



Capital
Markets

August 2, 2023

De Grey Mining Limited

Seize De Grey: Initiating DEG at Outperform

Our view: DEG's sole operation Mallina, is a remarkable large-scale, low-cost project with high upside value potential. We consider Resource extension and processing capacity expansion as quite feasible outcomes (+A\$0.61/sh, +A\$2.18/sh at spot). However, we find the stock is pricing-in minimal operational upside. We determine technical risks, including processing semi-refractory ore, are manageable. The site's Pilbara location gives us confidence for efficient project delivery. The DFS, project funding then delivery, plus strong corporate appeal should provide positive newsflow as this immense Australian deposit approaches 2026 production. We initiate with a A\$1.80/sh price target and an Outperform rating.

Key points:

A remarkable deposit and project: The Mallina Resource is already 12Moz and we expect gold discovery to continue. We forecast material gold production of ~550kozpa at a low AISC of ~A\$1200/oz. Mallina would be a top 5 producing Australian gold mine. Mine life is already nearing two decades, with a capex payback of ~2.5 years. Our Mallina NPV of A\$0.92/sh (spot A\$1.96/sh) is a valuation starting point; with potential life extension and/or processing capacity increases to exploit the vast gold Resource.

Considerable upside potential: Higher capacity would progressively reduce the benefit of Mallina's early-year grade and strip ratio prioritisation. We find life extension is also required to justify an expansion above ~2-3Mtpa. However, we consider +5Mtpa and another 100Mt (4.5Moz) of life a realistic outcome. This would add 61cps (+66%) or A\$2.18/sh (+236%) using spot gold forecasts.

Definitive Feasibility Study and Funding: The DFS is due this SepQ. We expect few technical changes from the detailed PFS. We expect reserve growth could be around the recent 20% increase in Measured and Indicated Resources, and costs should be comparable, but this is a risk. We forecast a capital raise of A\$1250m, and A\$800m of debt, in line with DEG's estimated capacity, leaving A\$450m of equity to be raised this DecQ. While we forecast the equity raise at a 10% discount to the current share price, we expect strong investor appetite for what might be DEG's final raise.

Feasible upside potential gives DEG our cheapest NPV: We value DEG at A\$1.80/sh based solely on an NPV. We use only a 1.0x NAV multiple, but include 80cps of exploration/extension upside potential. This is a larger percentage of operating value than typical in our coverage. We reason this is justified given Mallina's high operating upside potential and DEG's greater leverage to spot gold (A\$2870/oz vs RBC's LT price A\$2200/oz). We think DEG's strong corporate appeal could support more bullish operating outlooks. DEG's P/NAV of 0.78x and Spot P/NAV of 0.46x are respectively the lowest in our coverage (ex-SBM).

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Outperform

ASX: DEG; AUD 1.34

Price Target AUD 1.80

Scenario Analysis*



*Implied Total Returns

Key Statistics

Shares O/S (MM):	1,561.0	Market Cap (MM):	2,092
Dividend:	0.00	Yield:	0.0%
NAVPS:	1.76	P/NAVPS:	0.76x
BVPS:	0.27	P/BVPS:	4.96x
		Avg. Daily Volume:	4,020,972

RBC Estimates

FY Jun	2022E	2023E	2024E	2025E
EPS, Adj Basic	(0.01)	(0.01)	(0.01)	(0.02)
P/AEPS	NM	NM	NM	NM
CFPS, Adj Basic	0.00	(0.01)	(0.01)	(0.03)
FCFPS	(0.09)	(0.06)	(0.11)	(0.36)
P/FCF	nm	nm	nm	nm
Production	0.0	0.0	0.0	0.0

Share price as of 31 July 2023. Strategic shareholder: Gold Road Resources (GOR AU) 18%

All values in AUD unless otherwise noted.

Priced as of prior trading day's market close, EST (unless otherwise noted).



Key fundamental questions

Our view

Will Mallina's Resource continue to grow?

Emphatically yes, the only questions are by how much and when. The large 12Moz Resource has been established in around five years. Multiple deposits remain open and regional discoveries continue to be made. The eventual underground potential at depth is considerable. The Measured and Indicated Resource (which underpins a Reserve) has grown 20% since the Pre Feasibility Study. This suggests the next mining study will have an expanded Reserve.

Can capacity increase above 10Mtpa, and what capacity expansion would be justified?

DEG expects the plant has potential to reach 15% above nameplate through de-bottlenecking. However, the company and our base case is still 10Mtpa. DEG could invest in incremental growth, with a new ~5Mtpa autoclave the biggest step-change. The benefit of higher capacity is advancing production and cash flow forward. Potential value uplift is greatly enhanced by mine life extension. Any benefits would be countered by capex, earlier opex and a reduction in early mine life prioritisation of higher grades and lower strip ratios. We calculate that reaching ~15Mtpa is the highest value accretive expansion.

What is the potential value upside from extension and capacity expansion at Mallina?

Our Mallina life forecast is based on M&I Resources (189Mt). On our estimates, each additional 20Mtpa (2 years) increases site value 4-5% (~4cps). Incremental returns become more marginal around 100-120Mt of growth. We consider adding 100Mtpa to mine life a realistic outlook. We calculate this would add ~17cps. Without Resource extension we currently find investment in capacity as marginal and probably unwarranted. With another 100Mt of life we calculate expanding 5Mtpa would add 61cps in total. Additionally, our extension and expansion scenarios give increased leverage to the gold price.

Is there much risk processing a semi-refractory orebody?

Mallina's orebody is not fully refractory, and it has fairly consistent levels of sulphur and gold which should improve autoclave performance. Our study of historic gold plant performance suggests limited difference in recovery or throughput utilisation for pressure oxidation (POX) processing. Historically, new POX plants have had slightly slower throughput ramp-ups in the first two years. However, technology has progressively improved and Mallina has technical factors which mitigate some risk. Overall, we find Mallina has about the same pre-production processing risk as any other gold project.

Can mine sequencing support higher early grades, and also lower early strip ratios?

Mallina benefits from notably higher processing grades early in the mining schedule. This would advance project cash flow and lift project NPV. We find that this advantageous schedule is justified. Firstly, through sequencing better pits early; notably with the high-grade, low strip ratio Brolga Pit. Secondly, by mining ~3Mtpa more ore than processing in early years. This allows selective processing of better grade ore.

What project funding is required?

We calculate a total capital requirement of A\$1250m. We expect A\$800m of debt in line with DEG's estimates of debt capacity. We forecast the remaining A\$450m to be an equity raise in DecQ 2023. This is at a 10% discount to DEG's share price. However, our conversations with investors suggest there is strong appetite for what might be DEG's final raise.



Key ESG questions

This section is intended to highlight key ESG discussion points relevant to this company, as well as our views on the outlook. Both the questions we highlight and our responses will evolve over time as the dialogue between management, analysts and investors continues to advance. We welcome any feedback on the topics.

Our view

What are the most material ESG issues facing De Grey?

As a near-term gold producer, key ESG considerations for De Grey include the health and safety of its employees, community relations, emissions, and First Nations relationships. Specifically for De Grey, we believe the most material ESG risk/issue is community and traditional owner relationships. To help combat this risk, De Grey regularly engages with these groups. Longer term the move to Net Zero remains a goal for De Grey.

Does De Grey integrate ESG considerations into its strategy?

De Grey manages and integrates its ESG impact into strategy by intertwining ESG goals into the project development and planning, and ties these goals to individual performance targets. The company believes that responsible management of ESG elements is critical for its investors, the communities with whom it interacts and its team. As such De Grey has aligned itself and resolved to adhere to the International Council of Mining and Metals Mining Principles which are aligned with the United Nations Sustainable Development Goals. Furthermore, De Grey will report on ESG matters according to those measures laid out by the Task Force on Climate-Related Financial Disclosures.

How does De Grey manage its relationship with Traditional Owners?

De Grey values the traditional owners – the Kariyarra, Ngarluma, Nyamal, Ngarla and Mallina peoples, and the relationship that they hold with the land in which DEG operates. To help maintain this positive relationship, De Grey regularly engages with the traditional owners keeping them abreast of ongoing activities and always considers their requests and needs. De Grey has also established a partnership agreement with the Kariyarra people, the traditional custodians of the land over Hemi, which will provide business opportunities, employment training and community programs.

What is De Grey's approach to managing safety?

De Grey is committed to establishing a strong safety culture, and reducing both actual and potential incidents. To help ensure this, management's remuneration has been tied to lost time injury (LTI) rates. In FY22, achieved De Grey 110 LTI-free days and a rolling LTI frequency rate of 2.12, in comparison to the benchmark regional exploration industry rate of 2.00.

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DEG Investment Summary

De Grey Mining owns one major asset, the Mallina Gold Project. This is centred at the vast intrusion-hosted Hemi gold deposit (9.5Moz at 1.3g/t Resource), and surrounding smaller regional deposits (2.2Moz at 1.7g/t). The project has an advantageous location in the well established Pilbara region. Substantial existing infrastructure should aid project development and then operation. 8.1Moz of the total 11.7Moz Mallina Resource is in the higher confidence Measured and Indicated (M&I) level of Resources. In September DEG completed a Pre-Feasibility Study (PFS) finding a Reserve of 5.1Moz at 1.5g/t.

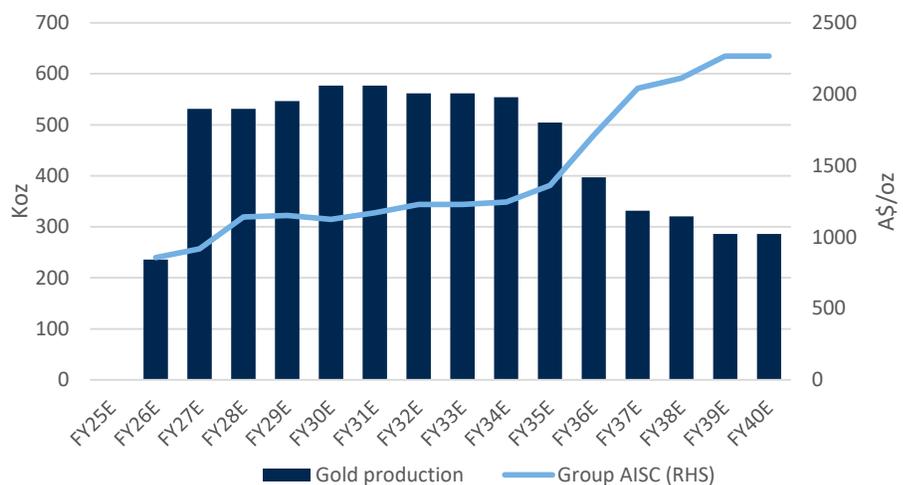
A rare deposit and gold project: We forecast first production in Q1 CY26, and annual gold produced to reach ~550koz at a low AISC of ~A\$1200/oz, which is sustained for nearly a decade. The project would be one of the current top five highest producing gold mines in Australia. Combined with its tier-1 location, low-cost, long-life and considerable growth potential, in our view, Mallina is one of the rarest and most valuable undeveloped gold deposits globally.

Exhibit 1 - Favourable Pilbara location



Source: Company report

Exhibit 2 - DEG gold and AISC. Discoveries could extend production at ~550kozpa



Source: Company reports, RBC Capital Markets estimates

Valuation and upside potential: We value DEG at A\$1.80/sh using its NAV. We value Mallina at 92cps (spot A\$1.96/sh) based on its M&I Resource life and a 8% real discount rate, on a 1.0x NPV multiple. Plus 4cps of cash and overhead. We include an upside value of 80cps for what we see as Mallina's considerable Resource extension and capacity expansion potential ([Exhibit 13](#)).

We think one realistic potential upside outcome could be 5Mtpa more capacity plus 100Mt (4.5Moz) extra mine life. We calculate this would value Mallina at A\$1.53/sh or at A\$3.10/sh using spot gold. DEG has considerable leverage to spot gold (A\$2870/oz) which is ~30% above our long-term forecast A\$2200/oz.

Cheapest gold NAV: Pre-production DEG is only comparable to our gold coverage by NAV. DEG's low P/NAV of 0.78x and Spot P/NAV of 0.48x are both the lowest in our gold coverage (ex small-SBM).



Forecast Summary

Exhibit 3 - DEG forecast summary

De Grey Mining Ltd	ASX: DEG		Price Target:	1.80	Rating:	Outperform
RBC Capital Markets	No Shares (m):	1,561			Risk Specifier:	-
Alexander Barkley +61 2 9033 3068	Liquidity (m sh/mth)	74	Share Price (\$/sh):	\$1.34	Implied Return (%):	34.3%
Kaan Peker +61 2 9033 3040	Market Cap. (M \$):	\$2,092	FY23E Dividend (A\$/sh):	\$0.00	Implied Total Return (%):	34.3%
Paul Wiggers +61 2 9033 3246	Enterprise Value (M \$)	\$1,979	NAV (\$/sh):	\$1.76	P/NAV (x)	0.76x

