



AUSTRALIA

GOR AU Outperform

Price (at 05:53, 24 Mar 2015 GMT) A\$0.37

Valuation A\$ 0.57

- DCF (WACC 9.0%)

12-month target A\$ 0.55

12-month TSR % +48.6

Volatility Index Very High

GICS sector Materials

Market cap A\$m 220

30-day avg turnover A\$m 0.2

Number shares on issue m 594.9

Investment fundamentals

Year end 30 Jun		2014A	2015E	2016E	2017E
Revenue	m	0.0	0.0	0.0	11.9
EBIT	m	-2.9	-17.0	-10.4	-11.7
Reported profit	m	0.4	-11.5	-6.5	-17.3
Adjusted profit	m	0.4	-11.5	-6.5	-17.3
Gross cashflow	m	0.4	1.4	-0.2	-7.7
CFPS	¢	0.1	0.2	0.0	-0.6
CFPS growth	%	nmf	183.2	nmf	-3210.7
PGCFPS	x	429.4	151.6	nmf	nmf
PGCFPS rel	x	44.04	15.61	nmf	nmf
EPS adj	¢	0.1	-1.9	-0.5	-1.4
EPS adj growth	%	nmf	nmf	72.3	-167.3
PER adj	x	433.1	nmf	nmf	nmf
PER rel	x	23.70	nmf	nmf	nmf
Total DPS	¢	0.0	0.0	0.0	0.0
Total div yield	%	0.0	0.0	0.0	0.0
ROA	%	-8.8	-28.6	-3.5	-2.0
ROE	%	1.3	-22.2	-3.6	-6.0
EV/EBITDA	x	-56.4	-49.0	-105.0	-208.0
Net debt/equity	%	-26.7	-23.3	-69.2	119.5
P/BV	x	5.2	3.2	1.5	1.6

GOR AU vs Small Ordinaries, & rec history



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, March 2015
(all figures in AUD unless noted)

Analyst(s)

Ben Crowley

+61 8 9224 0839

ben.crowley@macquarie.com

Hayden Bairstow

+61 8 9224 0838

hayden.bairstow@macquarie.com

24 March 2015

Macquarie Securities (Australia) Limited

Gold Road Resources

No smoke without fire

Event

- GOR reported a drill intersection of **59m at 3.03g/t gold** from drilling at the company's Smokebush target in the South Yamarna JV.

Impact

- Where there's smoke there's fire.** GOR has released the first assays from RC drilling programme at the company's Smokebush target approximately 50km south of the Gruyere project. Drilling intersected **59m at 3.03g/t gold** from 127m in a wide zone of quartz rich dolerite interpreted to be the central portion of a differentiated dolerite sill. The recent RC drilling is interpreted to be sub-parallel to the mineralisation which would explain the lack of coherent results from the other holes and overstates the thickness of the mineralised intersection which GOR estimates has a true thickness of 20m. Follow up drilling, with holes orientated to the east is underway with assays expected in the June quarter.
- Dolerite extension target to the north.** The nature of the host rocks at Smokebush is significant as some of the largest WA gold deposits are hosted by similar differentiated dolerites. Drilling to date has focused on the 800m of strike identified in the RAB drilling and a clear trend continues to the north which we think offers potential for further gold mineralisation.
- Developing and second mineralised trend.** As with GOR's other exploration successes, Smokebush was developed from first principles. Similar dolerites to those at Smokebush have been identified at Minnie Hills to the south and a clear trend is apparent on the western margin of the Yamarna belt. We estimate there is ~50km of untested prospective strike along this trend.

Earnings and target price revision

- No change to our valuation but we note that GOR's current share price implies only 5cps value for exploration and our valuation only carries 8cps for exploration and undeveloped resources.

Price catalyst

- 12-month price target: A\$0.55 based on a DCF methodology.
- Catalyst: Exploration is and will remain a key catalyst for GOR. Ongoing study work at the company's Gruyere discovery will also be a source of catalysts. A study update examining up-scaled development options is expected midyear and a PFS by the end of 2015. Whilst we believe corporate activity is unlikely before release of the Gruyere PFS we note recent M&A activity in the sector indicates a there are acquisitive players in the market for the right project.

