Doray Minerals
Mine life upside at Andy Well

Event
- DRM recently released drilling results from the Gnaweeda project 15km south east of the company’s Andy Well mine. After reviewing exploration results from both Gnaweeda and the Wilbur, Judy and Susie lodes at Andy Well, we have extended our mine life assumption at Andy Well by 12 months.

Impact
- **Underground resource to reserve conversion.** Conversion of resources to reserves at Andy Well is driven by the sub-vertical narrow-vein nature of mineralisation. Overall resource tonnes convert almost directly to reserve but contained ounces convert at a more modest ~70% thanks to dilution.
- **Wilbur resource upgrade likely.** Deep drilling completed at Wilbur in 2014 identified the continuation of high-grade at depth. DRM has followed up on these results from underground and continues to define high-grade outside of the existing resource. Whilst Wilbur appears to be becoming more complex with depth, we still expect it to deliver mine life extensions. Applying similar conversion rates to our estimate of the Wilbur Deeps resource, we have increased our assumed mining inventory at Wilbur by ~43koz.

**Susie Maiden resource shows promise.** In 3QFY15, DRM released a Maiden Indicated and Inferred Resource at the Susie Lode of 468kt at 8.1g/t for 123koz. Whilst drilling data is sparse, particularly at depth, we believe that the geological and grade continuity seen at Wilbur and Judy South will be replicated and we have chosen to include Susie in our assumed mining inventory. Due to the sparsity of data, we have used what we believe to be conservative 60% conversion of tonnes and 45% conversion of ounces resulting in an additional 55koz of mining inventory.

Earnings and target price revision
- We now assume an additional mining inventory of 440kt at a grade of 6.9g/t for ~98koz. Incorporating this into our model extends our assumed mine life of Andy Well by approximately 12 months. Consequently, our earnings forecasts for FY19 and FY20 increase by 57% and 47%, respectively. Our NPV for Andy Well increases to $0.68/sh, up from $0.61/sh lifting our target price for DRM to $0.80/sh from $0.70/sh.

Price catalyst
- 12-month price target: A$0.80 based on a DCF methodology.
- Catalyst: DRM’s next operational catalyst will be its June quarter production result; we expect a strong quarterly result delivering the mid-range of DRM’s 85-90koz full year guidance. Completion of the funding package for the ~$88m Deflector project should also prove a catalyst for DRM.

Action and recommendation
- **Outperform.** We believe that Andy Well will follow the path of many other high-grade narrow vein Australian gold assets delivering a mine life which far exceeds expectation.
Exploration drilling analysis

- DRM restates its Reserves and Resources annually at 30 June with the outcome released to the market in September. In light of recent high-grade drilling results at Andy Well and the 88% owned Gnaweeda project, we have taken the opportunity to review DRM’s exploration results over the last 12 months and assess potential for Resource and Reserve addition in its 2015 statement.

Underground resource to reserve conversion

- Conversion of resources to reserves at Andy Well is driven by the sub-vertical narrow-vein nature of mineralisation. Overall resource tonnes convert almost directly to reserve with 96% of tonnes at Wilbur and 81% at Judy South converting to reserve. Conversion of grade and ounces is impacted by mining dilution with a 58% conversion at Wilbur and 68% at Judy South.

**Fig 1  Andy Well resource to reserve conversion**

<table>
<thead>
<tr>
<th>Deposit</th>
<th>Tonnes</th>
<th>Ounces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilbur Underground</td>
<td>96%</td>
<td>58%</td>
</tr>
<tr>
<td>Judy South Underground</td>
<td>81%</td>
<td>68%</td>
</tr>
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</table>

Source: DRM, Macquarie Research, June 2015

Wilbur Lode – high-grade depth extensions

- DRM is currently mining the Wilbur Lode at Andy Well. As at 30 June 2014 Probable underground reserves stood at 556kt at 8.13g/t for 148koz, with an additional 14koz of open pit reserves. Deep drilling completed in 2014 identified the continuation of high-grade both 200m below the existing reserve and to the south at Wilbur South. DRM has followed up on these results with drilling from underground and continues to define high-grade outside of the existing resource. We expect this to deliver additional Inferred and potentially Indicated resources in the 2015 update.

- Whilst Wilbur appears to be becoming more complex with depth we still expect it to deliver mine life extensions. Applying similar resource to reserve conversion rates to our estimate of the depth extensions, we have increased our assumed mining inventory at Wilbur by ~43koz.

