from 22,414oz SepQ) at an AISC of A\$1,216/oz (A\$1,324/oz SepQ), which was largely in-line for DecQ production guidance of ~25koz, while costs were higher than forecast (AISC of ~A\$1,150/oz guided).

Company production guidance for **CY19 is 90k-100koz at an AISC range of A\$1,300-1,375/oz**. We had an expectation for guidance around the 100koz mark with costs slightly improved on the recent CY18 result. Our forecast for CY19 is ~96koz at an AISC of ~A\$1,357/oz. In a recent corporate presentation, MOY flagged production growth in CY20, and is now forecasting 110k-120koz (no cost guidance provided). We model ~110.6koz at an AISC of A\$1,285/oz in CY20.

Fig. 2: Nullagine Production CY18

		Mar-18	Jun-18	Sep-18	Dec-18	CY18
Total volume mined	bcm	1,098,931	1,323,820	1,818,484	1,569,118	5,810,353
Ore mined	t	369,927	568,927	529,152	602,871	2,070,877
Ore processed	t	474,420	436,887	523,614	458,174	1,893,095
Head grade	g/t	1.56	1.01	1.53	1.98	1.54
Metallurgical recovery	%	85.5	83.8	86.8	83.7	85.0
Fine gold production	oz	20,324	12,639	22,414	24,514	79,891
Gold sold	oz	21,013	15,129	21,945	22,782	80,869
Gold sales revenue	\$M	35.5	26.0	36.5	39.3	137.3
Cash Operating Cost	\$/oz	1,194	2,020	1,183	1,156	1,351
All-in Sustaining Cost	\$/oz	1,295	2,178	1,324	1,216	1,463

Source: Millennium Minerals Ltd (actuals); Hartleys Estimates: Costs on production not sold

Adjustments to our earnings forecasts from DecQ actuals, Company guidance and changes to our Nullagine model going forward

The Company recently achieved production guidance for CY18 at the upper end

Company production guidance for CY19 is 90k-100koz at an AISC range of A\$1,300-1,375/oz

VALUATION – UPDATED

Our sum of parts valuation for MOY assumes a further conversion of the current +1Moz resource to reserve over the coming years, and we assume a +6 year mine life can be achieved.

Our NAV for MOY assumes a further conversion of the current +1Moz resource to reserve over the coming years, and we assume a +6 year mine life can be achieved

To achieve the additional mine-life (above the current reserve position) we expect the Company to have further exploration success within the extensive shallow oxide prospects and underground options (such as Bartons and Golden Gate) to be added to the processing mix throughout the Nullagine region. The Bartons deposit is the first underground mine for MOY, and is already contributing development ore with first stoping ores in the MarQ CY19. A maiden reserve has now been released for Golden Gate (27.1koz grading 3.8g/t Au), which is ~36km from the Nullagine plant and has the potential to be the Company's second underground mine.

The current Nullagine processing plant has nameplate capacity of 1.5Mtpa, but continues to operate well above this operating level at ~2.0Mtpa (from predominantly oxide ore feed). The plant has a crusher, SAG mill, gravity circuit and CIL circuit, designed to process free-milling ores. MOY is now upgrading the processing circuit to treat the sulphide ores within the field. The anticipated capex for the processing expansion (Stage 1) is ~A\$15M, with the additional processing costs of A\$3.6/t on the current ~A\$18/t costs for the current CIL plant (total processing costs of ~A\$22/t), previously estimated. Latest metallurgical results from sulphide ores tested at Nullagine, highlight the potential for improved recoveries via use of pressurised in-mill oxidation (PINOX). MOY is now planning to undertake a Stage 2 expansion of the plant which is forecast to cost only another A\$5M (total A\$20M for Stage 1 and 2). Stage 1 of the plant expansion expects to be commissioning in April'19 and Stage 2 has potential commissioning in early CY20. Improved recoveries for more gold is expected.

We have adjusted our model to the latest production actuals and we currently have a forecast for CY19 production of ~96koz at an AISC of ~A\$1,357/oz and CY20 production of ~110koz at an AISC of ~A\$1,285/oz.