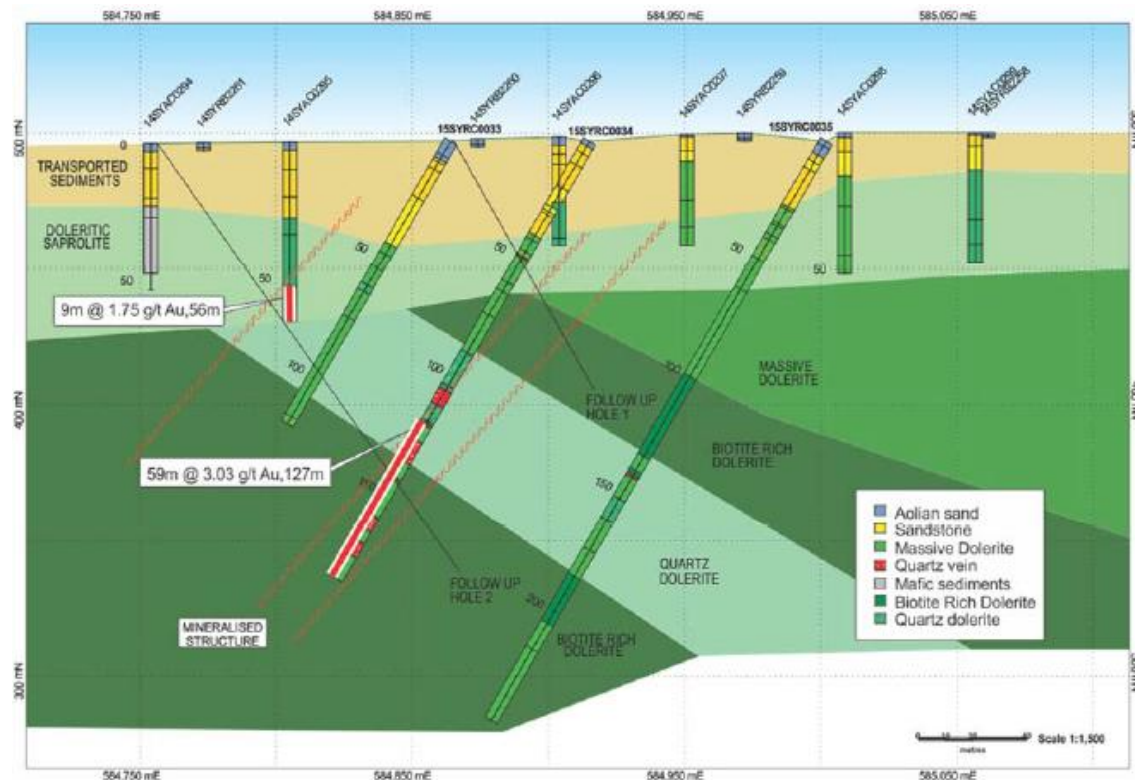
Action and recommendation

- Outperform.** An encouraging result which we believe will be backed up in the next round of drilling. Irrespective of the final outcome of the Smokebush drilling, GOR's ongoing exploration continues to highlight the prospectivity of its substantial ground holding in the Yamarna.

Where there's smoke, there's fire

- GOR has released the first assays from a nine hole 1,380m RC drilling programme at the company's Smokebush target in the South Yamarna Sumitomo JV approximately 50km south of the Gruyere project. Drilling intersected **59m at 3.03g/t** gold from 127m, the hole ended in mineralisation and will be extended. A second intersection of **5m at 1.6g/t** was drilled 400m to the south indicating a continuation of the mineralised structure however, other drill holes failed to deliver consistent results.
- Mineralisation occurs in a wide zone of quartz rich dolerite characterised 'quartz eyes' and interpreted to be the central portion of a differentiated dolerite sill.

Fig 1 Smokebush cross section - drilling sub-parallel to interpreted mineralisation



Source: GOR, Macquarie Research, March 2015

- Regional dip was initially interpreted to be to the east, hence angling drill holes to the west. However, it would appear that the dip is to the east and drilling is sub-parallel to the mineralisation. This explains the erratic drill results and also overstates the thickness on the mineralised intersection. GOR estimates the true thickness of the drill intersection to be in the order of 20m. Follow up drilling, with holes orientated to the east is underway with assays expected in the June quarter.

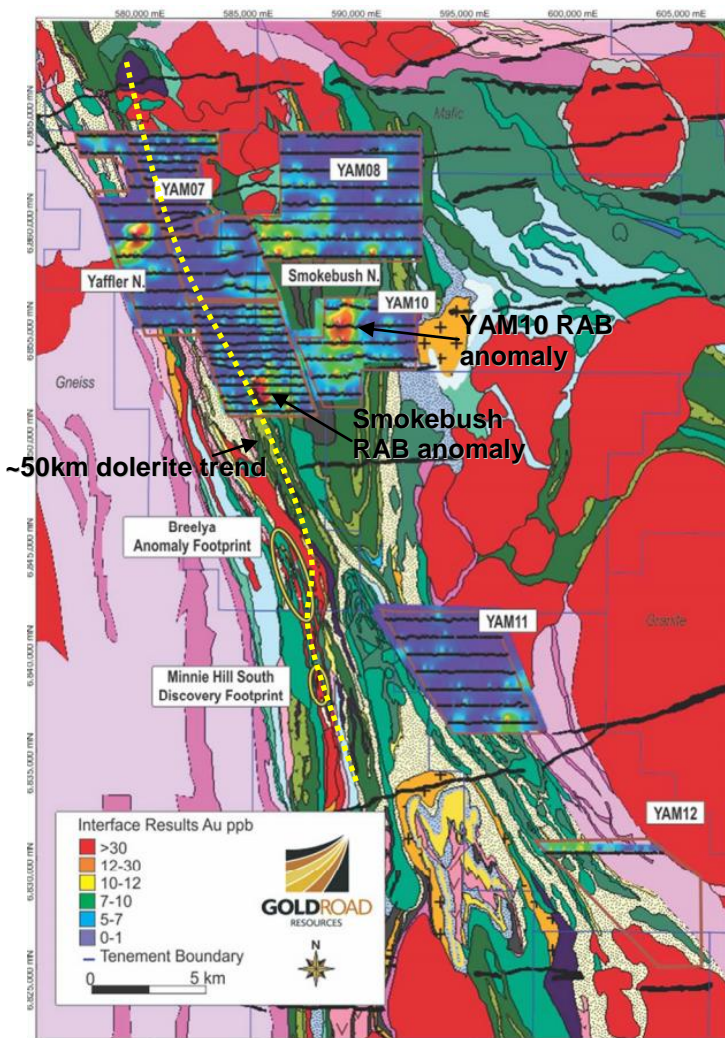
Sumitomo earning 50% for \$8m

- Smokebush is part of the South Yamarna JV with Sumitomo Metal Mining Oceania Pty Ltd (a subsidiary of Sumitomo Metal Mining Co. Limited). Under the JV, Sumitomo can earn up to 50% interest in GOR's South Yamarna tenements, an area covering ~2,900 square kilometres.
- Sumitomo achieved its first earn-in milestone at the end of 2014 after spending \$3.5m. Sumitomo can earn 30% interest by spending \$5 million and is on track to meet this in 1HCY15 and may increase its interest to 50% by spending a further \$3m prior to the end of 2016. After earning its 50%, the JV partners will contribute on an equity basis.