**Fig 2  Wilbur resources as at 30 June 2014**

Source: DRM, June 2015

**Fig 3  2015 drilling should deliver an increase in resources**

Source: DRM, June 2015

Susie Maiden Resource

- DRM recently estimated a Maiden Indicated and Inferred Resource at the Susie Lode of 468kt at 8.1g/t for 123koz. Whilst drilling data is sparse, particularly at depth we believe that the geological and grade continuity seen at Wilbur and Judy South will be replicated and we have chosen to include Susie in our assumed mining inventory. Due to the sparsity of data, we have used what we believe to be conservative 60% conversion of tonnes and 45% conversion of ounces. Consequently, we include now include an additional 55koz to our mining inventory.
Judy Maiden Reserve

- The Judy Lode body runs parallel to the Wilbur Lode and will be accessed via a decline from Wilbur. DRM estimated a maiden reserve at the Judy South in August 2014 which stands at 203kt for 58koz at a grade of 8.8g/t. Mineralisation continues to the north of Judy South at Judy North although to date Judy North has failed to return the same grade as the other lodes with a resource grade of 2.1g/t. Whilst in our view this is too low to include in a mine plan, the proximity of the planned Judy South decline and adjacent Wilbur development could allow for opportunistic mining of Judy North when the gold price is favourable.

Open pit sweeteners

- Soft oxide open pit ore from the Wilbur Stage 1 open pit has provided beneficial grade and material type blending feed for the Andy Well mill. This is continuing with oxide ore from the Stage 2 Wilbur open pit and a small open pit at the Susie deposit. However both these are relatively small and unlikely to provide mill feed beyond 1HFY16. Although at an early stage, we believe the recent drill results from the Gnaweeda project 15km south of Andy Well could provide a more long term source of oxide ore.

Changes to our forecast and valuation

- We now assume an additional mining inventory of 440kt at a grade of 6.9g/t for ~98koz. Incorporating this into our model extends our assumed the mine life of Andy Well by 12 months. Consequently, our earnings forecasts for FY19 and FY20 increase by 57% and 47%, respectively. Our NPV for Andy Well increases to $0.68/sh up from $0.61/sh lifting our target price for DRM to $0.80/sh.

Fig 6  DRM earnings and valuation changes

<table>
<thead>
<tr>
<th>Earnings changes</th>
<th>FY15e</th>
<th>FY16e</th>
<th>FY17e</th>
<th>FY18e</th>
<th>FY19e</th>
<th>FY20e</th>
<th>NPV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net profit (A$m) - old</td>
<td>16.7</td>
<td>44.3</td>
<td>111.3</td>
<td>54.9</td>
<td>28.8</td>
<td>18.5</td>
<td>0.73</td>
</tr>
<tr>
<td>Net profit (A$m) - new</td>
<td>16.7</td>
<td>44.3</td>
<td>111.3</td>
<td>54.9</td>
<td>45.2</td>
<td>27.3</td>
<td>0.80</td>
</tr>
<tr>
<td>Change</td>
<td>-0.1%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>56.7%</td>
<td>47.4%</td>
<td>9.4%</td>
</tr>
</tbody>
</table>

Source: Company data, Macquarie Research, June 2015
**Fig 7  Andy Well forecast production and costs**

- **Gold production (koz)**
- **C1 Cash cost (A$/oz)**
- **Cash costs - AISC (A$/oz)**

Source: DRM, Macquarie Research, June 2015

**Fig 8  Deflector forecast production and costs**

- **Gold production (koz)**
- **Silver production (koz)**
- **Copper production (kt)**
- **C1 Cash cost (A$/oz)**
- **Cash costs - AISC (A$/oz)**

Source: DRM, Macquarie Research, June 2015

**Fig 9  Gold equivalent production and group AISC**

- **Andy Well Gold (koz)**
- **Deflector Au equiv (koz)**
- **AISC ($A/oz)**

Source: DRM, Macquarie Research, June 2015

**Fig 10  Free cash flow is absorbed by the Deflector development**

- **Operating cash flow (A$m)**
- **Free cash flow (A$m)**

Source: DRM, Macquarie Research, June 2015

**Fig 11  DRM generates its market cap in cash by 2017**

- **Net cash (A$M)**
- **Market cap (A$M)**

Source: DRM, Macquarie Research, June 2015

**Fig 12  Andy Well dominates our valuation of DRM**

Source: DRM, Macquarie Research, June 2015
Doray Minerals

ASX: DRM Price: (A$ps) 0.44 Year end: Jun Rating: Outperform Diluted shares (m) 238.5 TSR 238.5
Mkt cap: (A$m) 105 Target: 0.80 Up/dn 82% 82%