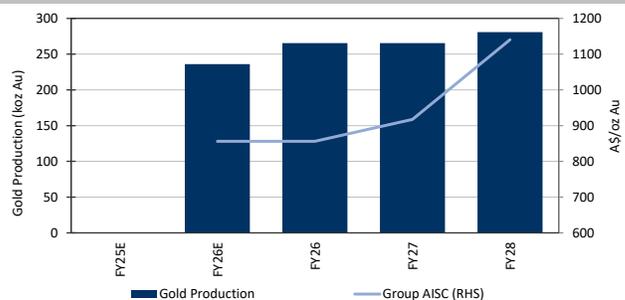
Priced at: 31/07/23							All AUD unless noted						
RATIO ANALYSIS		Year to 30 June					PRICES & EXCHANGE RATES						
		FY21	FY22	FY23E	FY24E	FY25E		FY23E	FY24E	FY25E	FY26E	FY27E	
Earnings - Adjusted	\$/sh	(\$0.00)	(\$0.01)	(\$0.01)	(\$0.01)	(\$0.02)	Gold Price	US\$/oz	1833	1783	1700	1675	1625
P/E Multiple	x	-317.9x	-173.5x	-139.5x	-170.2x	-63.7x	Gold price	A\$/oz	2721	2721	2638	2470	2299
CFPS (CFO)	\$/sh	(\$0.00)	(\$0.00)	(\$0.01)	(\$0.01)	(\$0.03)	Exchange rate	AUD:USD	0.67	0.66	0.64	0.68	0.71
P/CF Multiple	x	-421.6x	-300.6x	-176.1x	-151.3x	-44.2x	Mallina Production		FY23E	FY24E	FY25E	FY26E	FY27E
FCFPS (CFO-capex-expl.)	\$/sh	(\$0.05)	(\$0.09)	(\$0.06)	(\$0.11)	(\$0.36)	Throughput	kt	0	0	0	4500	10000
FCF Yield	%	(3.5%)	(6.8%)	(4.4%)	(8.5%)	(26.9%)	Mill Grade	g/t Au	0.0	0.0	0.0	1.7	1.8
Dividends Per Share	c/sh	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Recovery	%	0%	0%	0%	94%	94%
Dividend Yield	%	0.0%	0.0%	0.0%	0.0%	0.0%	Gold Production	koz Au	0	0	0	236	531
Gearing (ND: ND+E)	%	(67.8%)	(28.3%)	(39.0%)	(69.3%)	30.9%	Mallina C1 Cash Cost	\$/oz	0	0	0	719	785
EV/EBITDA	x	-413.2x	-220.0x	-138.7x	-155.2x	-164.9x	Mallina AISC	\$/oz	0	0	0	839	902
INCOME STATEMENT		FY21	FY22	FY23E	FY24E	FY25E	Group Corporate costs	\$/oz	0	0	0	17	15
Revenue	M \$	\$0	\$1	\$0	\$0	\$0	Group All-in Sustaining Cash Cost	\$/oz	0	0	0	856	918
Operating Costs	M \$	(\$5)	(\$10)	(\$14)	(\$13)	(\$12)	ATTRIBUTABLE RESERVES & RESOURCES						
EBITDA	M \$	(\$5)	(\$9)	(\$14)	(\$13)	(\$12)							
D&A	M \$	(\$1)	(\$2)	(\$2)	(\$2)	(\$2)							
EBIT	M \$	(\$5)	(\$11)	(\$16)	(\$15)	(\$14)							
Net interest	M \$	\$0	\$0	\$2	\$1	(\$27)							
EBT	M \$	(\$5)	(\$11)	(\$14)	(\$14)	(\$41)							
Taxes	M \$	\$0	\$0	\$0	\$0	\$0							
Net Income - Adjusted	M \$	(\$5)	(\$11)	(\$14)	(\$14)	(\$41)							
Adjustments	M \$	\$0	\$0	\$0	\$0	\$0							
Net Income - Reported	M \$	(\$5)	(\$11)	(\$14)	(\$14)	(\$41)							
Weighted average diluted shares	M	1,246	1,364	1,504	1,794	1,934							
CASH FLOW STATEMENT		FY21	FY22	FY23E	FY24E	FY25E							
Cash Flows from Operating Activities													
Gross operating cash flow	M \$	(\$5)	(\$6)	(\$12)	(\$10)	(\$10)							
Taxes Paid	M \$	\$0	\$0	\$0	\$0	\$0							
Working Capital cash flow	M \$	\$13	\$0	(\$12)	(\$5)	(\$20)							
Other inc. net interest	M \$	(\$13)	(\$0)	\$12	(\$2)	(\$29)							
Net Operating Cash flow	M \$	(\$4)	(\$6)	(\$12)	(\$17)	(\$59)							
Cash Flows from Investing Activities													
Capital Expenditure	M \$	(\$57)	(\$121)	(\$81)	(\$203)	(\$640)							
Other (incl exploration)	M \$	(\$1)	(\$0)	\$0	\$0	\$0							
Net Investing Cash Flow (incl. stripping)	M \$	(\$57)	(\$121)	(\$81)	(\$203)	(\$640)							
Cash Flows from Financing Activities													
Equity Issues (net of costs)	M \$	\$109	\$126	\$149	\$450	\$0							
Net Borrowings	M \$	\$0	\$0	\$0	\$200	\$600							
Dividends Paid & Other	M \$	(\$5)	(\$6)	\$0	\$0	\$0							
Net Financing Cash Flow	M \$	\$104	\$120	\$149	\$650	\$600							
Increase (Decrease) in Cash	M \$	\$43	(\$7)	\$50	\$430	(\$98)							
Cash at End of Year	M \$	\$71	\$63	\$113	\$543	\$445							
Operating Free Cash Flow	M \$	(\$61)	(\$128)	(\$92)	(\$220)	(\$698)							
Free Cash Flow	M \$	(\$61)	(\$128)	(\$92)	(\$220)	(\$698)							
BALANCE SHEET		FY21	FY22	FY23E	FY24E	FY25E							
Cash & Equivalents	M \$	\$71	\$63	\$113	\$543	\$445							
Other Current Assets	M \$	\$3	\$3	\$2	\$12	\$52							
PP&E & Mining Interests	M \$	\$7	\$9	\$8	\$156	\$756							
Other Long Term Assets	M \$	\$117	\$236	\$290	\$342	\$380							
Total Assets	M \$	\$197	\$312	\$412	\$1,053	\$1,632							
Current Liabilities	M \$	\$18	\$20	\$7	\$12	\$32							
Long Term Debt	M \$	\$0	\$0	\$0	\$200	\$800							
Other Long Term Liabilities	M \$	\$3	\$4	\$4	\$4	\$4							
Total Liabilities	M \$	\$21	\$23	\$11	\$216	\$836							
Shareholder Equity	M \$	\$176	\$288	\$402	\$837	\$797							
Total Liabilities & Shareholder Equity	M \$	\$197	\$312	\$412	\$1,053	\$1,632							
FINANCIAL RATIOS		FY21	FY22	FY23E	FY24E	FY25E							
Return on Equity (ROE)	%	(3.0%)	(3.7%)	(3.6%)	(1.7%)	(5.1%)							
Return on Capital (ROIC)	%	(2.7%)	(3.4%)	(3.5%)	(1.3%)	(2.5%)							

Mallina Production		FY23E	FY24E	FY25E	FY26E	FY27E
Throughput	kt	0	0	0	4500	10000
Mill Grade	g/t Au	0.0	0.0	0.0	1.7	1.8
Recovery	%	0%	0%	0%	94%	94%
Gold Production	koz Au	0	0	0	236	531
Mallina C1 Cash Cost	\$/oz	0	0	0	719	785
Mallina AISC	\$/oz	0	0	0	839	902
Group Corporate costs	\$/oz	0	0	0	17	15
Group All-in Sustaining Cash Cost	\$/oz	0	0	0	856	918

ATTRIBUTABLE RESERVES & RESOURCES		EV	
		koz	\$/oz
Proven/Probable Reserve (P&P)		5,139	\$385
Measured & Indicated Resources (M&I)		8,062	\$246
Total Resources, inc inferred		11,753	\$168

CAPEX BREAKDOWN		FY23E	FY24E	FY25E	FY26E	FY27E
Growth Capex	M \$	1	150	602	301	0
Sustaining Capex	M \$	0	1,794	0	14	32
Exploration & Evaluation	M \$	80	52	38	29	0
Total	M \$	81	203	640	344	32

GROUP ALL-IN SUSTAINING COSTS AND PRODUCTION



NET ASSET VALUE		Discount Rate (Real)	(A\$m)	A\$/Sh	NAV (%)
Operating Value					
Mallina Gold Project		8.0%	\$1,442	\$0.92	100%
Total			\$1,442	\$0.92	100%
Exploration/Expansion upside			\$1,250	\$0.80	
Cash and bullion			\$113	\$0.07	
Corporate G&A			(\$47)	(\$0.03)	
Debt			\$0	\$0.00	
Provisions			(\$2)	(\$0.00)	
Total Net Asset Value			\$2,755	\$1.76	
P/NAV					0.76x

For RBC Capital Markets Global Mining valuation comparatives, recent research, and other data please see RBC Insight or Bloomberg <RBCR> GO

Source: RBC Capital Markets estimates, company reports, Factset

Disclosures Look-up: <http://globaldisclosure/globaldisclosure/DisclosureLookup.aspx?entityid=1>

RBCe Mallina Forecasts and Valuation

We have largely followed the Sept-2022 Pre-Feasibility Study (PFS). We provide key details of our forecasts, including any differences from the PFS. See [Exhibit 4](#) for our full Mallina forecasts.

- **Project timing:** Construction capex to start JunQ FY24. First gold production in Q1 CY26 vs PFS estimate of CY25. This gap is based on any delays to date and a conservative view of the construction timeline.
- **Mining sequence:** Mining commences with the Brolga starter pit of 20.1Mt @ 1.7g/t Au. We forecast the next pit will need to commence in year two to maintain mill feed.
 - **Strip ratio:** DEG will not capitalise waste stripping in pits after Brolga, lifting operating strip ratios. We forecast SR of 2.7x in project year one (not FY) and 5.1x in year two. This rises to incorporate Hemi Life-of-mine (LOM) average 6.1x, regional pit LOM average 11.0x. We assume first ore from the regional pits (non-Hemi) from year five, in line with the PFS. We forecast an overall Mallina LOM SR of 6.6x, slightly below the PFS 6.9x related to our longer mine life forecast which uses the lower SR Hemi orebody.
- **Mine Life:** We forecast 100% extraction of the June-2023 Measured and Indicated Resource base of 189Mt of ore, for a roughly 19 year life. This is 53Mt (+39% or ~4 years) of ore above the Sept-2022 PFS mine plan at 136Mt.
- **Processing capacity:** Our base case forecast is 10Mtpa in line with nameplate capacity in the PFS. However, we do see upside potential to this capacity.
- **Grade prioritisation:** PFS LOM grade is 1.56g/t and M&I Resource is 1.33g/t. In years 1-4 we forecast a higher average processing grade of ~1.8g/t. In years 5-9 this rises to ~1.9g/t. Mine grades over this period are a lower ~1.6-1.7g/t. We forecast mining grades fall to a low of 1.0g/t towards the end of life, slightly above depleted M&I grade.
- **Ore mining to exceed milling:** We forecast grade prioritisation can be achieved by mining 3Mt of ore above milling for the first ~5 years. Mining then falls back to the 10Mtpa milling rate, before the higher strip ratio regional pits would commence.
- **Operating costs:** We follow PFS unit per tonne costs, including A\$4.30/t of material mined. We find a site AISC of ~A\$1200/oz in the first ten years of the project (PFS A\$1280/oz) and A\$1355/oz over the LOM. DEG only forecasts capitalised mining (including sustaining) in the Brolga pit, for a total of A\$68m of the LOM mine.
- **Growth capital:** We follow the PFS project total of A\$985m plus A\$68m for pre-strip, for a full total of A\$1053m. The A\$985 includes A\$100m of growth allowance for potential cost inflation.
- **NPV:** We find A\$1442m using an 8% real discount rate (PFS A\$2.7bn at 5%). We use a long-term gold price of A\$2220/oz (PFS A\$2,400/oz). Using PFS inputs our NPV is comparable to the PFS.



Exhibit 4 - RBCe Mallina operational and financial forecast summary

Mallina Gold Project		FY23E	FY24E	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E	FY31E	FY32E	FY33E	FY34E	FY35E	FY36E	FY37E	FY38E	FY39E	FY40E
Reserve and Resource (with ongoing depletion)																			
PFS Mine plan	Mt	136	136	136	131	116	103	90	78	67	57	47	37	27	17	7			
Plan grade	g/t	1.56	1.56	1.56	1.56	1.54	1.53	1.52	1.51	1.48	1.45	1.41	1.34	1.23	1.16	1.16			
M&I Region total	Mt	189	189	189	184	169	156	143	131	120	110	100	90	80	70	60	50	40	30
M&I grade	g/t	1.33	1.33	1.33	1.32	1.29	1.25	1.23	1.19	1.15	1.10	1.04	0.98	0.90	0.83	0.77	0.70	0.63	0.51
Operations																			
Ore mined	Mt				5.0	14.7	13.5	12.8	12.2	10.8	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Mine grade	g/t				1.70	1.70	1.65	1.56	1.61	1.66	1.66	1.66	1.66	1.61	1.36	1.16	1.12	1.00	1.00
Strip ratio	g/t				2.3	3.9	5.7	6.1	6.4	7.1	7.5	7.5	7.5	7.5	7.5	7.5	7.5	6.9	6.9
Total material	Mt				16.5	71.4	90.3	90.9	90.3	86.6	85.0	85.0	85.0	85.0	85.0	85.0	85.0	79.0	79.0
Milling	Mt				4.5	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Mill grade	g/t				1.73	1.75	1.75	1.80	1.90	1.90	1.85	1.85	1.83	1.68	1.37	1.16	1.12	1.00	1.00
Recovery	%				94%	94%	94%	94%	94%	94%	94%	94%	94%	93%	91%	89%	89%	89%	89%
Gold production	koz				236	531	531	546	577	577	561	561	554	505	397	332	320	286	286
Stockpile	Mt				0.5	5.2	8.7	11.5	13.6	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
Stockpile grade	g/t				1.45	1.58	1.49	1.30	1.14	1.00	0.87	0.75	0.63	0.59	0.59	0.59	0.59	0.59	0.59
C1 Cash costs	A\$/oz				719	785	1010	1023	999	1045	1102	1102	1117	1227	1558	1866	1932	2072	2072
Site AISC	A\$/oz				839	902	1125	1136	1109	1156	1214	1214	1230	1345	1693	2017	2087	2239	2239
Group AISC	A\$/oz				856	918	1140	1151	1123	1170	1228	1228	1244	1361	1714	2041	2112	2267	2267
Financials																			
USD gold price	A\$/oz				1675	1625	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
AUDUSD					0.68	0.71	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
AUD gold price	A\$/oz				2472	2301	2218	2218	2218	2218	2218	2218	2218	2218	2218	2218	2218	2218	2218
Revenue	A\$m				562	1222	1178	1212	1279	1279	1246	1246	1229	1119	881	736	710	635	635
Total Cost	A\$m				184	448	566	589	608	635	650	650	650	647	641	637	637	609	609
EBITDA	A\$m				379	774	612	623	671	644	596	596	579	472	240	99	74	26	26
EBITDA Margin	%				67%	63%	52%	51%	52%	50%	48%	48%	47%	42%	27%	13%	10%	4%	4%
NOPAT	A\$m				210	422	314	324	358	346	321	327	323	261	116	26	10	-20	-21
Expansion Capex	A\$m		150	602	301														
Sustaining Capex	A\$m				14	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Total Capex	A\$m		150	602	315	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Cash flow	A\$m		-150	-602	10	403	336	372	423	436	427	424	407	317	139	56	31	5	3

NPV at 8.0% discount A\$1442m

Source: RBC Capital Markets estimates, company reports.

Mallina Upside: Extension and Expansion Potential

Mallina growth potential should be incorporated into DEG valuation: Gold continues to be rapidly discovered at Hemi and across the Mallina tenements. Hence, to value Mallina we consider it necessary to consider the value of potential life extension, and also how much value of this huge gold Resource could be captured by expanding mill capacity above 10Mtpa. Our starting value point is A\$1442m or 92cps, which uses our below spot gold forecasts (RBC long-term A\$2220/oz vs spot A\$2870/oz).

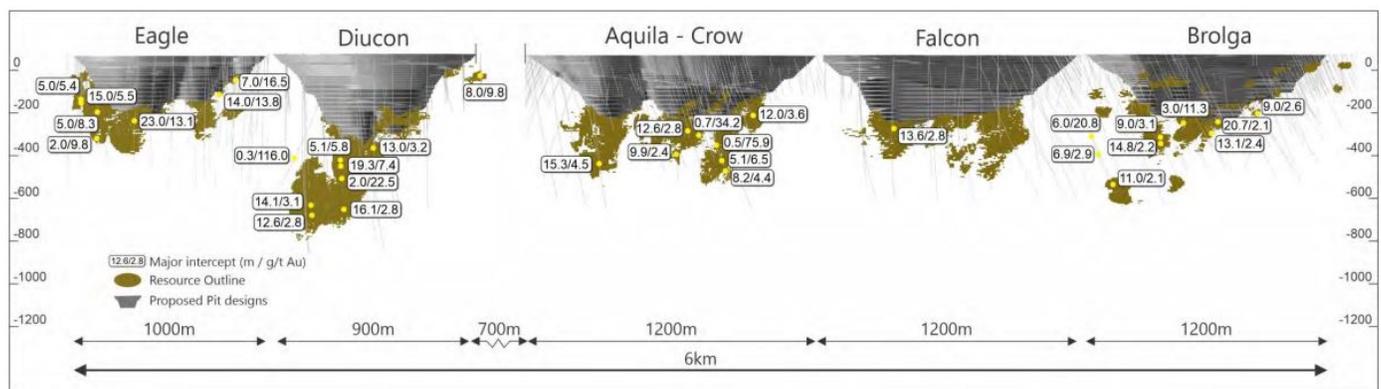
Combined life extension and capacity expansion the biggest prize: We find that incremental value accretion from extension alone starts to diminish after ~100Mt or if ~5Moz more are added to our base case life (188Mt with 8.5Moz). We calculate this would add around +20% of value (~18cps). We believe a combination with expansion is the biggest value driver. On our RBC gold deck, we find that mine life extension is required to justify any expansion investment over ~2-3Mtpa. However, we do consider life extension likely, and find a realistic expansion case of +5Mtpa of capacity and +100Mt of life would add 61cps (+66%).

Upside leverage to spot gold supercharged by extension/expansion: At spot gold our base case valuation lifts to A\$1.96/sh (+112%). Also, capacity expansion becomes more justified even before Resource growth. Our +5Mtpa/+100Mt upside scenario would lift site value to A\$3.10/sh (+236% vs RBC base operations and gold).