Developing and second mineralised trend

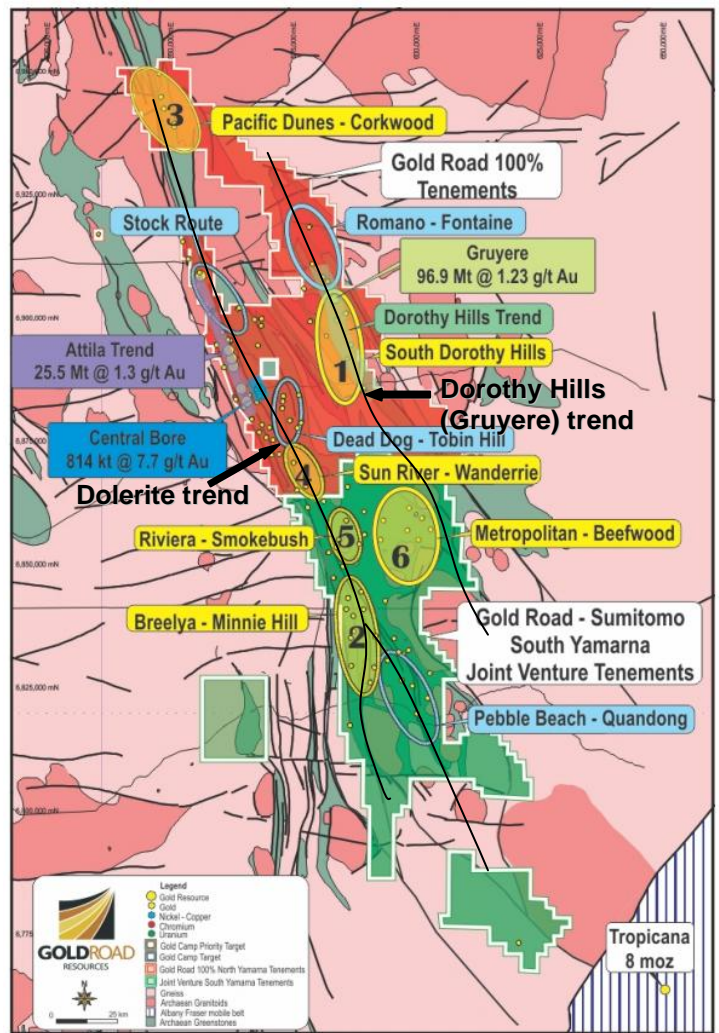
- The Smokebush Dolerite target was developed from a conceptual regional interpretation. The target was first tested with RAB drilling which delineated a clear geochemical anomaly 800m in length. This anomaly was followed up with Aircore drilling which confirmed the presence of in-situ gold returning results of 9m at 1.75g/t and 12m at 0.96g/t.
- Similar dolerites have been identified at Minnie Hills and a clear dolerite trend is apparent on the western margin of the Yamarna belt. We estimate there is ~50km of prospective strike along this trend in the South Yamarna JV with the potential for it to extend to the north into 100% GOR ground.
- There are a number of other prospective targets within the JV that will be tested later in the year including the Metropolitan-Beefwood targets to the east of Smokebush.

Fig 2 Smokebush was first identified in RAB which delineated a clear geochemical anomaly, although the geochemical signature is suppressed we think there is good potential for mineralisation to continue to the north



Source: GOR, Macquarie Research, March 2015

Fig 3 Two mineralised trends are developing – Dorothy Hills (including Gruyere) to the east and the Dolerite trend to the west



Source: GOR, Macquarie Research, March 2015

Smokebush - Highly prospective dolerite target to the north

- The nature of the host rocks at Smokebush is significant as some of the largest WA gold deposits are hosted by similar differentiated dolerites. Drilling to date has focused on the 800m of strike identified in the RAB drilling but we see clear potential for extensions to the north.
- Looking at the images below, which show the magnetic responses from the rock units in the area there is a clear magnetic trend coincident with the geochemical anomaly and drilling results. This continues to the north where it becomes more complex. Although the geochemical signature through this area is suppressed, we think there is good potential for mineralisation to continue to the north along the continuation of the magnetic trend.

Fig 4 Magnetic highs clearly pick out the dolerite which can be seen to continue to the north and become more complex