Reserves and resource updates are also expected to influence our valuation. We value the exploration potential for MOY at a nominal \$50M, which we believe is conservative.

MOY is currently trading around our latest NAV of 20cps (P/NAV 1.03x) and our spot NAV of 30cps (P/NAV 0.7x).

Fig. 3: MOY Sum of Parts Valuation

Share Price Valuation (NAV)	Risked Est. A\$m	Est. A\$/share
100% Nullagine (pre-tax NAV at disc. rate of 8%)	182.2	0.22
Other Exploration	50.0	0.06
Forwards	0.0	0.00
Corporate Overheads	-38.2	-0.05
Net Cash (Debt)	0.7	0.00
Tax (NPV future liability)	-23.9	-0.03
Options & Other Equity	0.7	0.00
Hedges	-0.6	0.00
Total	170.9	0.20

Source: Hartleys Estimates

PRICE TARGET

Our price target is based on our sum of parts valuation for the Nullagine project. We have included weighting for the base case at Consensus and Spot pricing.

We move to a Neutral recommendation (from Accumulate), due to some potential commissioning risks with the plant expansion and increased short-term financial risks

Fig. 4: MOY Price Target Methodology

Price Target Methodology	Weighting	Spot	12 mth out
NAV Base Case	60%	\$0.20	\$0.24
NAV Base Case at Spot commodity and FX prices	25%	\$0.30	\$0.35
NAV 1.1x	6%	\$0.22	\$0.26
Net Cash Backing	9%	\$0.00	\$0.00
Risk weighted composite		\$0.21	
12 Months Price Target		\$0.25	
Shareprice - Last		\$0.210	
12 mth total return (% to 12mth target + dividend)		17%	

Source: Hartleys Estimates

RISKS

The Company's current Net Cash position of ~A\$0.7M is expected to move to a Net Debt position to provide funding for the Nullagine plant expansion. Once debt is fully draw some additional financial risks are introduced. Gold prices are volatile but fundamentals remain favourable.

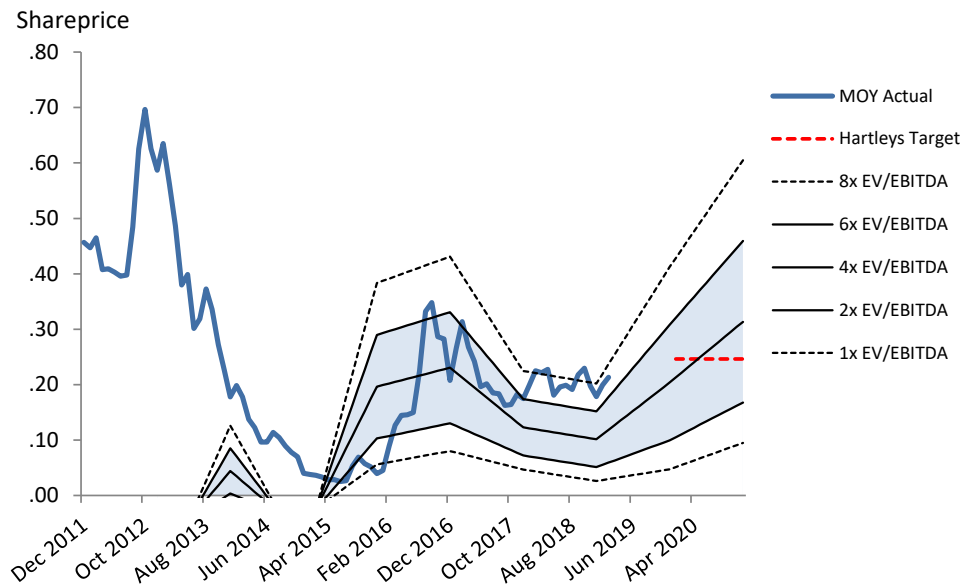
Fig. 5: Key assumptions and risks for valuation