Life extension from Resource growth

Hemi deposit underpins Mallina project: The Mallina Resource has rapidly grown in the last ~5 years to 11.7Moz. The Hemi discovery in Feb-2020 saw a regional jump from 2.2Moz to >9Moz within two years. Hemi is now at 9.5Moz. Of this Resource 8.5Moz is above 390m depth and just 1Moz is below, this is due to limited drilling. However, ongoing drilling suggests depth extension potential below the five key Hemi pit shells. There is potential that some gold mineralisation grade could increase at depth. This would help the economics of a potential future underground mine.

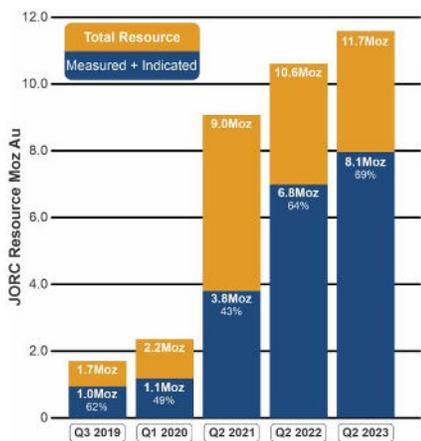
Exhibit 5 - High depth extension potential at Hemi deposits



Source: Company report 27/7/2023

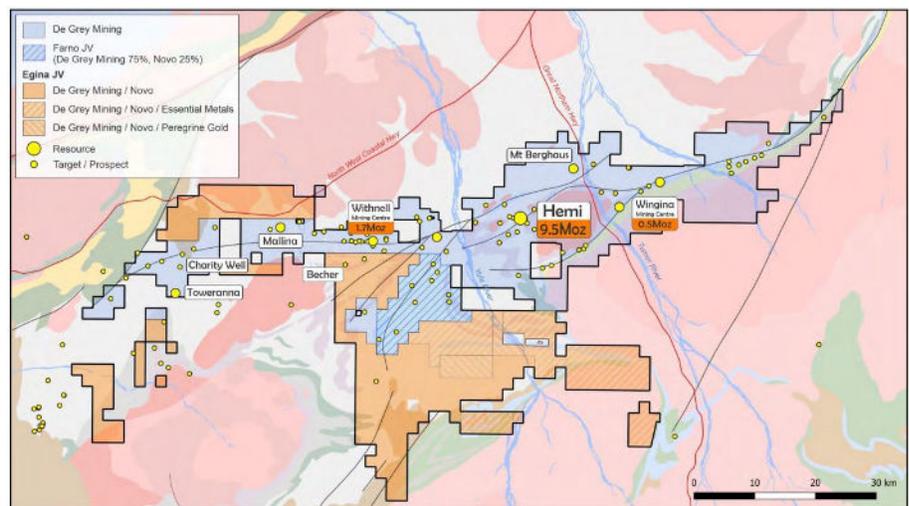
DEG has ~2,500km² of regional exploration tenements (including ~1,000km² of earn-in agreements with Novo Resources). Gold has been discovered along much of the ~150km of strike. DEG is actively Resource drilling regional deposits and searching for new discoveries. We forecast an exploration budget of A\$55m in FY24. At Hemi, Inferred Resource discovery cost has been a low \$10/oz, with conversion to Indicated Resources costing an additional \$6/oz. We expect exploration may shift focus to defining ore sources that could potentially impact the early years of Mallina production, particularly given Mallina already has a long mine life. Defining a potential higher-grade Hemi underground mine is one exploration goal. Overall, we still find the potential for ongoing Resource growth and regional discoveries remains considerable.

Exhibit 6 - Historic Mallina Resource growth



Source: Company report.

Exhibit 7 - Gold discovered across vast regional tenements



Source: Company report, 27/7/2023

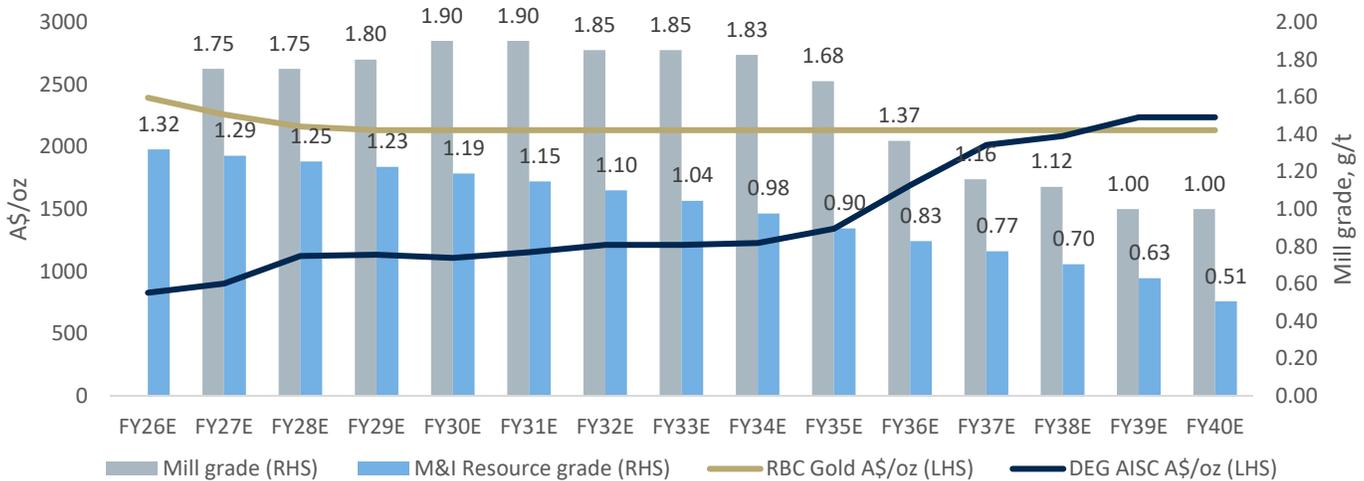
RBC Mallina life and grade forecasts

RBCe mine life based on M&I Resources, 39% more tonnes than the PFS Reserve: Our base case Mallina life, which we measure in tonnes of ore to be processed, is based on Measured and Indicated Resources as per the June-2023 update. This contains 189Mt of ore at 1.33g/t for 8.1Moz. This is 53Mt (+39%) of ore above the PFS mine plan at 136Mt for 1.56g/t for 6.8Moz. The PFS Reserve was informed by the prior M&I Resource of 158Mt, and was 86% of this amount. 86% of the current M&I Resources is 162Mt. This might imply the DFS Reserve could see growth of around 19%, which would be in line with the M&I Resource growth which has already occurred. Regardless of what Reserve we see in the DFS, in our view eventual mine life is quite likely to be at least as long as the current M&I Resource.

Better Mallina grade is prioritised in early years: The PFS forecasts processing grades ~1.8-2.0g/t in the early years of life, above life-of-mine (LOM) Reserve grade at 1.55g/t. We calculate mining in early years is a lower 1.6-1.7g/t, but still above Reserve grade. This is further above the June-2023 M&I grade of 1.33g/t. PFS grade descends to ~0.6g/t by the end of life. Using operating physical and cost forecasts closely aligning to DEG's, we expect these outer years would have an AISC of up to A\$2240/oz. This would not be cash flow positive using RBC's long-term AUD gold price of A\$2220/oz.

We assume a 1.0g/t minimum mining grade in outer years: We assume enough gold is found in the next 10-15 years to keep end-of-life mining at a minimum of 1.0g/t, which keeps the site profitable. Our forecasts start with M&I grade 1.33g/t, and incorporate all PFS scheduled early-year high grading. But by capping end-of life grade at 1.0g/t we assume a modest overall 6% increase in LOM average grade to 1.41g/t. This is still below the 1.55g/t Reserve. We consider a more likely eventual grade path, indeed outer-year grade risk could be skewed to the upside given the site's exploration potential.

Exhibit 8 - Late life AISC to rise on lower processing grade

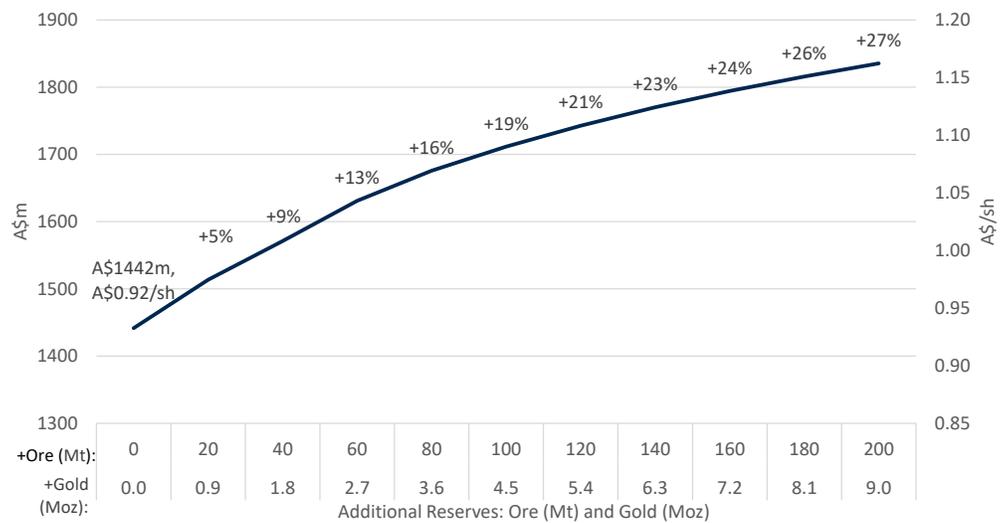


Source: RBC Capital Markets estimates, company reports



Value of incremental mine life extension (at 10Mtpa capacity): Our scenarios keep the same overall LOM grade and gold, with mining grade still prioritised early in the mine schedule. Final year grades will fall to a flat 1.0g/t. In [Exhibit 9](#) we show this at our base case 10Mtpa processing capacity. Unsurprisingly, all else equal, adding additional mine life adds value. However, value addition plateaus after adding around ~100Mt or ~5Moz. We calculate this would give Mallina another decade of life and extend site life to over two decades. This would mean heavy present value discounting of any incremental gold production.

Exhibit 9 - Mallina life extension sensitivity vs RBCe base case / M&I Resource



Source: RBC Capital Markets estimates

Processing capacity expansion

The Mallina processing plant capacity could either expand during commissioning debottlenecking or through additional capital investment.

Debottlenecking capacity creep: DEG expects there is some conservatism in the nameplate capacity, and the plant has a design tolerance of 15%. Management has indicated that there is potential for ~15% over 10Mtpa to be achieved. In management's view, this would be in line with commissioning increases often achieved at other gold plants. However, we note there is risk in any plant achieving its nameplate capacity let alone exceeding it. Additional technical risk at Mallina comes from using a pressure oxidation circuit.

Expansion via major plant upgrades: Purchase of additional or upscaled equipment could lead to a step-change in processing capacity. We understand a third ball mill could potentially lift crushing capacity up to ~12-13Mtpa. This would depend on capacity of other areas of the plant reaching this level. The two autoclaves have a combined 10Mtpa nameplate capacity. To reach 15Mtpa or above, we believe a third autoclave would likely be required.

More processing would require more mining: Processing a higher volume of ore would, all else equal, require a higher rate of mining. This could potentially require an expansion of the mining fleet. If additional locations or pits are required to lift mining capacity this could also negatively affect the sequence of grade and strip ratio prioritisation in the optimised 10Mtpa mining schedule. Overall, we expect that if DEG would invest in a material expansion it would only be after first establishing nameplate capacity.

Expansion scenario calculations explained

Expansion timing: We assume that all expansion scenarios occur as the operation is constructed, alongside the base 10Mtpa. This is for a simple comparison of value to our base case forecasts. While we expect any expansion would likely come later, we believe the economic merits would be comparable.

Capital intensity: The cost of the processing plant has been broken into plant, infrastructure and indirect costs. Capital directly for the plant (~A\$650m), plus all growth allowance capital (~A\$100m), gives a total cost for the plant at ~A\$745m. At 10Mtpa we calculate A\$75m/1Mtpa as the cost of capacity. We use this figure to test potential capacity expansion.

Expansion waters down the advantageous PFS mining schedule: The PFS incorporates an optimised sequence which heavily prioritises better grades early, reduces early strip ratio, mines sufficient tonnes above processing capacity to further early grades. Accelerating capacity would gradually reduce the advantages of the schedule, progressively as capacity is added. Despite progressive changes in our expansion (and extension) scenarios, we still maintain the same base case LOM grade and strip ratios.

Mining vs processing rate, and the resulting stockpile: Our base case assumes mining is ~3Mtpa or 30% over the 10Mtpa processing capacity. This allows prioritisation of the highest grade mined ore, and a grade uplift at the mill. Mining could either maintain a 3Mtpa excess over processing or +30%. Our expansion/extension calculations generally err towards a simply 3Mtpa, which we find better mirrors the PFS outcomes. However, we have the potential to flex that up to a 30% increase. More mining during early periods of better grade, along with upgrading to the mill could see a scenario unwittingly take more gold from the stockpile than exists. We set a minimum stockpile grade of 0.3g/t, which then feeds back into the potential peak mining grade in early years.

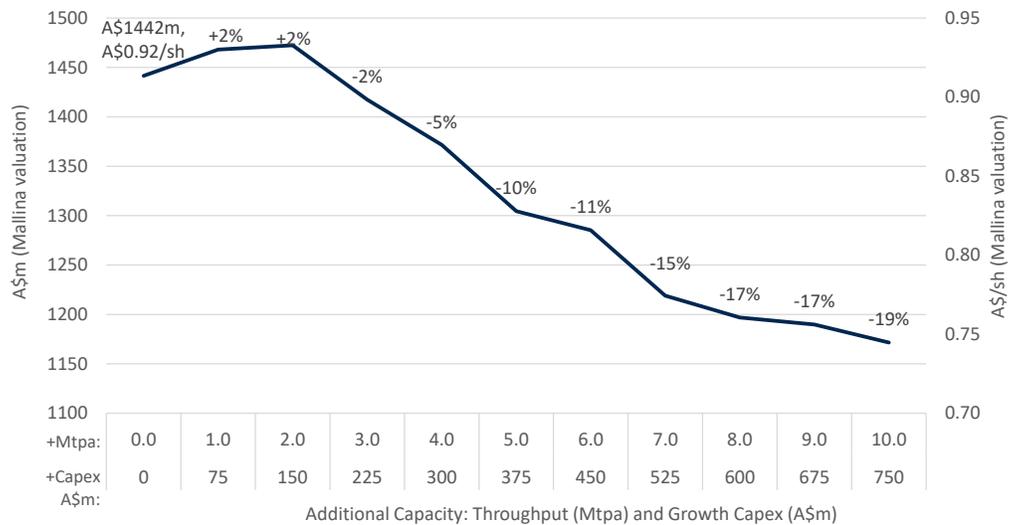


Capacity expansion value (with no mine life extension)

Investment in capacity above +3Mtpa is not justified: We find that at 10Mtpa and our RBC price deck there is limited value in paying for any milling expansion. We think there could be a minor benefit at ~1-3Mtpa extra, but value decreases above this. Above this level we see a reduction in site value: the positives of earlier cash flow are more than offset by extra capex, less grade and strip ratio prioritisation, and accelerating operating costs to match processing capacity.

Debottlenecking above 10Mtpa could add ~10% to value: In all cases, we assume capex is spent to achieve the new processing capacity. Should Mallina debottleneck to say +2Mtpa, we calculate a slight value upside plus the A\$150m of capex that was not needed; this is a 13% increase in site value.