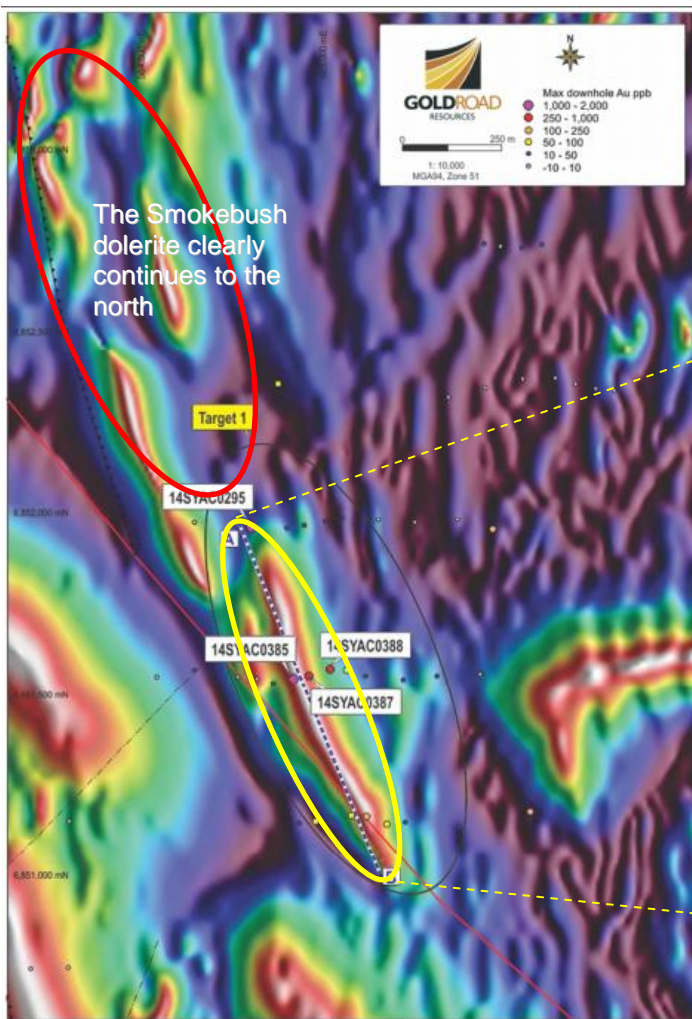
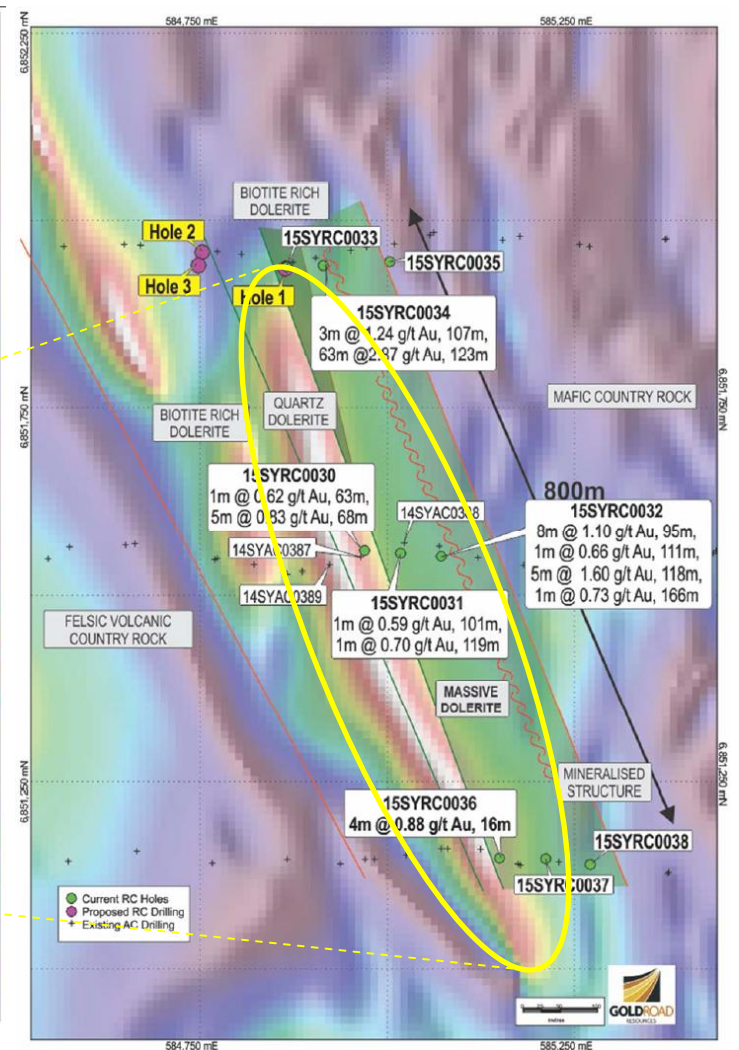


Fig 5 Recent drilling is interpreted to be sub-parallel to the regional dip explaining the inconsistent drill results



Source: GOR, Macquarie Research, March 2015

Source: GOR, Macquarie Research, March 2015

Gold Road Resources

ASX: GOR Price: (A\$ps) 0.36 Year end: Jun Rating: Outperform Up/dn
 Mkt cap: (A\$m) 214 Diluted shares (m) 594.9 Target: 0.55 53%

ASSUMPTIONS		FY11	FY12	FY13	FY14e	FY15e	FY16e	FY17e
Exchange Rate	A\$/US\$	0.99	1.03	1.03	0.92	0.83	0.68	0.71
Spot Gold	(US\$/oz)	1,371	1,672	1,604	1,295	1,236	1,314	1,408
Spot Gold	(A\$/oz)	1,390	1,631	1,563	1,406	1,482	1,939	1,975

RATIO ANALYSIS		FY11	FY12	FY13	FY14e	FY15e	FY16e	FY17e
Diluted share capital	m	432.1	453.0	494.1	512.8	652.0	1,239.5	1,239.5
EPS (diluted and pre sig. items)	A¢	-0.7	-0.7	-4.6	0.1	-1.9	-0.6	-1.4
P/E	x	-49.8x	-54.8x	-7.8x	429.2x	-18.8x	-55.5x	-25.8x
CFPS	A¢	(0.4)	(0.4)	(0.4)	0.2	(2.5)	(0.7)	(2.0)
P/CF	x	-93.6x	-102.7x	-94.6x	160.6x	-14.2x	-48.2x	-17.8x
DPS	A¢	0.0	0.0	0.0	0.0	0.0	0.0	0.0