Assumption	Risk of not realising assumption	Risk to valuation if assumption is incorrect	Comment
Increased production over a longer mine life	Moderate	Meaningful	We assume further exploration success at Nullagine to further convert the current +1Moz resources to reserves. We have assumed production close to 100koz in CY19, which is subject to change. With the introduction of Bartons underground mill grades should lift.
Metallurgy	Moderate	Meaningful	Metallurgy is a key risk within the Nullagine fresh rock (sulphide ores). The processing plant upgrade is estimated to cost A\$20M and new debt is available to be drawn to help fund the integration.
Debt drawn to fund plant upgrade	Low	Meaningful	We now model fully drawn debt to assist in the upgrade of the Nullagine plant. We assume the debt can be repaid through cash and cash generation from the operations. Clearly downside risk to our valuation if this is not achieved.
Exploration Upside	Moderate	Small	We assume exploration upside for MOY. We have assumed a relatively small value (\$50M) compared to the significant exploration potential of the region
Gold Price	High	High	Our gold price forecasts are in line with sell side consensus
Conclusion	<i>Our assumptions have associated meaningful risks. Processing of fresh ore has metallurgical risks which will be mitigated through development study work.</i>		

Source: Hartleys Research

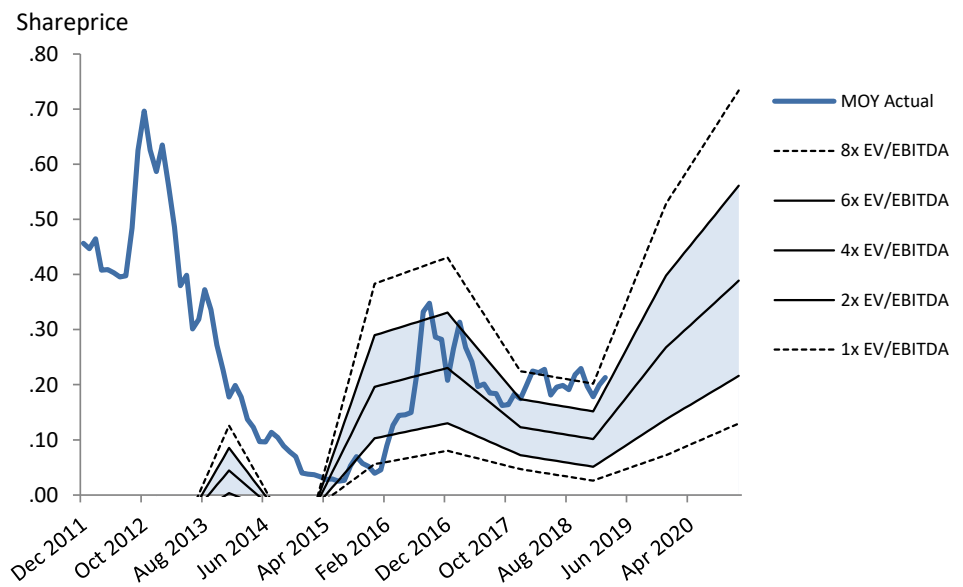
EV/EBITDA BANDS

Fig. 6: Using Hartleys base case commodity forecasts



Source: Hartleys Research Estimates, IRESS

Fig. 7: Using spot commodity prices



Source: Hartleys Research Estimates, IRESS

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Hartleys Recommendation Categories

Buy	Share price appreciation anticipated.
Accumulate	Share price appreciation anticipated but the risk/reward is not as attractive as a "Buy". Alternatively, for the share price to rise it may be contingent on the outcome of an uncertain or distant event. Analyst will often indicate a price level at which it may become a "Buy".
Neutral	Take no action. Upside & downside risk/reward is evenly balanced.
Reduce / Take profits	It is anticipated to be unlikely that there will be gains over the investment time horizon but there is a possibility of some price weakness over that period.
Sell	Significant price depreciation anticipated.
No Rating	No recommendation.
Speculative Buy	Share price could be volatile. While it is anticipated that, on a risk/reward basis, an investment is attractive, there is at least one identifiable risk that has a meaningful possibility of occurring, which, if it did occur, could lead to significant share price reduction. Consequently, the investment is considered high risk.

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