ASSUMPTIONS FY12 FY13 FY14 FY15 FY16 FY17 FY18 FY19 FY20
Exchange Rate A$US$ 1.03 1.03 0.92 0.84 0.72 0.70 0.70 Gold production (koz) nm nm 76.6 87.2 92.9 87.3 C1 Cash cost ($A/oz) nm nm nm 482 609 580 644 C1 Cash cost - ASC ($A/oz) nm nm nm 1,017 1,084 983 1,073
Spot Gold (US$/oz) 1,672 1,604 1,295 1,216 1,300 1,408 1,459 Deflector Cash costs - ASC ($A/oz) nm nm nm nm nm nm
E&P (explored and pre sig, items) Ac -5.4 -7.0 17.6 7.0 16.3 39.9 19.7 Silver production (koz) (0.0) (0.0) (0.0) (0.0) (0.0) (0.0) (0.0) Copper production (kt) (0.0) (0.0) (0.0) (0.0) (0.0) (0.0) (0.0)
Ag (koz) 86 0 0 (5) 7.0 8 (44 Deflector Cash - ASC ($A/oz) nm nm nm nm nm nm
P/E x -8.42 -8.42 2.5x 6.3x 2.7x 11.2x 2.5x
CFFS Ac (18.6) (2.4) 34.7 25.7 30.8 64.4 44.8
P/CF x -2.4x -18.1x 1.3x 2.0x 1.4x 0.7x 1.0x
DPS Ac 0.0 0.0 0.0 0.0 0.0 0.0 0.0
Dividend yield % 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
Fair Valuing % 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
Book value per share x 0.33 0.58 0.51 0.38 0.54 0.94 1.14
P/Book value 1.3x 0.8x 0.9x 1.2x 0.8x 0.5x 0.4x
R.O.E. (pre sig items) % -16% -12% 34% 18% 29% 42% 17%
R.O.A. (pre sig items) % -17% -9% 23% 19% 27% 53% 21%
Gold production (koz) (0.0) (0.0) (0.0) (0.0) (0.0) (0.0) (0.0)
Silver production (koz) (0.0) (0.0) (0.0) (0.0) (0.0) (0.0) (0.0)
AGS cost ($A/oz) 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EV/Reserve (A$/oz) 300 324 1 1

OPERATIONAL OUTLOOK

RESERVES AND RESOURCES (ATTRIBUTABLE)

ANDY WELL - GOLD (koz) FY14 FY15 FY16 FY17 FY18 FY19 FY20
Deflector Au equiv (koz) nm nm nm nm nm nm
AISC ($A/oz) 6.1 0.82 0.8 0.26 0.29 0.02

EARNINGS

Sales Revenue A$m 0 0 111 130 181 356 297
Other Revenue A$m 0 0 0 0 0 0 0
Total Revenue A$m 0 0 111 130 181 356 297
Operating Costs A$m 0 0 (41) (60) (67) (120) (136)
Operational EBITDA A$m 1 0 70 70 114 237 162
Exploration Expense/Write-offs A$m (0) (8) (5) (5) (6) (6) (6)
Corporate & Other Costs A$m (5) (4) (5) (6) (6) (6) (6)
EBITDA A$m (5) (12) 64 63 105 228 153
Net Incent A$m 1 1 (2) (1) (2) (1) 4
Profit Before Tax A$m (4) (12) 24 23 63 159 74
Tax Expense A$m 0 4 3 (7) (19) (48) (24)
Minorities A$m 0 0 0 0 0 0 0
Adjusted NPAT A$m (4) (8) 26 17 44 111 55
Significant Items (post tax) A$m 0 0 0 0 0 0 0
Reported NPAT A$m (4) (8) (6) 17 44 111 55
CASHFLOW

Net Profit A$m -4 -8 -6 17 44 111 55
Interest Tax/D&A A$m (14) (2) 30 36 49 73 68
Working Capital other A$m 4 4 2 1 (7) (4) 2
Net Operating Cashflow A$m (15) (3) 52 54 96 179 125
Capex A$m (1) (72) (33) (40) (110) (74) (52)
Investments A$m (0) (0) 0 0 0 0 0
Sale of PPE and Other A$m (0) (0) (21) (4) 0 0 0
Dividends Paid A$m 0 0 0 0 0 0 0
Debt A$m 0 0 55 (20) 3 49 (65) 0
Equity Issuance A$m 1 41 16 1 1 0 0
Other A$m 0 0 0 0 0 0 0
Net Operating Cashflow A$m 1 96 (4) 3 64 (65) 0
Net Change in cash A$m (15) 21 (10) 13 39 40 72

BALANCE SHEET

Cash A$m 5 26 16 29 68 108 180
PP&E & Mine Development A$m 1 101 71 72 143 149 123
Exploration A$m 21 11 5 11 19 29 39 48
Total Assets A$m 29 147 115 128 246 300 354
Debt A$m 0 56 15 17 65 0 0
Total Liabilities A$m 2 77 38 36 95 38 37
Total Net Assets / Equity A$m 27 70 77 92 151 262 317
Debtor (Net debt / (Cash)) A$m (5) (30) (0) (12) (3) (109) (180)
Gearing (net debt / (Aud + equity)) % (24%) 30% (0%) (15%) (2%) (70%) (132%)
Net Profit (includes discretionary items) A$m 100 100 100 100 100 100 100

Price Target 0.80

22 June 2015

Source: DRM, Macquarie Research, June 2015
Macquarie Quant View

The quant model currently holds a neutral view on Doray Minerals. The strongest style exposure is Valuations, indicating this stock is under-priced in the market relative to its peers. The weakest style exposure is Price Momentum, indicating this stock has had weak medium to long term returns which often persist into the future.