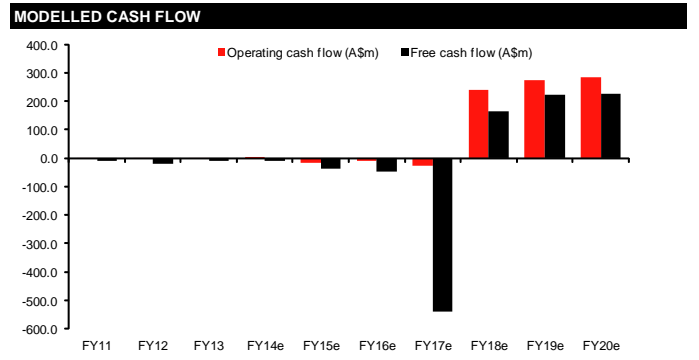
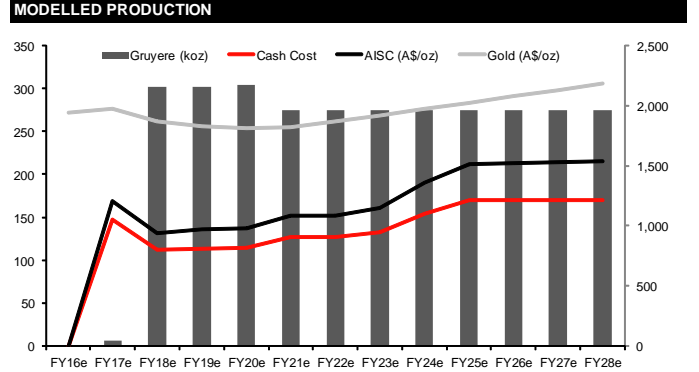
Dividend yield	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Franking Level	%	100%	100%	100%	100%	100%	100%	100%
Book value per share	x	0.05	0.09	0.05	0.07	0.10	0.24	0.23
P/Book value	x	7.3x	4.0x	6.9x	5.1x	3.5x	1.5x	1.6x
R.O.E. (pre sig items)	%	-14%	-7%	-88%	1%	-17%	-2%	-6%
R.O.A. (pre sig items)	%	-17%	-9%	-87%	-7%	-21%	-2%	-2%
Interest Cover	x	9.7x	4.3x	65.3x	8.4x	31.6x	9.0x	-0.9x
EBITDA per share	A\$ps	-0.01	-0.01	-0.05	-0.01	-0.03	-0.01	-0.01
EV/EBITDA	x	-54.8x	-53.3x	-8.7x	-70.6x	-11.6x	-0.9x	-64.4x

EARNINGS		FY11	FY12	FY13	FY14e	FY15e	FY16e	FY17e
Sales Revenue	A\$m	0	0	0	0	0	0	12
Other Revenue	A\$m	0	0	0	0	0	0	0
Total Revenue	A\$m	0	0	0	0	0	0	12
Operating Costs	A\$m	0	0	0	0	0	0	(7)
Operational EBITDA	A\$m	0	0	0	0	0	0	5
Exploration Expense/Write-offs	A\$m	(0)	(0)	(20)	(0)	(13)	(6)	(6)
Corporate & Other Costs	A\$m	(3)	(4)	(4)	(3)	(4)	(4)	(7)
EBITDA	A\$m	(4)	(4)	(24)	(3)	(17)	(10)	(9)
D&A	A\$m	0	0	0	0	0	0	(3)
EBIT	A\$m	(4)	(4)	(24)	(3)	(17)	(10)	(12)
Net Interest	A\$m	0	1	0	0	1	1	(13)
Profit Before Tax	A\$m	(3)	(3)	(23)	(3)	(16)	(9)	(25)
Tax Expense	A\$m	0	0	1	3	5	3	7
Minorities	A\$m	0	0	0	0	0	0	0
Adjusted NPAT	A\$m	(3)	(3)	(23)	0	(12)	(6)	(17)
Significant Items (post tax)	A\$m	0	0	0	0	0	0	0
Reported NPAT	A\$m	(3)	(3)	(23)	0	(12)	(6)	(17)

CASHFLOW		FY11	FY12	FY13	FY14e	FY15e	FY16e	FY17e
Net Profit	A\$m	-3	-3	-23	0	-12	-6	-17
Interest/Tax/D&A	A\$m	(6)	(17)	9	(17)	(5)	(3)	(4)
Working Capital/other	A\$m	7	19	12	17	0	0	(4)
Net Operating Cashflow	A\$m	(2)	(2)	(2)	1	(16)	(9)	(25)
Capex	A\$m	(7)	(18)	(10)	(13)	(31)	(36)	(514)
Investments	A\$m	0	0	0	0	0	0	0
Sale of PPE and Other	A\$m	(0)	(0)	1	3	10	0	0
Free cash flow	A\$m	(8)	(19)	(11)	(9)	(37)	(46)	(539)
Dividends Paid	A\$m	0	0	0	0	0	0	0
Debt	A\$m	0	0	0	0	0	200	155
Equity Issuance	A\$m	16	22	7	10	43	235	0
Other	A\$m	0	0	0	0	0	0	0
Net Financing Cashflow	A\$m	16	22	7	10	43	435	155
Net change in cash	A\$m	8	3	(4)	1	6	389	(384)

BALANCE SHEET		FY11	FY12	FY13	FY14e	FY15e	FY16e	FY17e
Cash	A\$m	10	13	9	10	16	405	21
PP&E & Mine Development	A\$m	1	2	1	1	32	68	579
Exploration	A\$m	11	28	17	27	27	31	38
Total Assets	A\$m	23	43	27	39	80	510	664
Debt	A\$m	0	0	0	0	0	200	355
Total Liabilities	A\$m	1	2	1	3	12	213	384
Total Net Assets / Equity	A\$m	21	41	26	36	68	296	279
Net Debt / (Cash)	A\$m	(10)	(13)	(9)	(10)	(16)	(205)	334
Gearing (net debt/(nd + equity))	%	(84%)	(46%)	(53%)	(36%)	(30%)	(224%)	54%
Gearing (net debt/equity)	%	(46%)	(31%)	(35%)	(27%)	(23%)	(69%)	120%

ATTRIBUTABLE MINE OUTPUT		FY16e	FY17e	FY18e	FY19e	FY20e	FY21e
Gold production (equity)							
Gruyere	(koz)	0.0	6.2	301.5	301.5	304.2	274.9
Total	(koz)	0.0	6.2	301.5	301.5	304.2	274.9
Cash costs							
Gruyere	(A\$/oz)	-	1,053	803	814	818	903
AISC Cash Costs							
Gruyere	(A\$/oz)	-	1,209	939	970	979	1,084
AISC Cash Costs	(A\$/oz)	-	1,209	939	970	979	1,084
Operational EBITDA Contribution (pre hedging)							
Gruyere	A\$m	-	5	322	306	301	253



RESERVES AND RESOURCES (ATTRIBUTABLE)			
Reserves			
Project	Mt	g/t	koz
Gruyere	0.0	0.0	0
Attila - Central Bore	0.0	0.0	0
Total	0.0	0.0	0
Resources			
Project	Mt	g/t	koz
Gruyere	96.9	1.23	3,833.1
Attila - Central Bore	26.3	1.49	1,261.7
Total	96.9	1.23	3,837

EQUITY DCF VALUATION	Macquarie forecasts		Spot prices	
	A\$m	A\$ps	A\$m	A\$ps
Projects				
Gruyere	385	0.31	297	0.24
Undeveloped Resources & exploration	97	0.08	96	0.08
Unpaid capital & new equity	257	0.21	257	0.21
Forwards	0	0.00	0	0.00
Corporate	(48)	(0.04)	(48)	(0.04)
Net cash (debt)	14	0.01	14	0.01
Net Equity Value (@ 10% WACC)	705	0.57	615	0.50
Price Target		0.55		0.50

Important disclosures:

<p>Recommendation definitions</p> <p>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</p> <p>Benchmark return is determined by long term nominal GDP growth plus 12 month forward market dividend yield</p> <p>Macquarie – Asia/Europe Outperform – expected return >+10% Neutral – expected return from -10% to +10% Underperform – expected return <-10%</p> <p>Macquarie First South - South Africa Outperform – expected return >+10% Neutral – expected return from -10% to +10% Underperform – expected return <-10%</p> <p>Macquarie - Canada Outperform – return >5% in excess of benchmark return Neutral – return within 5% of benchmark return Underperform – return >5% below benchmark return</p> <p>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</p>	<p>Volatility index definition*</p> <p>This is calculated from the volatility of historical price movements.</p> <p>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.</p> <p>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.</p> <p>Medium – stock should be expected to move up or down at least 30–40% in a year.</p> <p>Low-medium – stock should be expected to move up or down at least 25–30% in a year.</p> <p>Low – stock should be expected to move up or down at least 15–25% in a year.</p> <p>* Applicable to Asia/Australian/NZ/Canada stocks only</p> <p>Recommendations – 12 months Note: Quant recommendations may differ from Fundamental Analyst recommendations</p>	<p>Financial definitions</p> <p>All "Adjusted" data items have had the following adjustments made: Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests</p> <p>EPS = adjusted net profit / epowa* ROA = adjusted ebit / average total assets ROA Banks/Insurance = adjusted net profit / average total assets ROE = adjusted net profit / average shareholders funds Gross cashflow = adjusted net profit + depreciation *equivalent fully paid ordinary weighted average number of shares</p> <p>All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).</p>
--	--	---

Recommendation proportions – For quarter ending 31 December 2014

	AU/NZ	Asia	RSA	USA	CA	EUR	
Outperform	51.80%	58.06%	45.07%	44.42%	60.54%	46.81%	(for US coverage by MCUSA, 5.29% of stocks followed are investment banking clients)
Neutral	31.80%	27.37%	30.99%	50.10%	35.37%	33.51%	(for US coverage by MCUSA, 3.08% of stocks followed are investment banking clients)
Underperform	16.39%	14.57%	23.94%	5.48%	4.08%	19.68%	(for US coverage by MCUSA, 0.44% of stocks followed are investment banking clients)



12-month target price methodology

GOR AU: A\$0.55 based on a DCF methodology

Company-specific disclosures:

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

Date	Stock Code (BBG code)	Recommendation	Target Price
21-Mar-2015	GOR AU	Outperform	A\$.55
27-Jan-2015	GOR AU	Outperform	A\$.51
15-Jan-2015	GOR AU	Outperform	A\$.57
13-Aug-2014	GOR AU	Outperform	A\$.41

Target price risk disclosures:

GOR 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.

Analyst certification:

The views expressed in this research accurately reflect the personal views of the analyst(s) about the subject securities or issuers and no part of the compensation of the analyst(s) was, is, or will be directly or indirectly related to the inclusion of specific recommendations or views in this research. The analyst principally responsible for the preparation of this research receives compensation based on overall revenues of Macquarie Group Ltd ABN 94 122 169 279 (AFSL No. 318062) (MGL) and its related entities (the Macquarie Group) and has taken reasonable care to achieve and maintain independence and objectivity in making any recommendations.

General disclaimers:

Macquarie Securities (Australia) Ltd; Macquarie Capital (Europe) Ltd; Macquarie Capital Markets Canada Ltd; Macquarie Capital Markets North America Ltd; Macquarie Capital (USA) Inc; Macquarie Capital Securities Ltd and its Taiwan branch; Macquarie Capital Securities (Singapore) Pte Ltd; Macquarie Securities (NZ) Ltd; Macquarie First South Securities (Pty) Limited; Macquarie Capital Securities (India) Pvt Ltd; Macquarie Capital Securities (Malaysia) Sdn Bhd; Macquarie Securities Korea Limited and Macquarie Securities (Thailand) Ltd are not authorized deposit-taking institutions for the purposes of the Banking Act 1959 (Commonwealth of Australia), and their obligations do not represent deposits or other liabilities of Macquarie Bank

Limited ABN 46 008 583 542 (MBL) or MGL. MBL does not guarantee or otherwise provide assurance in respect of the obligations of any of the above mentioned entities. MGL provides a guarantee to the Monetary Authority of Singapore in respect of the obligations and liabilities of Macquarie Capital Securities (Singapore) Pte Ltd for up to SGD 35 million. This research has been prepared for the general use of the wholesale clients of the Macquarie Group and must not be copied, either in whole or in part, or distributed to any other person. If you are not the intended recipient you must not use or disclose the information in this research in any way. If you received it in error, please tell us immediately by return e-mail and delete the document. We do not guarantee the integrity of any e-mails or attached files and are not responsible for any changes made to them by any other person. MGL has established and implemented a conflicts policy at group level (which may be revised and updated from time to time) (the "Conflicts Policy") pursuant to regulatory requirements (including the FCA Rules) which sets out how we must seek to identify and manage all material conflicts of interest. Nothing in this research shall be construed as a solicitation to buy or sell any security or product, or to engage in or refrain from engaging in any transaction. In preparing this research, we did not take into account your investment objectives, financial situation or particular needs. Macquarie salespeople, traders and other professionals may provide oral or written market commentary or trading strategies to our clients that reflect opinions which are contrary to the opinions expressed in this research. Macquarie Research produces a variety of research products including, but not limited to, fundamental analysis, macro-economic analysis, quantitative analysis, and trade ideas. Recommendations contained in one type of research product may differ from recommendations contained in other types of research, whether as a result of differing time horizons, methodologies, or otherwise. Before making an investment decision on the basis of this research, you need to consider, with or without the assistance of an adviser, whether the advice is appropriate in light of your particular investment needs, objectives and financial circumstances. There are risks involved in securities trading. The price of securities can and does fluctuate, and an individual security may even become valueless. International investors are reminded of the additional risks inherent in international investments, such as currency fluctuations and international stock market or economic conditions, which may adversely affect the value of the investment. This research is based on information obtained from sources believed to be reliable but we do not make any representation or warranty that it is accurate, complete or up to date. We accept no obligation to correct or update the information or opinions in it. Opinions expressed are subject to change without notice. No member of the Macquarie Group accepts any liability whatsoever for any direct, indirect, consequential or other loss arising from any use of this research and/or further communication in relation to this research. Clients should contact analysts at, and execute transactions through, a Macquarie Group entity in their home jurisdiction unless governing law permits otherwise. The date and timestamp for above share price and market cap is the closed price of the price date. #CLOSE is the final price at which the security is traded in the relevant exchange on the date indicated.

Country-specific disclaimers:

Australia: In Australia, research is issued and distributed by Macquarie Securities (Australia) Ltd (AFSL No. 238947), a participating organisation of the Australian Securities Exchange. **New Zealand:** In New Zealand, research is issued and distributed by Macquarie Securities (NZ) Ltd, a NZX Firm.

Canada: In Canada, research is prepared, approved and distributed by Macquarie Capital Markets Canada Ltd, a participating organisation of the Toronto Stock Exchange, TSX Venture Exchange & Montréal Exchange. Macquarie Capital Markets North America Ltd., which is a registered broker-dealer and member of FINRA, accepts responsibility for the contents of reports issued by Macquarie Capital Markets Canada Ltd in the United States and sent to US persons. Any US person wishing to effect transactions in the securities described in the reports issued by Macquarie Capital Markets Canada Ltd should do so with Macquarie Capital Markets North America Ltd. The Research Distribution Policy of Macquarie Capital Markets Canada Ltd is to allow all clients that are entitled to have equal access to our research. **United Kingdom:** In the United Kingdom, research is issued and distributed by Macquarie Capital (Europe) Ltd, which is authorised and regulated by the Financial Conduct Authority (No. 193905).

Germany: In Germany, this research is issued and/or distributed by Macquarie Capital (Europe) Limited, Niederlassung Deutschland, which is authorised and regulated by the UK Financial Conduct Authority (No. 193905), and in Germany by BaFin. **France:** In France, research is issued and distributed by Macquarie Capital (Europe) Ltd, which is authorised and regulated in the United Kingdom by the Financial Conduct Authority (No. 193905). **Hong Kong & Mainland China:** In Hong Kong, research is issued and distributed by Macquarie Capital Securities Ltd, which is licensed and regulated by the Securities and Futures Commission. In Mainland China, Macquarie Securities (Australia) Limited Shanghai Representative Office only engages in non-business operational activities excluding issuing and distributing research. Only non-A share research is distributed into Mainland China by Macquarie Capital Securities Ltd.

Japan: In Japan, research is issued and distributed by Macquarie Capital Securities (Japan) Limited, a member of the Tokyo Stock Exchange, Inc. and Osaka Securities Exchange Co. Ltd (Financial Instruments Firm, Kanto Financial Bureau (kin-sho) No. 231, a member of Japan Securities Dealers Association and The Financial Futures Association of Japan and Japan Investment Advisers Association). **India:** In India, research is issued and distributed by Macquarie Capital Securities (India) Pvt. Ltd. (CIN: U65920MH1995PTC090696), formerly known as *Macquarie Capital (India) Pvt. Ltd.*, 92, Level 9, 2 North Avenue, Maker Maxity, Bandra Kurla Complex, Bandra (East), Mumbai – 400 051, India, which is a SEBI registered stockbroker having membership with National Stock Exchange of India Limited (INB231246738) and BSE Limited (INB011246734).

Malaysia: In Malaysia, research is issued and distributed by Macquarie Capital Securities (Malaysia) Sdn. Bhd. (Company registration number: 463469-W) which is a Participating Organisation of Bursa Malaysia Berhad and a holder of Capital Markets Services License issued by the Securities Commission. **Taiwan:** In Taiwan, research is issued and distributed by Macquarie Capital Securities Ltd, Taiwan Branch, which is licensed and regulated by the Financial Supervisory Commission. No portion of the report may be reproduced or quoted by the press or any other person without authorisation from Macquarie. Nothing in this research shall be construed as a solicitation to buy or sell any security or product. Research Associate(s) in this report who are registered as Clerks only assist in the preparation of research and are not engaged in writing the research. **Thailand:** In Thailand, research is produced, issued and distributed by Macquarie Securities (Thailand) Ltd. Macquarie Securities (Thailand) Ltd. is a licensed securities company that is authorized by the Ministry of Finance, regulated by the Securities and Exchange Commission of Thailand and is an exchange member of the Stock Exchange of Thailand. The Thai Institute of Directors Association has disclosed the Corporate Governance Report of Thai Listed Companies made pursuant to the policy of the Securities and Exchange Commission of Thailand. Macquarie Securities (Thailand) Ltd does not endorse the result of the Corporate Governance Report of Thai Listed Companies but this Report can be accessed at: <http://www.thai-iod.com/en/publications.asp?type=4>.

South Korea: In South Korea, unless otherwise stated, research is prepared, issued and distributed by Macquarie Securities Korea Limited, which is regulated by the Financial Supervisory Services. Information on analysts in MSKL is disclosed at <http://dis.kofia.or.kr/websquare/index.jsp?w2xPath=/wg/fundMgr/DISFundMgrAnalystStut.xml&divisionId=MDIS0300200100000&serviceld=SDIS03002001000>. **South Africa:** In South Africa, research is issued and distributed by Macquarie First South Securities (Pty) Limited, a member of the JSE Limited. **Singapore:** In Singapore, research is issued and distributed by Macquarie Capital Securities (Singapore) Pte Ltd (Company Registration Number: 198702912C), a Capital Markets Services license holder under the Securities and Futures Act to deal in securities and provide custodial services in Singapore. Pursuant to the Financial Advisers (Amendment) Regulations 2005, Macquarie Capital Securities (Singapore) Pte Ltd is exempt from complying with sections 25, 27 and 36 of the Financial Advisers Act. All Singapore-based recipients of research produced by Macquarie Capital (Europe) Limited, Macquarie Capital Markets Canada Ltd, Macquarie First South Securities (Pty) Limited and Macquarie Capital (USA) Inc. represent and warrant that they are institutional investors as defined in the Securities and Futures Act. **United States:** In the United States, research is issued and distributed by Macquarie Capital (USA) Inc., which is a registered broker-dealer and member of FINRA. Macquarie Capital (USA) Inc. accepts responsibility for the content of each research report prepared by one of its non-US affiliates when the research report is distributed in the United States by Macquarie Capital (USA) Inc. Macquarie Capital (USA) Inc.'s affiliate's analysts are not registered as research analysts with FINRA, may not be associated persons of Macquarie Capital (USA) Inc., and therefore may not be subject to FINRA rule restrictions on communications with a subject company, public appearances, and trading securities held by a research analyst account. Information regarding futures is provided for reference purposes only and is not a solicitation for purchases or sales of futures. Any persons receiving this report directly from Macquarie Capital (USA) Inc. and wishing to effect a transaction in any security described herein should do so with Macquarie Capital (USA) Inc. Important disclosure information regarding the subject companies covered in this report is available at www.macquarie.com/research/disclosures, or contact your registered representative at 1-888-MAC-STOCK, or write to the Supervisory Analysts, Research Department, Macquarie Securities, 125 W. 55th Street, New York, NY 10019.

© Macquarie Group

© Macquarie Group

© Macquarie Group

Auckland Tel: (649) 377 6433	Bangkok Tel: (662) 694 7999	Calgary Tel: (1 403) 294 9541	Denver Tel: (303) 952 2800	Frankfurt Tel: (069) 509 578 000	Geneva Tel: (41) 22 818 7777	Hong Kong Tel: (852) 2823 3588
Jakarta Tel: (62 21) 515 1818	Johannesburg Tel: (2711) 583 2000	Kuala Lumpur Tel: (60 3) 2059 8833	London Tel: (44 20) 3037 2000	Manila Tel: (63 2) 857 0888	Melbourne Tel: (613) 9635 8139	Mumbai Tel: (91 22) 6653 3000
Munich Tel: (089) 2444 31800	New York Tel: (1 212) 231 2500	Paris Tel: (33 1) 7842 3823	Perth Tel: (618) 9224 0888	Seoul Tel: (82 2) 3705 8500	Shanghai Tel: (86 21) 6841 3355	Singapore Tel: (65) 6601 1111
Sydney Tel: (612) 8232 9555	Taipei Tel: (886 2) 2734 7500	Tokyo Tel: (81 3) 3512 7900	Toronto Tel: (1 416) 848 3500	Vancouver Tel: (1 604) 605 3944		

Available to clients on the world wide web at www.macquarieresearch.com and through Thomson Financial, FactSet, Reuters, Bloomberg, and CapitalIQ.



Research

Head of Equity Research

John O'Connell (Global)	(612) 8232 7544
Paul Checchin (Australia)	(612) 8232 4197

Retail / Consumer

Bryan Raymond	(612) 8232 2740
---------------	-----------------

Energy

Kirit Hira	(612) 8232 9692
------------	-----------------

ESG

Deana Mitchell	(612) 8232 4576
----------------	-----------------

Financials

Banks

Michael Wiblin	(612) 8232 6089
Anita Stanley	(612) 8232 9869

Insurance & Diversified Financials

Tim Lawson	(612) 8237 7332
Bryan Raymond	(612) 8232 2740

Healthcare / Food & Bev

Dr Craig Collie	(612) 8232 4130
Ben Tedder	(612) 8232 5387

Industrials

Capital Goods

John Purtell	(612) 8232 8633
--------------	-----------------

Infrastructure

Ian Myles	(612) 8232 4157
-----------	-----------------

Transportation

Sam Dobson	(612) 8232 9986
------------	-----------------

Chemicals, D&C, