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Buy

Current Price \$0.97
Valuation \$1.40

Thursday, 8 September 2022

De Grey Mining Ltd (DEG)

Going long

John Macdonald

Quick Read

Mallina output plans continue to expand. Costs have been on the rise too, but gold always wins longer term. Maintain buy recommendation.

Main points

PFS: De Grey has completed a pre-feasibility study for the Mallina project.

Changes from the October 2021 scoping study include:

- The PFS mine plan, including the regional deposits, assumes a 6.8Moz inventory, compared to 5.1Mozs used in the scoping study.
- Within the total inventory, Hemi's estimated inventory is up from 95Mt at 1.42g/t at 4.9:1 waste:ore, to 114Mt at 1.54g/t at 6.1:1 waste:ore. The increase in strip ratio is driven mainly by geotechnical considerations.
- The Hemi inventory includes 103Mt at 1.55 g/t (5.1Mozs) in probable reserves, estimated for the first time.
- Capital costs are up from \$893M to \$1,053M including a \$68M pre-strip.
- Estimated processing costs are down 10% to \$24/t, due mainly to the identification of reduced neutralisation requirement. Mining costs are up from \$21/t to \$31/t, due to the strip ratio change and industry cost increases seen in the last 12 months.
- Instead of 470kozspa over the first five years, De Grey is looking at 550kozspa, with some grade streaming taking the early head grade average up to 1.75 g/t. Metallurgical recovery projection has increased from 93% to 93.6%.

The planned ore processing rate has been maintained at 10Mtpa. Open pit only is considered at this stage.

A schedule is set for completion of a DFS in 2023, construction from 2023 to 2025 and production from 2025.

No net change under our assumptions: In our model Mallina's post tax NPV is essentially unchanged as cost increases offset higher output assumptions.

Making light of POx: The projected flotation performance, and oxidation/CIL recoveries from all ore types and sources are very good at a very tolerable costs, and that may be an area that potential financiers or acquirers will want to bed down.

Recommendation

Mallina passes the second study iteration with no backward steps and withstands some market-imposed inflation. We think a group will eventually pay up for control of De Grey, because Hemi's long-life, high-volume potential transcends gold price and cost inflation concerns. Our valuation and recommendation are unchanged at \$1.40/share and buy, respectively.

Code: **DEG**
Sector: **Materials**

* All figures in AUD unless stated otherwise

Shares on Issue (M): **1,409**
Market Cap (\$M): **1,367**
Net cash (\$M June 2022) **65**
Enterprise value (\$M): **1,302**

52 wk High/Low (ps): **\$1.44** **\$0.74**
12m av. daily vol. (Mshs): **6.57**

Key Metrics

	FY25e	FY26e	FY27e
P/E (x)	0.0	3.4	3.3
EV/EBITDA (x)	-46.5	2.2	2.1

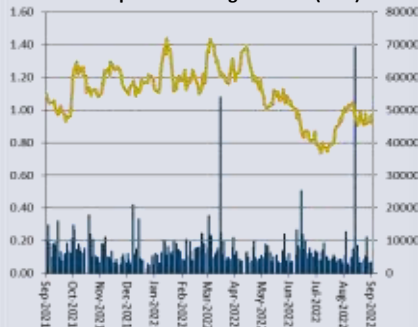
Financials:

	FY25e	FY26e	FY27e
Revenue (\$M)	0	1,144	1,271
EBIT (\$M)	-28	505	524
NPAT (A\$M)	-27	398	414
Net assets (\$M)	609	944	1,187
Op CF (\$M)	-27	518	517

Per share data:

	FY25e	FY26e	FY27e
EPS (c)	-1.9	28.2	29.4
Dividend (cps)	0.0	0.0	7.0
Yield (%)	-	-	-
CF/Share (cps)	-1.9	36.8	36.7
Prod (koz Au)	0	474	527

Share Price Graph and trading volumes (msh)



Please refer to important disclosures at the end of the report (from page 5)



De Grey Mining

Equities Research

Analyst: John Macdonald

Recommendation Buy
Current Price \$0.97
Valuation \$1.40

Sector Metals & Mining
Issued Capital (Mshs) 1,409
Market Cap (M) \$1,367
Thursday, 8 September 2022