617/1086
Global rank in Materials

Factors driving the Alpha Model
For the comparable firms this chart shows the key underlying styles and their contribution to the current overall Alpha score.

Drivers of Stock Return
Breakdown of 1 year total return (local currency) into returns from dividends, changes in forward earnings estimates and the resulting change in earnings multiple.

What drove this Company in the last 5 years
Which factor score has had the greatest correlation with the company’s returns over the last 5 years.

How it looks on the Alpha model
A more granular view of the underlying style scores that drive the alpha (higher is better) and the percentile rank relative to the sector and market.

Macquarie Alpha Model ranking
A list of comparable companies and their Macquarie Alpha model score (higher is better).

Macquarie Earnings Sentiment Indicator
The Macquarie Sentiment Indicator is an enhanced earnings revisions signal that favours analysts who have more timely and higher conviction revisions. Current score shown below.

Source (all charts): FactSet, Thomson Reuters, and Macquarie Research. For more details on the Macquarie Alpha model or for more customised analysis and screens, please contact the Macquarie Global Quantitative/Custom Products Group (cpg@macquarie.com)
22 June 2015

Important disclosures:

**Recommendation definitions**

Macquarie - Australia/New Zealand
Outperform – return >3% in excess of benchmark return
Neutral – return within 3% of benchmark return
Underperform – return <3% below benchmark return

Benchmark return is determined by long term nominal GDP growth plus 12 month forward market dividend yield.

Macquarie – Asia/Europe
Outperform – expected return >10%
Neutral – expected return from -10% to +10%
Underperform – expected return < -10%

Macquarie First South - South Africa
Outperform – expected return >10%
Neutral – expected return from -10% to +10%
Underperform – expected return < -10%

Macquarie - Canada
Outperform – return >5% in excess of benchmark return
Neutral – return within 5% of benchmark return
Underperform – return <5% below benchmark return

Macquarie - USA
Outperform (Buy) – return >5% in excess of Russell 3000 index return
Neutral (Hold) – return within 5% of Russell 3000 index return
Underperform (Sell) – return <5% below Russell 3000 index return

**Volatility index definition**

This is calculated from the volatility of historical price movements.

**Very high–highest risk** – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.

**High** – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.

**Medium** – stock should be expected to move up or down at least 30–40% in a year.

**Low-medium** – stock should be expected to move up or down at least 25–30% in a year.

**Low** – stock should be expected to move up or down at least 15–25% in a year.

*Applicable to Asia/Australian/NZ/Canada stocks only

**Recommendations** – 12 months

Note: Quant recommendations may differ from Fundamental Analyst recommendations

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**DRM AU vs Small Ordinaries, & rec history**

(all figures in AUD currency unless noted)

Note: Recommendation timeline – if not a continuous line, then there was no Macquarie coverage at the time or there was an embargo period.

Source: FactSet, Macquarie Research, June 2015

**12-month target price methodology**

DRM AU: A$0.80 based on a DCF methodology

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**Company-specific disclosures:**

Important disclosure information regarding the subject companies covered in this report is available at www.macquarie.com/disclosures.

<table>
<thead>
<tr>
<th>Date</th>
<th>Stock Code (BBG code)</th>
<th>Recommendation</th>
<th>Target Price</th>
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<tbody>
<tr>
<td>11-Mar-2015</td>
<td>DRM AU</td>
<td>Outperform</td>
<td>A$0.70</td>
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<tr>
<td>29-Jan-2015</td>
<td>DRM AU</td>
<td>Outperform</td>
<td>A$0.73</td>
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<td>23-Jan-2015</td>
<td>DRM AU</td>
<td>Outperform</td>
<td>A$0.69</td>
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<td>15-Jan-2015</td>
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<td>29-Oct-2014</td>
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<td>15-Nov-2013</td>
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<td>A$0.75</td>
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**Target price risk disclosures:**

**DRM AU:** Any inability to compete successfully in their markets may harm the business. This could be a result of many factors which may include geographic mix and introduction of improved products or service offerings by competitors. The results of operations may be materially affected by global economic conditions generally, including conditions in financial markets. The company is exposed to market risks, such as changes in interest rates, foreign exchange rates and input prices. From time to time, the company will enter into transactions, including transactions in derivative instruments, to manage certain of these exposures.

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