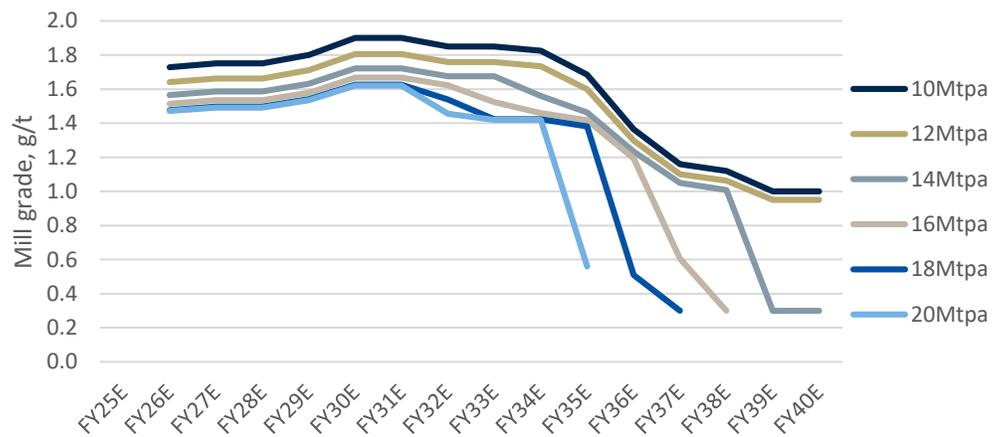
Exhibit 10 - Capacity expansion sensitivity vs RBCe



Source: RBC Capital Markets estimates

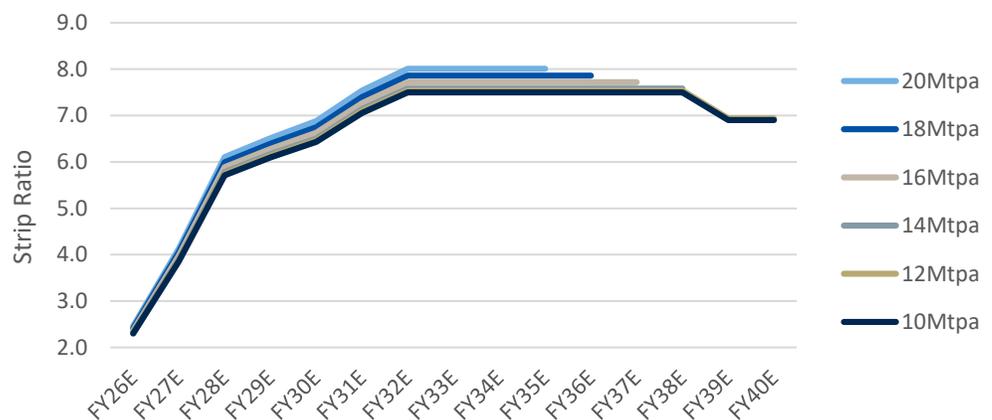
Value loss coming from less early-life prioritisation of grade and strip ratio: We show our estimates for the LOM processing grade path at 10-20Mtpa scenarios in [Exhibit 11](#). Each scenario still includes better grades earlier in the mining schedule. For instance peak annual grade of ~1.9g/t at 10Mtpa only falls to ~1.6g/t when mining double that at 20Mtpa, still above our LOM 1.4g/t. The difficulty in maintaining elevated gold grades at a higher capacity in part explains why DEG is targeting production from a hypothetical underground mine with better grades. **Strip ratios** ([Exhibit 12](#)) also have a slightly less advantageous path at higher processing capacities. However, strong prioritisation in early years still occurs.

Exhibit 11 - Mill grade path at varying Plant capacity (no life extension)



Source: RBC Capital Markets estimates

Exhibit 12 - Strip Ratios at varying Plant capacity (no life extension)



Source: RBC Capital Markets estimates

Expansion plus Extension: Valuation Sensitivity

We calculate the value of all combinations of capacity expansion from -2Mtpa to +10Mtpa (8-20Mtpa overall) plus orebody extension of up to 200Mt and 9.0Moz of gold. This is above our base case of 188Mtpa for 8.5Moz.

We find a strongly symbiotic relationship between growth in capacity and life extension. Logically this makes sense, as there is now more gold to justify the capex of expansion. If we look at higher processing capacities, an 8Mtpa capacity expansion is economically justified with an extension of over ~30Mt. But considering risks this minimum extension is likely to be more. But this is a feasible Reserve expansion for the site. Additionally, hedging could be involved to back any capital cost. An appropriate mining schedule would also have to match this material increase. Another autoclave (5Mtpa) would mean a capacity of 15Mtpa, and we see this as a realistic potential upside capacity. Given Resource growth potential and with incremental returns dropping after around 100-140Mt, we consider another 100Mt with 4.5Moz a reasonable extension scenario to test potential site upside value.

+5Mtpa and another 100Mtpa gives potential upside of 61cps: We calculate an NPV of A \$2392m or A\$1.53/sh. This is A\$950m or A\$0.61/sh above our base case (92cps), a 66% increase in value. At 15Mtpa and with mine life extension, we calculate the site could operate at peak production of 750-850kozpa, above the current ~550kozpa.

Exhibit 13 - Mallina Valuation Sensitivity: Expansion and Extension (RBC gold and FX forecasts)

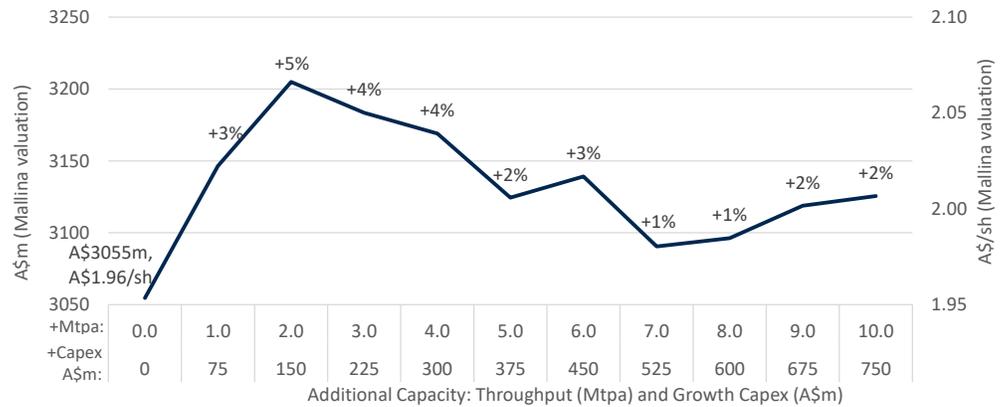
Mallina NPV (A\$m)		EXTENSION - Additional Ore (Mt) and gold (Moz)												
		0 Mt	20 Mt	40 Mt	60 Mt	80 Mt	100 Mt	120 Mt	140 Mt	160 Mt	180 Mt	200 Mt		
		0.0 Moz	0.9 Moz	1.8 Moz	2.7 Moz	3.6 Moz	4.5 Moz	5.4 Moz	6.3 Moz	7.2 Moz	8.1 Moz	9.0 Moz		
EXPANSION	Additional capex (A\$m) and capacity (Mtpa)	-\$150m	-2 Mtpa	1175	1196	1214	1229	1243	1255	1266	1239	1233	1233	
		-\$75m	-1 Mtpa	1334	1386	1423	1452	1477	1499	1518	1535	1551	1522	1518
		\$0m	0 Mtpa	1442	1513	1571	1631	1676	1712	1743	1770	1794	1816	1835
		\$75m	1 Mtpa	1468	1643	1806	1968	2124	2260	2382	2494	2596	2689	2774
		\$150m	2 Mtpa	1472	1664	1841	2010	2195	2356	2502	2634	2754	2863	2963
		\$225m	3 Mtpa	1417	1663	1854	2032	2211	2412	2585	2741	2883	3011	3128
		\$300m	4 Mtpa	1372	1595	1843	2028	2215	2398	2613	2797	2963	3113	3250
		\$375m	5 Mtpa	1305	1549	1828	2029	2219	2392	2583	2814	3008	3184	3342
		\$450m	6 Mtpa	1285	1527	1751	2010	2206	2407	2575	2771	3008	3213	3398
		\$525m	7 Mtpa	1219	1458	1711	1920	2178	2380	2583	2743	2959	3209	3425
\$600m	8 Mtpa	1197	1437	1681	1875	2177	2349	2553	2756	2927	3148	3411		
\$675m	9 Mtpa	1190	1354	1610	1856	2080	2344	2523	2717	2942	3107	3337		
\$750m	10 Mtpa	1172	1335	1588	1783	2022	2237	2514	2707	2886	3109	3273		

Source: RBC Capital Markets estimates. Base case NPV in blue text. Red are values below our base case NPV, and green is above.

Spot gold - expansion and extension valuation

Market using higher gold than RBCe: Spot gold of A\$2870/oz (US\$1950, AUDUSD 0.68) is 29% above RBC's long-term forecast of A\$2220/oz (US\$1600, AUDUSD 0.72). We find that even with no mine life extension, most capacity investment is already around NPV neutral. This starting point would allow value to rise with ongoing exploration success.

Exhibit 14 - SPOT capacity expansion vs RBCe spot case (No life extension)



Source: RBC Capital Markets estimates

Mallina potential upside on spot gold of 112%, rising to 236% with expansion & extension: Using spot prices over the LOM our base case value would rise to A\$3055 (A\$1.96/sh), 112% than when using RBC gold forecasts. Our +5Mtpa/+100Mt scenario is A\$4838m (A\$3.10/sh). This is 58% above our base Mallina operational forecasts at spot, and 236% above our overall RBC Mallina base case valuation.

Exhibit 15 - SPOT - Mallina Valuation Sensitivity: Expansion and Extension (Spot AUD gold forecasts)

SPOT Mallina NPV (A\$m)		EXTENSION - Additional Ore (Mt) and gold (Moz)											
Additional capex (A\$m) and capacity (Mtpa)		0 Mt	20 Mt	40 Mt	60 Mt	80 Mt	100 Mt	120 Mt	140 Mt	160 Mt	180 Mt	200 Mt	
		0.0 Moz	0.9 Moz	1.8 Moz	2.7 Moz	3.6 Moz	4.5 Moz	5.4 Moz	6.3 Moz	7.2 Moz	8.1 Moz	9.0 Moz	
EXPANSION	-\$150m -2 Mtpa	2611	2673	2725	2769	2807	2840	2869	2841	2834	2834	2834	
	-\$75m -1 Mtpa	2869	2978	3062	3131	3189	3239	3282	3320	3354	3324	3320	
	\$0m 0 Mtpa	3055	3197	3314	3428	3517	3591	3654	3710	3759	3802	3841	
	\$75m 1 Mtpa	3146	3426	3683	3933	4170	4375	4560	4727	4878	5015	5140	
	\$150m 2 Mtpa	3205	3512	3793	4057	4337	4580	4798	4995	5173	5334	5479	
	\$225m 3 Mtpa	3183	3565	3869	4151	4427	4727	4986	5218	5427	5615	5785	
	\$300m 4 Mtpa	3169	3528	3910	4205	4499	4780	5097	5369	5614	5834	6032	
	\$375m 5 Mtpa	3124	3515	3941	4263	4564	4838	5130	5467	5752	6009	6239	
	\$450m 6 Mtpa	3139	3530	3892	4290	4604	4918	5185	5483	5828	6127	6395	
	\$525m 7 Mtpa	3091	3483	3885	4226	4622	4941	5257	5514	5838	6200	6512	
\$600m 8 Mtpa	3096	3494	3889	4213	4671	4957	5277	5592	5864	6193	6572		
\$675m 9 Mtpa	3119	3424	3838	4233	4595	5001	5294	5602	5945	6207	6548		
\$750m 10 Mtpa	3126	3433	3849	4181	4565	4914	5334	5645	5931	6273	6533		

Source: RBC Capital Markets estimates. Spot case NPV in blue text. Red are values below our spot case NPV, and green is above.

Valuation Methodology (Base case Mallina plus upside)

RBC Price Target calculation

Our A\$1.80/sh price target is based entirely on NAV. With first commercial gold production still years off, we do not use a forward earnings multiple. We value Mallina and DEG at 1.0x NPV. Our rounded price target includes a base 92cps Mallina valuation and exploration/expansion upside potential of 80cps. Consensus price targets for DEG range from A\$1.70-2.45/sh. DEG has six buy recommendations and two holds according to Factset.

Mallina discount Rate: We use an 8% real WACC to discount the pre-production Mallina mine. We would typically use a lower ~7% rate for producing assets in a tier-1 jurisdiction like Western Australia. 8% is the discount rate we use for Bellevue Gold's (BGL) Bellevue mine. Mallina's DFS is expected SepQ 2023 and should add greater confidence to Mallina forecasts. However, our 8% discount rate largely considers a pre-production, DFS level of forecast certainty.

Exhibit 16 - RBCe DEG price target

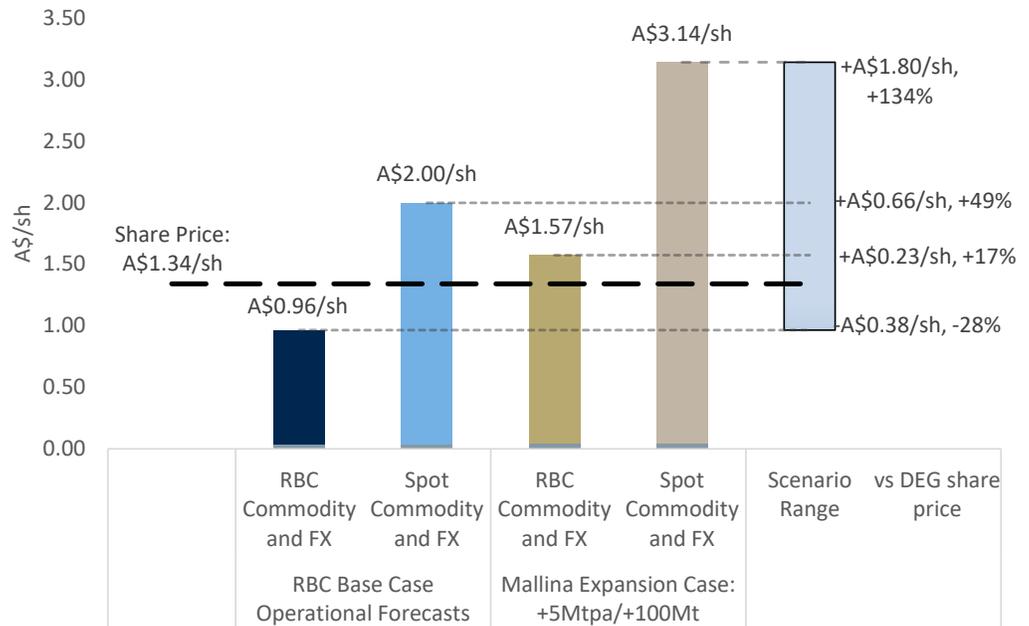
	x	A\$m	A\$/sh
Operating NAV		1442	0.92
Multiple	1.0x		
Implied Operating NAV		1442	0.92
Exploration/Expansion upside		1250	0.80
Cash and bullion		113	0.07
Corporate G&A		-47	-0.03
Debt		0	0.00
Provisions		-2	0.00
Price Target (rounded)			1.80

Source: RBC Capital Markets estimates

Valuing Mallina and its upside

Market likely pricing little operational upside: On our base case operational forecasts and RBC gold and FX forecasts we calculate a Mallina value of A\$1422m or A\$0.92/sh. Net cash adds 7cps and group corporate costs subtract 3cps. This gives a net valuation A\$0.96/sh before any exploration or expansion upside is considered. This base case valuation would be around 28% below DEG's current share price, but at spot it would be 49% above. Consensus gold (~US\$1800/oz LT) would be closer to the current share price. We therefore expect the market is pricing in limited upside potential beyond DEG's existing PFS forecasts.

Exhibit 17 - DEG valuation scenarios: Mallina (variable) plus net cash and overhead (4cps)



Source: RBC Capital Markets estimates. Note: These demonstrative valuation scenarios do not reflect RBC's price target for DEG.

Valuing expansion/extension upside potential

RBC forecast DEG expansion/extension upside of 80cps: As part of our valuation of DEG we select an upside valuation of 80cps. This is roughly halfway between the two lower upside scenarios in Exhibit 17 1) base case operating forecasts and spot gold (A\$2.00/sh), and 2) expansion scenario operating forecasts but RBC gold (A\$1.57/sh). We highlight six reasons why we think this high percentage of upside value to operating value (~87% ratio) is warranted:

1) RBC gold is below consensus expectations: Our A\$0.96/sh is likely a weaker starting price when considering potential upside. Using US\$1800/oz at AUD 0.72 we calculate an ex-upside base valuation of A\$1.43/sh. This would reduce the upside in our A\$1.80/sh price target to ~37cps (27% of scenario Mallina value). Our expansion/extension scenario is even more leveraged to gold than our base case.

2) Realistic Mallina operating bull case could lift DEG value by ~60%: Reaching our scenario capacity of +5Mtpa/+100Mt using either RBC or spot commodity forecasts, gives a roughly 60% potential Mallina upside. With DEG value only exposed to Mallina, the site's high upside potential would directly impact the stock.

3) A smaller capacity expansion could occur through de-bottlenecking: DEG expects capacity may reach around 11.5Mtpa through minimal de-bottlenecking capex. We estimate doing so could add around 10cps to our site valuation, which would rise with any Reserve extension. We think low cost de-bottlenecking could actually occur on top of our 15Mtpa capacity scenario.

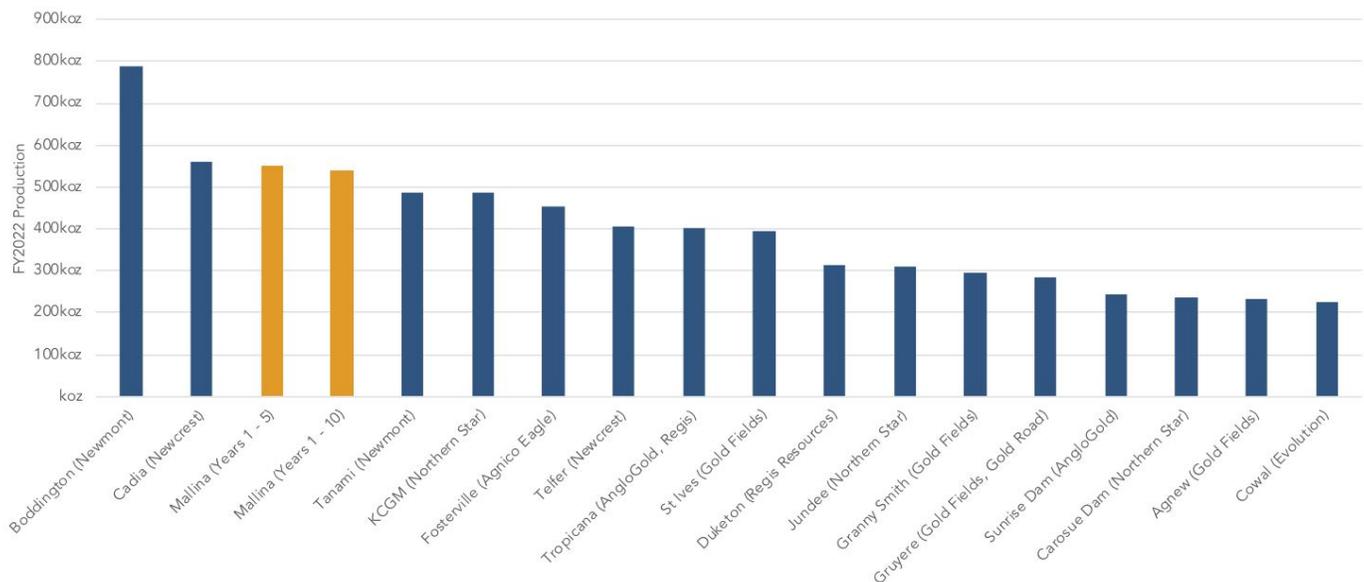
4) Our upside cases do not consider higher grades that could come from future underground mining or new pit. The highly prospective region might yield a new higher than average grade source of ore. This is a realistic potential which we have not explicitly considered.

5) Future DEG earnings multiples suggest share price is at least supported: Producing gold

companies typically incorporate an earnings or cash flow multiple in their valuation. This can be higher than their NPV. In the first full FY of production in FY27 we estimate DEG would trade on ~3x EV/EBITDA and 15% FCF yield. Mid-tier gold producers typically trade on 4x, very roughly around 30-40% higher than DEG. After discounting this value to today it would be around the 34% implied upside we find to our A\$1.80 price target via an NPV valuation. There are two benefits to this: 1) Expansion lifts DEG's annual earnings 2) In a hypothetical acquisition or combination with other assets, we calculate DEG may trade at a higher EV/EBITDA multiple of say 5-8x.

6) DEG has high takeover appeal: Mallina has high production scale, low-cost, a long-life, and is located in a tier one mining jurisdiction. We believe it could improve the portfolio of most gold miners. Rather than consider an arbitrary takeover multiple (we value Mallina at 1.0x NPV), we expect our upside scenario of +5Mtpa/+100Mt is indicative of the peak value an acquirer might hope to unlock, and hence pay. Further, if any hypothetical acquirer has a bullish outlook on gold, their peak valuation for the asset might approach our Spot upside case of A\$3.14/sh. This is before any portfolio improvement benefits the group might hope to achieve via a higher earnings multiple.

Exhibit 18 - Mallina PFS annual gold. Other top producing sites are owned by global major companies.



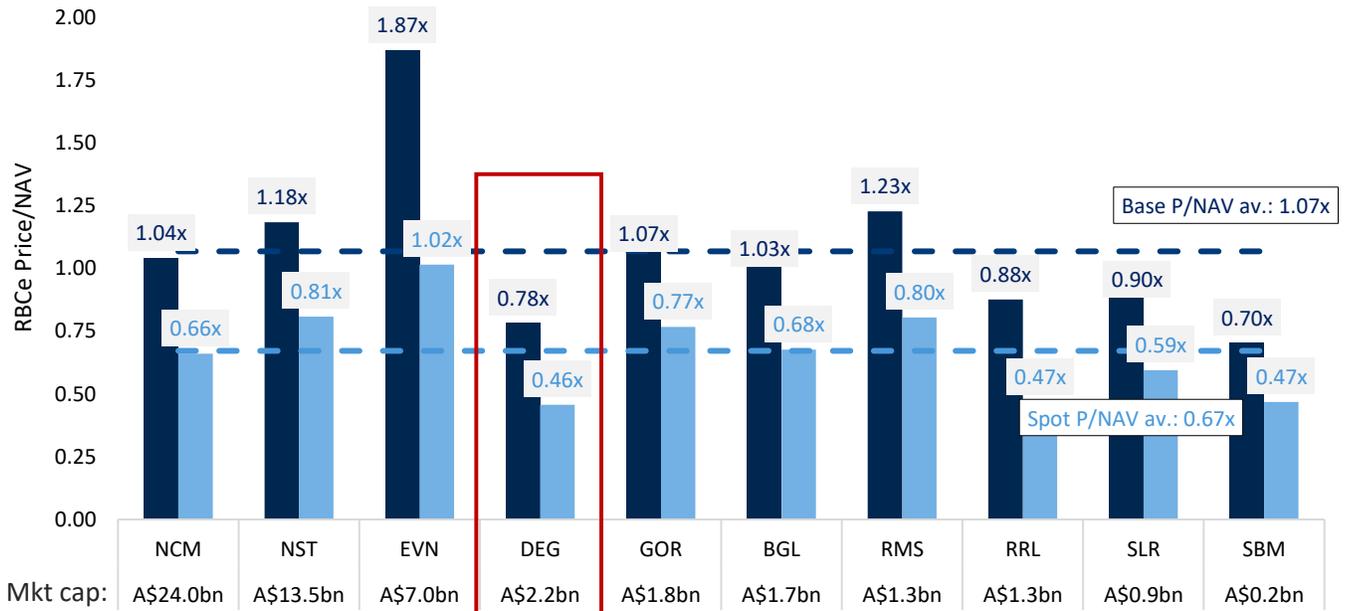
Source: Company PFS report 7/9/2022. Peer details given in company report.

DEG Valuation vs ASX gold coverage

Exploration/extension upside potential higher than ASX gold peers: Our 80cps upside would be 87% of operating asset value. For mid-tier gold companies in our coverage, this percentage is generally around 20-25%. In our conversations with investors we have found high scrutiny on the potential upside of this remarkable deposit and mine. Hence, we view valuation of upside potential as a pragmatic approach to where the stock could trade. However, we do acknowledge that incorporating more upside potential does provide valuation risk.

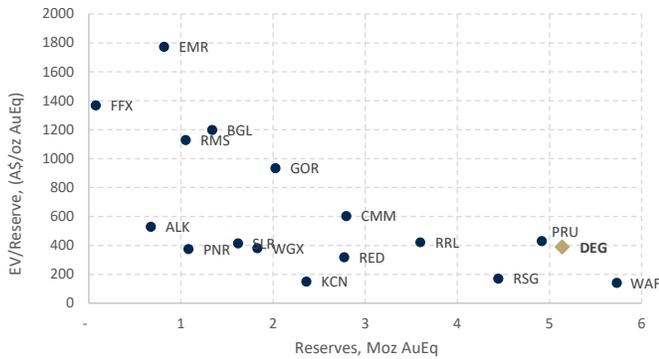
Leveraged upside to spot: Mallina's long life and relatively lower grades in outer-years give cash flow leverage to the long-term AUD gold price. We also forecast no gold hedging to the gold price, unlike for some peers. We have set only one quarter of DEG's exploration upside as sensitive to spot changes in operational value. This is due to some implicit incorporation of higher gold prices in its value already.

Exhibit 19 - RBCe P/NAV using base and spot case commodity and FX forecasts



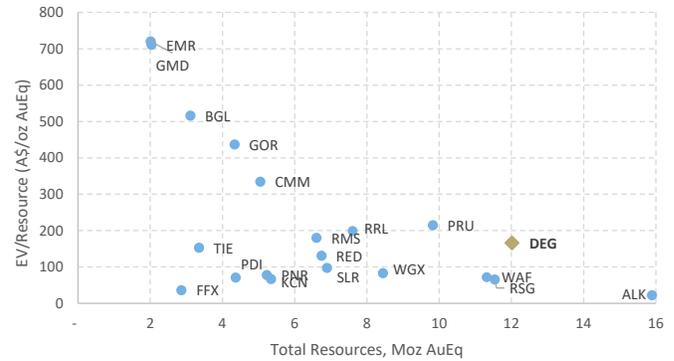
Source: RBC Capital Markets estimates

Exhibit 20 - Total AuEq Reserves vs EV/Reserve



Source: RBC Capital Markets, S&P Capital IQ, Note: AuEq Reserve is gold, copper and silver at RBC FY24e prices.

Exhibit 21 - ASX gold miners EV/Resource vs total AuEq Resources



Source: RBC Capital Markets, S&P Capital IQ, Note: AuEq Resource is gold, copper and silver at RBC FY24e prices.

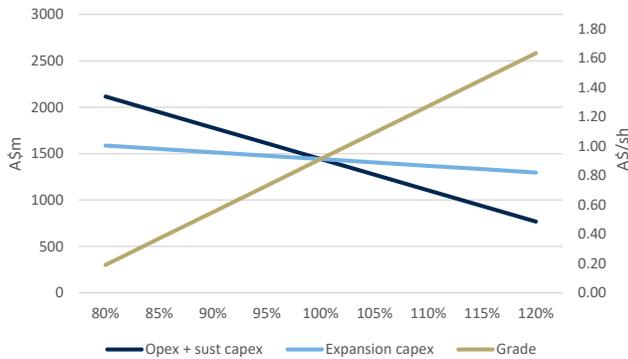
Exhibit 22 - RBC ASX Gold Coverage Summary

Company	RBC Rating	Share price	Target Price	Implied TP upside	Mkt Cap (A\$m)	P/NAV	EV/EBITDA		FCF Yield		Gearing	
							FY24	FY25	FY24	FY25	FY23-end	FY24-end
Silver Lake	Outperform	0.89	1.40	57%	869	0.86	2.8	2.1	13%	22%	-41%	-50%
De Grey	Outperform	1.34	1.80	34%	2,155	0.76	na	na	-6%	-20%	-39%	-59%
Regis	Outperform	1.68	2.20	31%	1,284	0.87	4.9	3.0	7%	1%	5%	2%
Northern Star	Outperform	11.51	13.00	13%	13,463	1.17	7.6	5.4	2%	7%	1%	3%
Bellevue	Outperform	1.45	1.50	3%	1,691	1.00	11.1	3.4	1%	16%	11%	6%
St Barbara	Sector Perform	0.24	0.35	46%	196	0.70	15.1	76.4	0%	-3%	-67%	-66%
Ramelius	Sector Perform	1.27	1.30	2%	1,289	1.20	3.7	3.0	11%	14%	-46%	-69%
Newcrest	Sector Perform	26.41	22.00	-17%	23,956	1.03	8.9	8.3	0%	3%	12%	13%
Gold Road	Underperform	1.58	1.50	-5%	1,844	0.99	6.8	7.0	8%	8%	-20%	-31%
Evolution	Underperform	3.70	2.50	-32%	6,955	1.83	6.6	5.9	4%	7%	33%	28%

Source: RBC Capital Markets estimates, Factset. Prices as of 31/7/2023

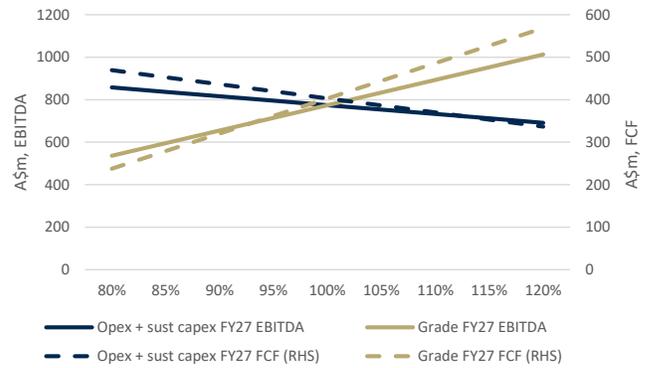
Mallina base case sensitivity analysis: NPV and earnings

Exhibit 23 - Mallina NPV sensitivity to opex, capex and grades



Source: RBC Capital Markets estimates

Exhibit 24 - FY27 EBITDA and FCF: sensitivity to costs and grade



Source: RBC Capital Markets estimates

Exhibit 25 - Mallina NPV sensitivity to opex + sustaining capex, and grade

NPV		Opex + sustaining capex factor									
		80%	85%	90%	95%	100%	105%	110%	115%	120%	
Grade factor	80%	974	806	638	469	301	132	-36	-204	-373	
	85%	1260	1091	923	754	586	418	249	81	-88	
	90%	1545	1376	1208	1040	871	703	534	366	197	
	95%	1830	1662	1493	1325	1156	988	820	651	483	
	100%	2115	1947	1778	1610	1442	1273	1105	936	768	
	105%	2400	2232	2064	1895	1727	1558	1390	1222	1053	
	110%	2686	2517	2349	2180	2012	1844	1675	1507	1338	
	115%	2971	2802	2634	2466	2297	2129	1960	1792	1624	
	120%	3256	3088	2919	2751	2582	2414	2246	2077	1909	

Source: RBC Capital Markets estimates

Exhibit 26 - Mallina NPV % change sensitivity to opex + sustaining capex, and grade

NPV		Opex + sustaining capex factor									
		80%	85%	90%	95%	100%	105%	110%	115%	120%	
Grade factor	80%	-32%	-44%	-56%	-67%	-79%	-91%	-103%	-114%	-126%	
	85%	-13%	-24%	-36%	-48%	-59%	-71%	-83%	-94%	-106%	
	90%	7%	-5%	-16%	-28%	-40%	-51%	-63%	-75%	-86%	
	95%	27%	15%	4%	-8%	-20%	-31%	-43%	-55%	-67%	
	100%	47%	35%	23%	12%	0%	-12%	-23%	-35%	-47%	
	105%	67%	55%	43%	31%	20%	8%	-4%	-15%	-27%	
	110%	86%	75%	63%	51%	40%	28%	16%	5%	-7%	
	115%	106%	94%	83%	71%	59%	48%	36%	24%	13%	
	120%	126%	114%	103%	91%	79%	67%	56%	44%	32%	

Source: RBC Capital Markets estimates

Exhibit 27 - Mallina EBITDA sensitivity to opex + sustaining capex, and grade

FY27 EBITDA		Opex + sustaining capex factor									
		80%	85%	90%	95%	100%	105%	110%	115%	120%	
Grade factor	80%	619	599	578	557	536	515	494	474	453	
	85%	679	658	637	617	596	575	554	533	512	
	90%	739	718	697	676	655	634	614	593	572	
	95%	798	777	756	736	715	694	673	652	631	
	100%	858	837	816	795	774	754	733	712	691	
	105%	917	896	876	855	834	813	792	771	751	
	110%	977	956	935	914	893	873	852	831	810	
	115%	1036	1016	995	974	953	932	911	891	870	
	120%	1096	1075	1054	1033	1013	992	971	950	929	

Source: RBC Capital Markets estimates

Exhibit 28 - Mallina EBITDA % change sensitivity to opex + sustaining capex, and grade

FY27 EBITDA		Opex + sustaining capex factor									
		80%	85%	90%	95%	100%	105%	110%	115%	120%	
Grade factor	80%	-20%	-23%	-25%	-28%	-31%	-33%	-36%	-39%	-42%	
	85%	-12%	-15%	-18%	-20%	-23%	-26%	-28%	-31%	-34%	
	90%	-5%	-7%	-10%	-13%	-15%	-18%	-21%	-23%	-26%	
	95%	3%	0%	-2%	-5%	-8%	-10%	-13%	-16%	-18%	
	100%	11%	8%	5%	3%	0%	-3%	-5%	-8%	-11%	
	105%	18%	16%	13%	10%	8%	5%	2%	0%	-3%	
	110%	26%	23%	21%	18%	15%	13%	10%	7%	5%	
	115%	34%	31%	28%	26%	23%	20%	18%	15%	12%	
	120%	42%	39%	36%	33%	31%	28%	25%	23%	20%	

Source: RBC Capital Markets estimates



Definitive Feasibility Study and Funding

Definitive Feasibility Study

Imminent DFS should be similar to the PFS but with a longer life: DEG expects to release a Mallina Definitive Feasibility Study in the September quarter 2023. The PFS was completed to a high level of detail, and we do not expect a great deal of technical variation. We expect the DFS will be still be 10Mtpa. This is in line with the PFS and environmental permits submitted in June 2023. Any expansion is likely to come later after first establishing 10Mtpa, in our view. Since the prior Reserve, the Resource base has grown by 10%. The M&I Resource, which would underpin a Reserve, has grown 19%. This gold increase could benefit outer-years of production more, with the earlier schedule already somewhat optimised. We find Mallina's opex as reasonable vs similar projects. Its capex is helped by the sites Pilbara location. This reduces infrastructure cost and allows efficient delivery to site. DEG costing completed in 2022 was around the time of peak pricing, with limited overall inflation left for the DFS. However, there is a risk that capital cost comes higher than the PFS.

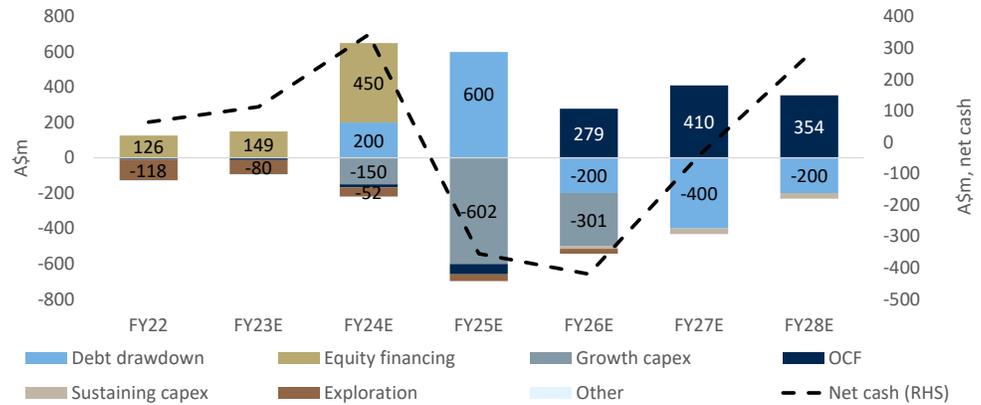
Project Funding

Pre-production capital and corporate cost: Based on DEG's PFS we expect A\$1053m of expansion capital, including A\$100m of growth/contingency. Working capital build has been largely captured by indirect processing costs, and Mallina will use contract mining which reduces working capital requirement. We forecast A\$25m of working capital on top of expansion capital and for ongoing exploration expenses of ~A\$40-50mpa. We predict first gold production will occur in MarQ 2026, with total project and corporate outflow of ~A\$1250m (including interest payments on debt).

Debt capacity A\$800m: DEG stated that of non-binding proposals from 14 banks based on the PFS, the majority suggest a project debt funding capacity of around A\$800m. DEG could investigate various project financing options, but we have implicitly considered this to be part of the overall debt capacity. A short ~2.5 year payback helps allow this level of debt. We forecast a peak gearing of 48%.

A\$1250m total required with A\$450m of equity: June-2023 cash was A\$113m with no debt. We forecast a total of A\$1250m raised in DecQ 2023. A\$800m from a debt facility and the remaining A\$450m from equity. We assume a 10% discount in the raise. This might be the last equity raise DEG requires, and it is the only one we forecast. Our investor conversations suggest there is already decent appetite to enter the stock via this potential equity issuance. The A\$450m allows cash to stay above ~A\$100m (min A\$100m at Q4 2025), and DEG would always have the option to draw less debt. Similarly, we have timed debt drawdown to stay above this rough A\$100m figure and minimise outstanding debt and interest repayments.

Exhibit 29 - Forecast DEG cash flow and net cash position



Source: RBC Capital Markets estimates, Company reports

Mallina construction

More likely to bring positive rather than negative news: DEG will have ~2 years of project construction. Through this period there is limited potential for any operating technical risk to occur. Key risks would be any potential delays or cost overruns. However, if this does occur it may only become apparent closer to first production in early 2026. Conversely, positive news could come through ongoing exploration, and progressively delivering the project. This will incrementally de-risk the site, and bring DEG closer to a potentially higher earnings/cash flow valuation. We find high corporate appeal for DEG. The progressive de-risking of the project could potentially fuel news flow around potential acquirers. Regardless of the validity, we think this is more likely to be a stock positive. Additionally, we believe the upside risk of an actual takeover offer may help to support stock value.

Pressure Oxidisation Processing Risk

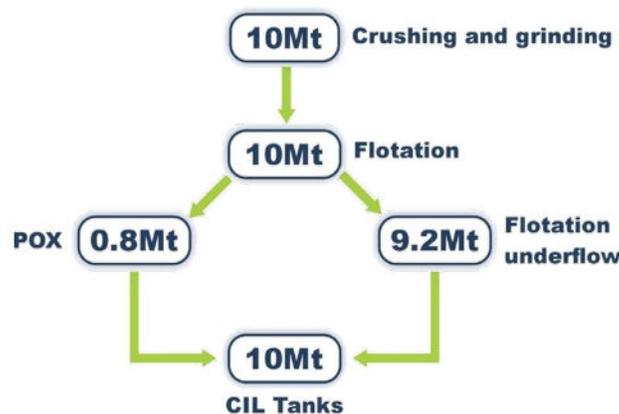
Mallina Pressure oxidation (POX) POX processing risks are commensurate with a non-refractory project: Mallina's orebody is not fully refractory, and it has fairly consistent levels of sulphur and gold which should aid autoclave performance. Our study of historic gold plant 5-year ramp-up performance suggests limited difference in recovery or throughput utilisation for POX processing. POX plants have shown slightly slower throughput ramp-up in the first year or two, but do reach design utilisation and recovery beyond that. POX technology has been in use for decades and major issues should by now be well understood and considered in design, albeit with potential teething issues as each site is optimised. Mallina is a well funded major global project, and overall we do not consider it shows much greater processing risk than a non-POX processing plant.

Semi-refractory ore treated with pressure oxidation (POX)

Orebody is only partially refractory: In the Hemi deposit, the transition (~11% of Hemi gold) and fresh (~83%) domains are semi-refractory. DEG's chosen processing method will include Pressure Oxidation (POX). DEG will use POX to oxidise sulphide minerals and release the portion of gold which is locked up in the lattice of refractory sulphide minerals, predominantly arsenopyrite. The deposit is considered *semi*-refractory as approximately 60% to 70% of the gold is recoverable via fine grinding and conventional CIL processing. DEG expects overall gold recoveries of ~92-95% for transitional ore and >90% for fresh rock, depending on grade.

Good float recovery aids selective POX processing: DEG finds sulphide minerals which are mostly pyrite and to a lesser extent arsenopyrite, are readily recovered via flotation into a concentrate. This allows isolation and oxidation of the refractory arsenopyrite before leaching. DEG finds strong flotation recovery of >95% of sulphide minerals to the flotation concentrate. This concentrate is only 8% by mass and allows an 800ktpa throughput through the POX circuit vs 10Mt entering the mill. Effective flotation is crucial for ensuring all refractory ore passes through the POX but a surplus of throughput would require a higher capacity. The circuit, including autoclave, is not likely to be easily or cheaply be scaled incrementally larger.

Exhibit 30 - Process plant design throughput - 8% through POX



Source: Company report 7/9/2022

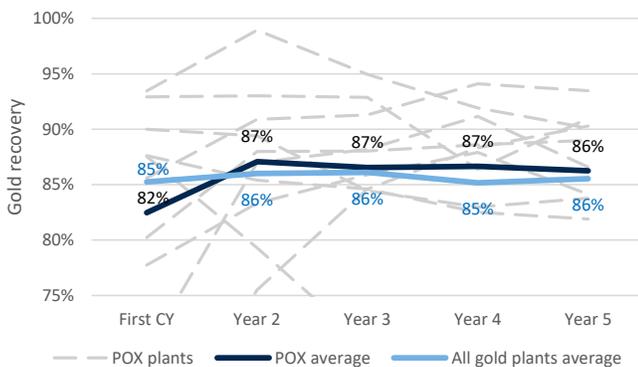
Historical POX plant performance

Study of past plant throughput utilisation and gold recovery: We measure ramp-up success of a processing plant by its gold recovery and throughput utilisation, vs its nameplate rates. We conduct a broad study of previously constructed POX plants. We have deemed data appropriate for 10 plants. All were constructed since the late 1990s. We compare this to a sample of all gold plant ramp-ups. We find ~40 reasonable data sets from plants after 1970 at above 500ktpa. The data is in calendarised years rather than actual years of operation. This makes the first calendar year of lower relevance for recovery and not useful for plant utilisation.

No recovery difference: Overall, we find there to be limited difference in gold recovery ([Exhibit 32](#)). All minor differences are not significant vs variability in the POX and non-POX plant data sets.

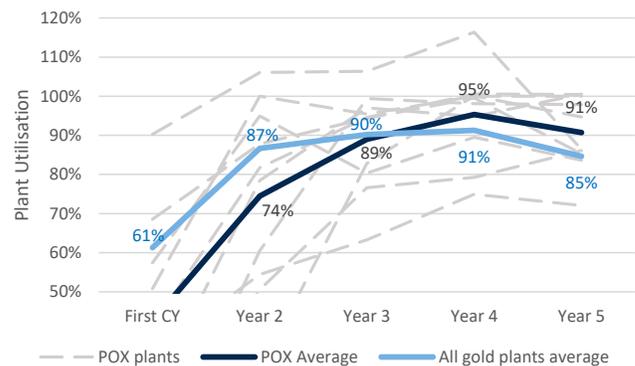
Slightly slower throughput ramp-up: For utilisation, POX plants performed slightly weaker in the first two years of operation ([Exhibit 42](#)). There was a noticeable trend of lower utilisation in year two, and we largely disregard the data from year one. However, by the third calendar year all plants including POX appear to reach steady-state operation.

Exhibit 32 - Gold plant recovery in first 5 calendar years



Source: RBC Capital Markets, Wood Mackenzie, S&P Capital IQ. 10 POX plants shown. All gold sites are after 1970, capacity above 500ktpa and five years of data; 40 plants used. Data is on a calendarised basis.

Exhibit 33 - Plant capacity utilisation (calendarised data makes year 1 unimportant)



Source: RBC Capital Markets, Wood Mackenzie, S&P Capital IQ. 10 POX plants shown. All gold sites are after 1970, capacity above 500ktpa and five years of data; 42 plants used. Date is on a calendarised basis - year one will depend on start point within the CY.

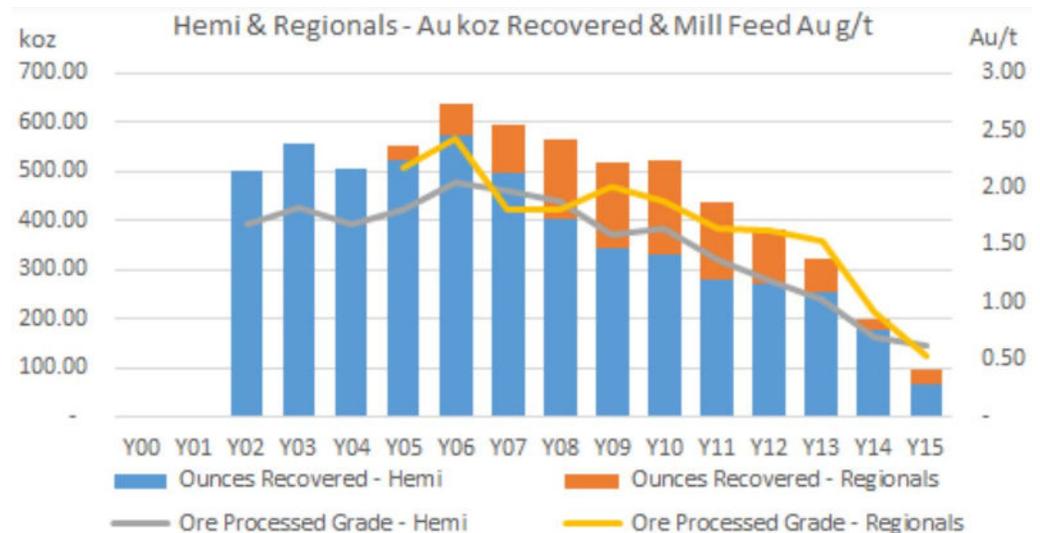
Mining Sequence and Grade Prioritisation

Planned grade prioritisation should be feasible: De Grey is likely to benefit from better grades early in the mining schedule, which should advance gold production, cash flow and project NPV. Better early grades could be expected due to a combination of 1) sequencing higher grade pits first, 2) better grades shallower within each pit, and 3) predominantly from the stockpiling surplus mined tonnes and processing the best grades first. DEG has not given an exact pit mining sequence but does expect the Brolga pit to be prioritised early. The other benefit from stockpiling is that it adds flexibility to autoclave performance, including adding consistency to sulphur input.

Higher Mallina grades early in the mine plan

De Grey's production schedule assumes an advantageous acceleration of better grades into early years. All else equal this would advance gold production and cash flow. The accelerated grades occur at both Hemi and Regional pits. High Hemi grades are maintained at Hemi for ~8 years before falling year-on-year, and Hemi grades peak with early production before progressively falling each year.

Exhibit 34 - DEG mine plan for gold production and mill grade



Source: Company report 7/9/2022

DEG forecasts in numbers: Using digital image software we have captured the grades in Exhibit 34. Gold production is given elsewhere in the PFS. Using these figures, and LOM recovery 94.4%; we calculate mill feed tonnages. Our calculations sum to ~10Mtpa per year suggesting these figures are reasonably accurate (Exhibit 35).

Exhibit 35 - PFS milling plan: showing tonnes, grade and gold by location

	Units	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13
Hemi gold produced	koz		500	555	505	520	575	500	400	345	330	280	270	255
Hemi plan grade	g/t		1.7	1.8	1.7	1.8	2.0	2.0	1.9	1.6	1.6	1.4	1.2	1.0
Hemi tonnes milled	Mt		9.8	10.1	10.0	9.5	9.3	8.4	7.0	7.2	6.7	6.7	7.6	8.3
Regional gold produced	koz					35	60	95	165	175	195	160	110	65
Regional plan grade	g/t					2.2	2.4	1.8	1.8	2.0	1.9	1.6	1.6	1.5
Regional tonnes milled	Mt					0.5	0.8	1.7	3.0	2.9	3.5	3.2	2.2	1.4
Total gold produced	koz		500	555	505	555	635	595	565	520	525	440	380	320
Total mine plan grade	g/t		1.67	1.81	1.67	1.82	2.06	1.9	1.8	1.7	1.7	1.5	1.3	1.1
Total tonnes milled	Mt		9.8	10.1	10.0	10.1	10.2	10.1	10.1	10.1	10.1	9.9	9.9	9.7

Source: Company reports, RBC Capital Markets. Figures digitally captured from DEG report Mine tonnage assumes recovery 94.4%..

If we deduct the tonnage of each deposit mined we can calculate the changing gold balance and grade of given orebodies. We have only calculated the planned annual milling grades and tonnes, not directly the tonnes mined. Mining would be at least 10Mtpa to keep the mill filled. This would allow a mining at lower grade but higher tonnage to be selectively milled at a higher grade. We expect mining will exceed the 10Mtpa milling in early years.

Hypothetical depleted R&R grades: if mining matches milling at 10Mtpa

The following analysis including [Exhibit 36](#) and [Exhibit 37](#) should only be considered a hypothetical calculation of grades if mining occurs at 10Mtpa. This scenario highlights the importance of mining exceeding 10Mtpa.

Depleted Resource and Reserve grade: We start with the Resources, Reserves and mine plans used in the September-2022 PFS and deduct tonnes and gold mined from the respective orebodies. For each R&R we can calculate the remaining or depleted grade which will occur at the end of each of these future periods. The annual difference in planned vs depleted grades are highlighted blue.

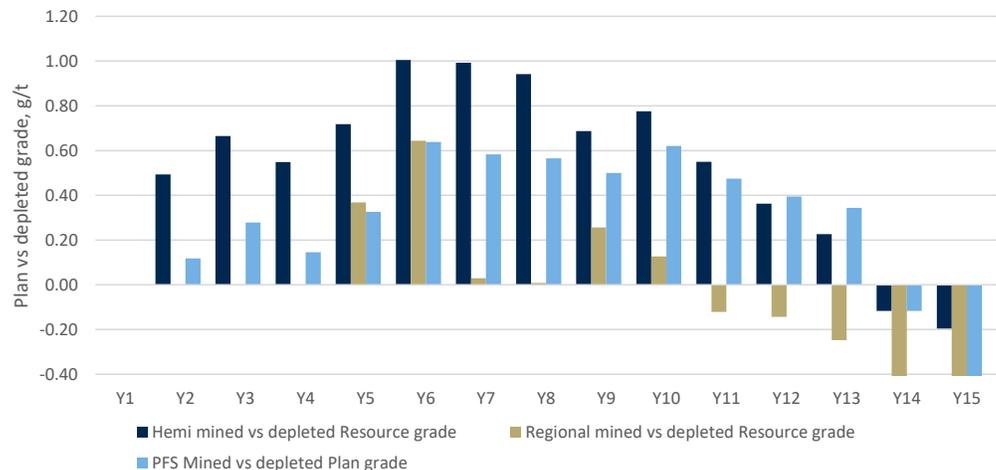
Exhibit 36 - Hemi and Regional depleted grades to fall based on PFS mine plan (if at 10Mtpa mining)

			Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13
Hemi OP Total Resource	Mt	208	198	188	178	169	159	151	144	137	130	123	116	107
Depleted grade	g/t	1.2	1.2	1.1	1.1	1.1	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.8
Ounces	koz	8053	7523	6935	6400	5850	5241	4711	4287	3922	3572	3275	2989	2719
Plan vs depleted	g/t		0.49	0.66	0.55	0.72	1.01	0.99	0.94	0.69	0.78	0.55	0.36	0.23
Regional OP Total Resource	Mt	37	37	37	37	36	34	31	28	25	22	19	18	
Depleted grade	g/t	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.8	1.8	
ounces	koz	2160	2160	2160	2123	2059	1959	1784	1599	1392	1223	1106	1037	
Plan vs depleted	g/t				0.37	0.64	0.03	0.01	0.26	0.13	-0.12	-0.14	-0.25	
PFS Mine Plan	Mt	136	126	116	106	96	86	76	66	56	45	36	26	16
Depleted grade	g/t	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.3	1.2	1.1	1.0	0.9	0.7
Ounces	koz	6840	6310	5722	5187	4600	3927	3297	2698	2147	1591	1125	722	383
Plan vs depleted	g/t		0.12	0.28	0.15	0.33	0.64	0.58	0.56	0.50	0.62	0.47	0.39	0.34

Source: Company report, RBC Capital Markets. Using PFS 7-Sep-2022, and its underlying Resource 31-May-2022. Later year grades can skew based on slight differences in mined grade assumptions.

Consistent high grade prioritisation of orebodies required: For each of the Hemi Reserve and Resource, the Regional pits Resource (which have no Reserve) and the overall mine plan we find that planned grades are consistently higher than the average depleted grade of the orebody in the first ten years of the mine schedule.

Exhibit 37 - Mining grades (if at 10Mtpa) would have multiple years above depleted grades



Source: Company report, RBC Capital Markets. Using PFS 7-Sep-2022, and its underlying Resource 31-May-2022. Later year grades can skew based on slight differences in mined grade assumptions.

Pit sequencing

Pit sequencing a contributing factor: The six Hemi pits have total Reserve grades ranging from 1.4-1.7g/t. This consistency makes preferentially mining higher grade pits vs the total Reserve less possible. DEG has not given an exact pit mining sequence but does expect the Brolga pit to be prioritised early. DEG cites this is in part due to the higher amount of ounces per vertical metre of Brolga, which could suggest less waste material, or a lower strip ratio, to reach the orebody. The upper 200m portion of the Brolga resource equates to 10,700oz/Vm .

Shallower oxide grade slightly higher grades: Oxide ore, and then transition ore, are likely to be shallower than the larger sulphide orebody below. Hemi's oxide Reserve grade is 1.7g/t, above the total Reserve grade of 1.55g/t. But it is only 7.3Mt or around a year of production. Also from checking Resource grades we find that oxide ore does not entirely explain the higher early year grades.

Exhibit 38 - Hemi Reserve by ore type

Deposit	Type	Proved			Probable			Total		
		Mt	Au g/t	Koz	Mt	Au g/t	Koz	Mt	Au g/t	Koz
Aquila	Oxide				1.6	1.8	95	1.6	1.8	95
	Transition				1.8	2.1	121	1.8	2.1	121
	Sulphide				6.6	1.6	339	6.6	1.6	339
	Total				10.1	1.7	555	10.1	1.7	555
Brolga	Oxide				2.2	1.6	115	2.2	1.6	115
	Transition				1.5	1.6	79	1.5	1.6	79
	Sulphide				25.7	1.6	1,287	25.7	1.6	1,287
	Total				29.5	1.6	1,481	29.5	1.6	1,481
Crow	Oxide				0.8	1.2	31	0.8	1.2	31
	Transition				1.0	1.4	42	1.0	1.4	42
	Sulphide				11.1	1.4	505	11.1	1.4	505
	Total				12.9	1.4	578	12.9	1.4	578
Diucon	Oxide				0.2	2.0	13	0.2	2.0	13
	Transition				0.3	1.9	20	0.3	1.9	20
	Sulphide				21.0	1.7	1,129	21.0	1.7	1,129
	Total				21.5	1.7	1,162	21.5	1.7	1,162
Eagle	Oxide				0.1	2.0	9	0.1	2.0	9
	Transition				0.2	1.7	10	0.2	1.7	10
	Sulphide				11.0	1.4	502	11.0	1.4	502
	Total				11.3	1.4	520	11.3	1.4	520
Falcon	Oxide				2.3	1.9	141	2.3	1.9	141
	Transition				1.2	1.5	57	1.2	1.5	57
	Sulphide				14.6	1.4	646	14.6	1.4	646
	Total				18.1	1.4	843	18.1	1.4	843
Hemi Mining Centre	Oxide				7.3	1.7	403	7.3	1.7	403
	Transition				6.0	1.7	329	6.0	1.7	329
	Sulphide				90.1	1.5	4,408	90.1	1.5	4,408
	Total				103.4	1.5	5,139	103.4	1.5	5,139

Source: Company report 7/9/2022

Higher grades possible from mining more than milling

Excess mining would increase mill grade but advance mining costs: Better early grades could be achieved by mining surplus tonnes and then processing the best stockpiled and ex-pit tonnes. This is likely to require more mining cost earlier in the mine schedule, and also a small extra cost from rehandling ore on the ROM pad. Stockpiling would also add some flexibility to the blend being fed to the pressure oxidation circuit, which could improve its performance. DEG has stated it expects to mine more tonnes than it mills in the early years of the mine schedule.

Higher Resource cut-off grades show an equivalent calculation: The PFS gives what overall grade the Resource body would increase to if a higher cut-off grade is used. This would omit the lowest grade material below the new cut-off from the Resource calculation. This calculation can be indicative of what grades might be achieved from selectively processing better grade ore. If more tonnes are mined, the lowest grade ore can be excluded, as per the Resource calculation.

Exhibit 39 - Hemi OP grades at different cut-offs

Cut-off grade (Au g/t)	Indicated			Inferred			Total			% Indicated
	Mt	Au g/t	Koz	Mt	Au g/t	Koz	Mt	Au g/t	Koz	
0.3	133.6	1.3	5,651	26.9	1.1	988	160.5	1.3	6,639	85.1%
0.4	120.2	1.4	5,500	23.5	1.3	950	143.7	1.4	6,450	85.3%
0.5	107.4	1.5	5,315	20.4	1.4	905	127.8	1.5	6,220	85.4%
0.6	95.8	1.7	5,110	17.7	1.5	858	113.5	1.6	5,968	85.6%
0.7	85.5	1.8	4,895	15.4	1.6	810	100.9	1.8	5,705	85.8%

Source: Company report May-2022. Note: Only Open Pit resources reported from Hemi. Regional resources excluded.

Material grade uplift from excluding only a small volume of ore: If cut-off lifts from base case 0.3g/t to a materially higher 0.7g/t, the total Resource grade lifts 1.8 g/t from 1.3g/t. While this may not appear a huge increase, it includes 86% of gold ounces. This comes from only 63% of ore. The remaining 60Mt of ore is at only 0.49g/t. This suggests that if DEG can promote mining in advance of milling and build a substantial stockpile, better grades could be achieved.

Potential mill grade uplift: This roughly implies that if DEG could consistently mine 16.0Mt (or above) of Hemi for every 10Mt processed, the higher 1.8g/t can be processed vs 1.3g/t. This is a roughly 0.5g/t increase in processing grade. Should 13Mt be mined per 10Mt milled for a 30% higher mining rate, 1.53g/t could be processed. This is 0.24g/t above the total Resource. However, we note grade uplift would not be uniform across the site. Our own model forecasts assume 13Mtpa. With first mining in the highest grade pit, at Brolga, we calculate that sufficient grade uplift can be achieved to match DEG's forecasts.



RBC Gold Forecasts

Exhibit 40 - RBC gold and AUD forecasts vs consensus and spot

	2023				2024		CY	CY	CY	Long-term
	Q1	Q2	Q3	Q4	Q1	Q2	2023	2024	2025	CY27
Gold USD/oz										
RBCe	1,890	1,984	1,865	1,810	1,755	1,700	1,887	1,714	1,700	1,688
Consensus	1,890	1,984	1,923	1,926	1,977	1,975	1,930	1,881	1,856	
<i>RBCe vs cons</i>	0%	0%	-3%	-6%	-11%	-14%	-2%	-9%	-8%	
SPOT	1,890	1,984	1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950
<i>RBCe vs spot</i>	0%	0%	-4%	-7%	-10%	-13%	-3%	-12%	-13%	-13%

AUDUSD	Q1	Q2	Q3	Q4	Q1	Q2	2023	2024	2025	LT
RBCe	0.68	0.67	0.67	0.66	0.65	0.64	0.67	0.64	0.66	0.72
Consensus	0.68	0.67	0.64	0.68	0.67	0.67	0.69	0.71	0.73	
<i>RBCe vs cons</i>	0%	0%	5%	-3%	-3%	-4%	-3%	-11%	-9%	
SPOT	0.68	0.67	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
<i>RBCe vs spot</i>	0%	0%	-1%	-3%	-4%	-6%	-1%	-7%	-2%	6%

Gold AUD/oz	Q1	Q2	Q3	Q4	Q1	Q2	2023	2024	2025	LT
RBCe	2,765	2,968	2,784	2,742	2,700	2,656	2,815	2,699	2,561	2,340
Consensus	2,765	2,968	3,005	2,832	2,951	2,948	2,797	2,649	2,542	
<i>RBCe vs cons</i>	0%	0%	-7%	-3%	-8%	-10%	1%	2%	1%	
SPOT	2,765	2,968	2,868	2,868	2,868	2,868	2,868	2,868	2,868	2,868
<i>RBCe vs spot</i>	0%	0%	-3%	-4%	-6%	-7%	-2%	-6%	-11%	-18%

Source: RBC Capital Markets estimates, Factset consensus

Gold Commentary

Gold has now been above US\$1900/oz since mid-March 2023 despite the threat of further rate hikes from the Fed extending the duration of tightening. We continue to believe that the gold price is largely dependent on the Fed's moves as this will dictate short term gold prospects.

Fed actions and commentary firmly support restrictive policy remaining in place pending a clear decline in inflation to targets, while market expectations have begun to discount Fed rate cuts, which are not yet a foregone conclusion. In our view, gold has also already begun to discount this future potential upside. However, ultimately we view slowing growth as supporting lower future inflation and enabling restrictive policy to soften, thereby pressuring real rate expectations lower.

Potential upside factors we acknowledge that could provide support for recent price strength include rising recession risks that have historically been gold-positive, a reversal of US dollar strength continuing, and low speculative gold investment positioning, which has historically acted as a positive contra-signal.

Appendix

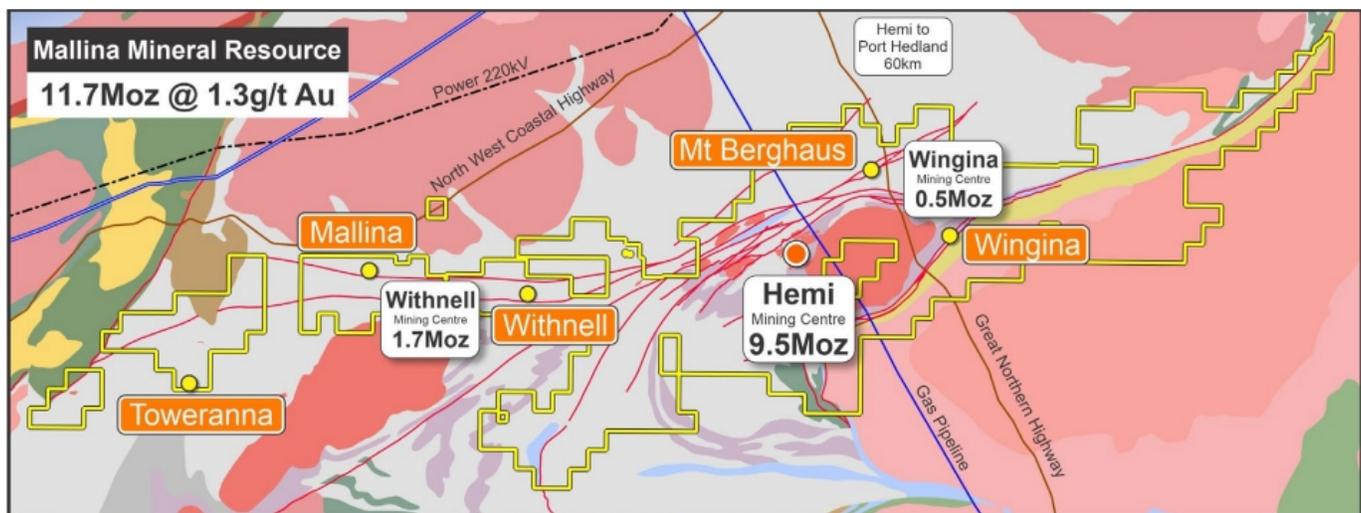
Hemi geological setting

The Hemi deposit was discovered in 2019. This was followed up with the maiden Resource Estimate of 6.8Moz in 2021.

The Hemi discovery consists of a series of gold deposits Aquila, Brolga, Crow, Diucon, Eagle and Falcon hosted within predominately diorite to quartz diorite intrusions and sills that have been emplaced within the Mallina Basin.

De Grey has identified two mineralisation styles, the Brolga-type and the Diucon-type. The Brolga-type, strong albite-chlorite-sulphide alteration occurs within the intrusions and this alteration is intimately associated with a stockwork of chlorite-sulphide veins. The Diucon-type sees sericite and albeite alteration and smoky quartz veining. Later brittle-ductile shear zones exploit the alteration and veining, where later chlorite-carbonate-talc alteration and sulphide-gold mineralisation is observed. Native gold is constrained to the Diucon and Eagle deposits which also see elevated contents of galena, sphalerite and chalcopyrite.

Exhibit 41 - Mallina gold project showing locations of gold deposits



Source: Company report 15/6/2023

Resource and Reserve calculation

The 2022 Reserve estimate assumes the following parameters:

- A block cutoff grade of 0.41g/t for oxide material and 0.5g/t for other material has been applied.
- A gold price of A\$2,500/oz.

The 2022 Resource estimate assumes the following parameters:

- Mining costs averaging \$7.90 per BCM and, processing costs of \$31 per tonne for the semi refractory material.
- Recovery is assumed to be 95% for transitional and fresh mineralisation from Brolga, Falcon, and Crow. A 94% rate is assumed for Aquila. For oxide mineralisation at Aquila, a gold recovery of 95% is assumed.

- Pit optimisation work assumes a gold price of A\$2,100/oz to A\$3,300/oz.

Exhibit 42 - Mallina Gold Project - Global Mineral Resource Estimate, June 2023

Mining Centre	Measured			Indicated			Inferred			Total		
	Mt	Au g/t	Koz	Mt	Au g/t	Koz	Mt	Au g/t	Koz	Mt	Au g/t	Koz
Hemi Mining Centre				165.7	1.3	6,876	70.7	1.2	2,632	236.5	1.3	9,508
Withnell Mining Centre	1.6	1.8	92	15.8	1.6	799	12.3	2.0	809	29.7	1.8	1,701
Wingina Mining Centre	3.1	1.7	173	2.5	1.5	122	6.3	1.2	243	11.9	1.4	538
Total	4.7	1.7	265	184.1	1.3	7,798	89.2	1.3	3,684	278.0	1.3	11,747

Source: Company report June-2023 Resource update

Exhibit 43 - Mallina Gold Project – Hemi Ore Reserve Estimate, September 2022

Mining Centre	Type	Proved			Probable			Total		
		Mt	Au g/t	Au KOz	Mt	Au g/t	Au KOz	Mt	Au g/t	Au KOz
Hemi Mining Centre	Oxide				7.3	1.7	403	7.3	1.7	403
	Transition				6.0	1.7	329	6.0	1.7	329
	Sulphide				90.1	1.5	4,408	90.1	1.5	4,408
	Total				103.4	1.5	5,139	103.4	1.5	5,139
Total	Oxide				7.3	1.7	403	7.3	1.7	403
	Transition				6.0	1.7	329	6.0	1.7	329
	Sulphide				90.1	1.5	4,408	90.1	1.5	4,408
	Total				103.4	1.5	5,139	103.4	1.5	5,139

Source: Company report PFS September 2022

Regional Deposits

Withnell

Gold mineralisation at Withnell and the adjacent Hester deposit is associated with quartz veins, quartz-sulphide lodes, disseminated sulphides and associated carbonate alteration and hosted by altered and poly-deformed folded sediments within the east-west trending Withnell Shear Zone. Drilling or intersections of note include: 9m grading 4.6g/t and 27m grading 1.0g/t.

Toweranna

Toweranna gold mineralisation occurs in numerous variously oriented pyrite-rich quartz veins which occur within intermediate granitoid stock. The veins comprise quartz, pyrite, arsenopyrite and can occasionally exhibit free gold.

Mt Berghaus

The Mt Berghaus Central, North Lode and Berghaus West gold deposits are controlled by the Mt Berghaus Shear Zone and are hosted within deformed metasediments. Gold mineralisation is developed within a NE-SW striking, sub-vertical zone with resource grade mineralisation defined to date in three separate areas. Gold mineralisation is associated with zones of quartz-pyrite veining developed as multiple steep lodes within metasediments.

Wingina

The Wingina gold deposit is shear-hosted and occurs within deformed cherts and banded iron formation of Archean age. The cherty horizons form a prominent ridge along much of the extent of the identified shear zone. Gold mineralisation is associated with extensive development of

pyrrhotite resulting in iron rich gossanous zones in the oxidised portion of the deposit.

Mallina

Mallina gold mineralisation and associated alteration zones occur as linear multiple stacked lodes hosted within metasediments. The gold is intimately associated with quartz-sulphide veining and pervasive carbonate, pyrite-arsenopyrite alteration of the metasedimentary wall rock units.

Mining costs

We assume that operating costs are in line or broadly in line with the feasibility estimates. In terms of mining costs, DEG is suggesting A\$4.30/t of material moved, which we think is reasonable considering its proximity to the Pilbara, the shallow nature of the deposit and its relative cost compared large iron ore miners. We estimate large iron ore miners are moving material at approximately A\$3.50/t.

Exhibit 44 - PFS LOM all-in sustaining costs

Area	Total LOM	\$/tonne	AUD/oz Produced	% of AISC
	\$Million	milled	LOM	
Mining	4152	30.54	650	49.37%
Processing & Lab	3255	23.95	509	38.71%
Administration	188	1.38	29	2.24%
Cash Operating Costs	7596	55.87	1189	90.32%
Non-Production Costs	123	0.91	19	1.47%
Royalties	383	2.82	60	4.55%
Sustaining & Project Capital	126	0.93	20	1.50%
Tailings Dam Wall Lifts	87	0.64	14	1.04%
Rehabilitation	95	0.70	15	1.13%
Total All in Sustaining Costs (AISC)	8410	61.86	1316	100.00%

Source: Company report 7/9/2022

Shallower wall angles would lift mining costs

Hemi Resource pits have been designed with a 75deg batter angle with 20m bench heights in fresh rock and 65deg in softer transitional ore. Regional pits are at 75deg for fresh rock. Some Hemi Reserve pits could be at slightly shallower angles. Further studies may reduce the pit wall angles in some locations of the various pits, which would have the effect of increasing strip ratios and waste mining. This would effectively lift mining cost per tonne or per gold ounce. In all open pit mines, a trade-off must occur between lower cost steeper wall design vs higher geotechnical risk of rockfalls or wall failure.

Pre-Feasibility Study Outcomes

In September 2022 De Grey announced its pre-feasibility study for Mallina/Hemi. Key outcomes from the study were as follows:

- Gold production of ~550koz for years 1-5 or ~540koz over a 10yr period via a 10Mtpa plant processing ore at ~1.6g/t with a recovery of 93.6%.
- LOM AISC of A\$1,280/oz.

- Pre-production capital of A\$1053m including A\$68m in pre-stripping and a A\$885m 10Mtpa plant (with A\$100m growth contingency).
- Pre-tax Net Present Value (NPV_{5%}) of approximately A\$3.9bn and post-tax NPV_{5%} of A\$2.7b
- Pre-tax IRR of ~51% and post-tax IRR of ~41%

Exhibit 45 - PFS Mine schedule outputs

Scenario	Life of Mine years	% Indicated %	Strip Ratio waste:ore	Waste Tonnes Mined Mt	Ore Tonnes Mined Mt	Gold Grade g/t Au	Average Au Recovered	
							Yr 1 to 5 Koz Au / annum	Yr 1 to 10 Koz Au / annum
Mallina Reserves & Resources	13.6	87%	6.9	947	137	1.56	550	539
Hemi Reserves & Resources	11.4	91%	6.1	695	114	1.54	523	496
Hemi Reserves	10.3	100%	6.1	644	103	1.55	554	474

Source: Company report 7/9/2022. Note: Mallina R&R are based on Hemi Indicated and Inferred Resources plus Regional Deposit Resources.

Scoping Study Outcomes

In October 2021 De Grey announced its maiden scoping study for Mallina/Hemi. Key outcomes from the study were as follows:

- Gold production of ~473koz for years 1-5 or ~427koz over a 10yr period via a 10Mtpa plant processing ore at ~1.43g/t with a recovery of 93%.
- LOM C1 A\$1170/oz. LOM AISC of A\$1,224/oz.
- Pre-production capital of A\$893m including A\$58m in pre-stripping and a A\$985m 10Mtpa plant (with 25% contingency).
- Pre-tax Net Present Value (NPV_{5%}) of approximately A\$2.8bn and post-tax NPV_{5%} of A\$2.0b
- Pre-tax IRR of ~60% and post-tax IRR of ~49%

Corporate

Management and Board

CEO/Managing Director: Glen Jardine: Previously COO of Lion Ore Australia and Azure Minerals. Has also been the GM of the Henty gold mine additionally he has been the project manager of Emily Ann and Maggie Hays Nickel mines. He brings >35 years operational experience across CIP/CIL, DMS, sulphide flotation, BIOX, pressure oxidation and SX/EW processing.

CFO: Peter Canterbury: Peter has held senior roles within the mining industry for close to 20 years, including as CEO and CFO of several ASX-listed companies. His previous positions include Managing Director of Triton Minerals Ltd, CEO/Executive Director of Bauxite Resources Ltd, CFO and Acting CEO of Sundance Resources Ltd and several positions with Alcoa in finance, marketing and project development. During his tenure with Sundance, he was involved with negotiating the Mining and Development convention for Sundance in Cameroon and the Republic of Congo for the US\$5 billion iron ore mine, rail and port project.

Executive Technical Director: Andy Beckwith: Andy previously held senior technical roles with AngloGold Ashanti, Acacia Resources, Helix Resources, Normandy NFM, North Flinders Mines, BP Minerals Australia and Westgold Resources. At Westgold, Mr Beckwith initially held the role of exploration manager before appointment as Managing Director where he built a 5Moz resource.

General Manager: Phil Tornatora: Mr. Tornatora has over 25 years of geological experience. He has had substantial Exploration Management experience; with over 4 years as General Manager of Exploration at Northern Star. During this time Northern Star advanced from a single mine



operation to a multi-mine company producing around 500Koz gold per annum.

Directors: De Grey's board consists of five men and one woman. Simon Lill leads the team as the non-executive chairperson. Peter Hood, Andy Beckwith Paul Harvey and Emma Scotney are the non-executive directors. Glenn Jardine is the managing director.

Debt and Hedging

At the end of the March Quarter of 2023, De Grey Mining had A\$145m in cash and no debt. The company continues to explore debt funding as a component of overall project development. The majority of institutions have indicated the Mallina Project supports traditional debt funding capacity of approximately A\$800m based on De Grey's September 2022 PFS. The Company will consider the optimal level of debt funding within an overall financing package. De Grey has no hedging in place at this stage.

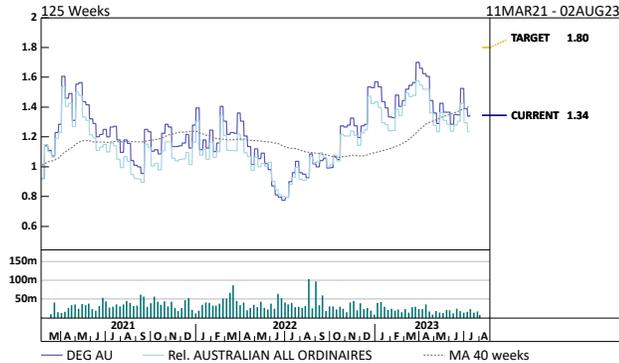
Ownership

De Grey has three substantial shareholders who have notified the Company in accordance with section 671B of the Corporations Act 2001. These are Gold Road Resources (~18%), Jupiter Asset Management (~6%) and Van Eck (~5%).



Target/Upside/Downside Scenarios

De Grey Mining Limited



Source: Bloomberg and RBC Capital Markets estimates for Target

Valuation

Our rounded A\$1.80/sh price target for De Grey is based entirely on our NAV estimate with a 1.0x multiple. We do not incorporate a cash flow based valuation unlike the rest of our ASX gold coverage as DEG is expected to have limited near term earnings while in pre-production. We use a real WACC of 8% for De Grey. Typically, we use a lower ~7% rate for producing assets in Australia. We also consider cash/bullion, corporate overheads, provisions, debt and exploration upside potential in our NAV estimate. Our base case valuation incorporates a combined upside scenario of capacity lifting to 15Mtpa and a 100Mt life extension. The implied return to our price target supports our Outperform rating.

Upside scenario

De Grey value could increase from further Resource to Reserve conversion, larger plant capacity, declines in expected OPEX and CAPEX. Considering a larger processing capacity in addition to a higher life of mine gold price, our upside price scenario lifts to ~A\$3.00/sh.

Downside scenario

Our downside scenario for De Grey considers higher OPEX and CAPEX as well as lower grade reconciliation and gold prices. Furthermore, we consider no exploration upside and lower gold recoveries. This suggests a downside scenario of ~A\$0.70/sh.

Investment summary

Mallina is De Grey's sole key asset. Located in Western Australia, close to Port Hedland. The low-cost project (AISC ~A\$1200/oz) has high scale (550kozpa at steady state) and is expected to have a mine life of ~15 years with further upside potential. We find the project risks, including pressure oxidation processing, as modest. We see risks as manageable and market concerns should ease as the project is delivered.

Mill capacity may be conservative. Mallina has potential for the mill to exceed its nameplate capacity of 10Mtpa. This could come through de-bottlenecking during commissioning. The plant was built with 15% contingency and DEG has suggested this might rate (11.5Mtpa) could be achieved, and for little cost. Alternatively, DEG could invest in a higher capacity. We see reaching 15Mtpa as a realistic outcome. Potential value upside is magnified by concurrent mine life expansion.

Geological upside. The 12Moz Resource was established in around five years, and we expect growth to continue. Extension potential at Hemi is evident with intercepts outside current Resource estimates and PFS shells returning thick intercepts in excess of 300m at over 1g/t. DEG could target development of a higher grade underground mine. We do not forecast this. The site also has strong regional potential. Exploration success continues at multiple deposits.

Potential Catalysts: The Definitive Feasibility Study and project funding could help confirm PFS metrics and incrementally de-risk the project. We find DEG has high corporate appeal. Project delivery could elicit news commentary about potential takeovers. Gold Road (GOR) owns 18% of DEG, and its sale to another corporate could be a positive catalyst, through suggesting a bid for the remaining shares. Although we do not suggest any takeover offer for DEG may eventuate.

Risks to rating and price target

The primary risks to our rating and our price target are the gold price and development. While we forecast gold prices to decline over the next few years to our long term price of US\$1,600/oz we still see competitive margins for De Grey at these prices and any movement in the price could positively or negatively affect earnings. As with most mining projects in pre-production the biggest risks are geology, mining, processing, project delivery and funding. Increases to capital or operating costs could negatively affect the project, as could any delays.



Company description

De Grey is an Australian based explorer and developer that has one core asset, the Hemi/Mallina project located just to the southwest of Port Hedland in the Pilbara region of Western Australia. The Hemi Resource consists of six deposits: Aquila, Brolga, Crow, Diucon, Eagle and Falcon. These deposits contain in excess of 8Moz of gold in Resources and are expected to produce more than 500Kozpa once operating from a large, low cost CIL and Pressure oxidation circuit. DEG expects that the mine will operate for in excess of 10 years.

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