Profit & loss (\$M) 30 June	2022E	2023E	2024E	2025E
Sales Revenue	0	0	0	0
+ Other income/forwards	0	0	0	0
- Operating costs	0	0	0	0
- Royalties	0	0	0	0
- Corporate & administration	-10	-28	-28	-28
Total Costs	-10	-28	-28	-28
EBITDA	-10	-28	-28	-28
- margin	0%	0%	0%	0%
- D&A	0	0	0	0
EBIT	-10	-28	-28	-28
+ Finance Income/Expense	0	0	-2	-6
PBT	-10	-28	-30	-34
- Tax expense	1	6	6	7
- Impairments and other				
NPAT	-9	-22	-24	-27

Cash flow (\$M)	2022E	2023E	2024E	2025E
+ Revenue	0	0	0	0
- Cash costs	-10	-28	-28	-28
- Forwards	0	0	0	0
-Tax payments	1	0	6	7
+ Interest & other	0	0	-2	-6
Operating activities	-10	-28	-24	-27
- Property, plant, mine devel.	-89	-42	-493	-560
- Exploration	-4	-32	-20	-20
Investment activities	-93	-74	-513	-580
+ Borrowings	0	0	400	400
- Dividends	0	0	0	0
+ Equity	126	135	360	0
Financing activities	126	135	760	400
Cash change	24	33	224	-207

Balance sheet	2022E	2023E	2024E	2025E
Cash & bullion	85	118	341	134
Other Current Assets	0	0	0	0
Total current assets	85	118	341	134
Property, plant & equip.	167	209	702	1262
Investments/other	0	0	0	0
Total non-curr. assets	167	209	702	1262
Total assets	252	327	1043	1396
Trade payables	12	13	6	40
Short term borrowings	0	0	0	120
Other	12	13	68	68
Total curr. liabilities	24	26	74	107
Long term borrowings	0	0	400	680
Other	0	0	0	0
Total non-curr. liabil.	0	0	400	680
Total liabilities	24	26	474	787
Net assets	228	301	570	609

Shares	2022E	2023E	2024E	2025E
New shs issued/exerciseable	118	152*	301*	3
Average issue price	1.07	0.89*	1.19*	0.00
Ordinary shares - end	1409	1561	1862	1865
Diluted shares - end	1415	1565	1865	1865

*Argonaut assumption

Price assumptions	2022E	2023E	2024E	2025E
AUDUSD	0.726	0.725	0.725	0.725
Gold	1819	1810	1775	1750
Gold	2504	2497	2448	2414

Financial ratios		2024E	2025E	2026E	2027E
GCFPS	AC	-1.7	-1.9	36.8	36.7
CFR	X	0.0	0.0	2.6	2.6
EPS	AC	-1.7	-1.9	28.2	29.4
PER	X	0.0	0.0	3.4	3.3
DPS	AC	0.0	0.0	0.0	0.1
Yield	%	0.0%	0.0%	0.0%	7.2%
Interest cover	x	-18.7	-5.1	66.9	82.5
ROCE	%	-4%	-2%	43%	47%
ROE	%	-5%	-6%	53%	44%
Gearing	%	70%	112%	59%	37%

Operations summary	2024E	2025E	2026E	2027E
Mallina project				
Ore processed (Mt)	0.0	0.0	9.0	10.0
Head grade (g/t)	0.00	0.00	1.75	1.75
Met. recovery	0.00	0.00	0.94	0.94
Gold prodn (kcozs)	0	0	474	527
Cost per milled tonne (A\$/t)	0	0	53	56
Cash costs pre royalty (A\$/oz)	0	0	1097	1168
All in sustaining costs (A\$/oz)	0	0	1223	1292
Growth capital (\$M)	493	560	3	6

Valuation summary	A\$M	A\$/sh
Mallina project 7% real after tax DR	1891	1.34
Exploration, all sites	284	0.20
Corporate overheads	-147	-0.10
Cash	75	0.05
Debt	0	0.00
Tax benefit	60	0.04
Hedging	0	0.00
Option/equity dilution	-186	-0.13
NAV	1,977	1.40

Directors, management	
Simon Lill	Non-Executive Chairman
Glenn Jardine	Managing Director
Andy Beckwith	Executive Director
Peter Hood	Non-Executive Director
Ed Eshuys	Non-Executive Director
Samantha Hogg	Non-Executive Director
Paul Harvey	Non-Executive Director

Top shareholders	M shs	%
Gold Road Resources	280	19.9
State Street Corporation	110	7.8
Jupiter Investment Management	99	7.0
Invesco Australia	71	5.0

Resources June '22	Mt	g/t Au	Kozs	Mkt cap/oz
Mallina gold project	251.0	1.32	10,635	129
Measured & indicated	158.0	1.34	6,808	
Inferred	93.0	1.28	3,828	
Includes probable reserves	103.0	1.55	5,133	266

Argonaut model Jun '22	Mt	g/t Au	Kozs	
TOTAL INVENTORY	139.0	1.55	6,931	197
Hemi open pit	114.0	1.54	5,645	
Satellite open pit	25.0	1.60	1,286	

Market expectations, as at 8 September 2022

Fig. 1: Check model run at spot gold, DEG share price of \$0.97 (as at 8 September 2022). Argonaut estimates the market expects 30% margin above total costs, and 4.6Mozs to be produced.

		June 2022	Post construction	1st quarter
Gold price	A\$/oz	2625	2625	2625
	US\$/oz	1799	1799	1799
Exch rate		0.685	0.685	0.685
De Grey				
Gold production per quarter	kozs			125
Reported AISC	A\$/oz			1350
Net cash & bullion (EOP)	\$M	75	-1175	-1107
Cost to get to first prodn	\$M		1250	
Total costs	\$M			260
CAIC	A\$/oz			2077
S/holder cash build/qtr	\$M			68
AISC/CAIC				65%
Market Capitalisation	\$M	1367	1367	1367
EV	\$M	1292	2542	2473
Cash banked/EV				2.8%
Margin				26%
Expected margin		30%	30%	30%
Expected reserve	kozs	4561	4561	4438
Par quarter	\$M			77

Source: Argonaut research

Valuation

Argonaut's De Grey valuation is based on a discounted cash flow valuation of the Mallina project, and an informal estimate of exploration assets value and nominal assessment of De Grey's other assets and liabilities, as at June 2022. Assumptions about Mallina's future development and cash flows are based on De Grey's September 2022 pre-feasibility study, with differences in timing and price settings. A real, after tax discount rate of 7% is used. Future tax benefits are added back as an estimate of present value. Argonaut's base case commodity and currency forecasts, set out in the summary table, are used to estimate the base case NAV.

Fig. 2: Valuation summary, projected June 2022

Valuation summary	A\$M	A\$/sh
Mallina project 7% real after tax DR	1891	1.34
Exploration, all sites	284	0.20
Corporate overheads	-147	-0.10
Cash	75	0.05
Debt	0	0.00
Tax benefit	60	0.04
Hedging	0	0.00
Option/equity dilution	-186	-0.13
NAV	1,977	1.40

Source: Argonaut research

Key risks to valuation

Mineable inventory

Argonaut's estimates of mineable inventories at Mallina are based on De Grey's pre-feasibility study figures, including inferred resources as per De Grey's mine plans.

Metallurgy

De Grey's early tests indicate high rates of recovery using conventional pressure oxidation processes. Other large scale operations with successful operating records use the technologies available to and being considered by De Grey.

Gold price

Our estimates of De Grey cash flows are sensitive to the gold price. Each 10% change in the Australian dollar gold price changes our valuation by 20%.

Costs

Cost assumptions are based on pre feasibility study estimates. Study cost accuracy is +- 15-25%.

Equity dilution

De Grey may seek to finance its activities by issuing new shares. The number of shares and the price at which new shares are issued affect our valuation of the existing shares. We have assumed 150M new shares issued in FY 2023 at \$0.90 per share and 300M new shares issued in FY24 at \$1.20 per share.

Exploration success

De Grey may invest its cash and any future free cash flows in exploration and/or other mineral asset acquisitions. Valuation assumes that future exploration and investments achieve acceptable returns. Subjective value is attributed to exploration assets at Mallina.

Interest rates/discount rates

Argonaut takes cash flow risk into account when choosing discount rates for different projects. Our valuation is sensitive to the discount rate used. A 2% change in the (after tax) discount rate makes a 16-20% difference to our De Grey valuation.

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Argonaut Securities Pty Limited acted as Joint Lead Manager & Joint Bookrunner and Argonaut PCF Limited acted as Joint Underwriter to the \$125M Placement announced 20 October 2021 and received fees commensurate with these services.

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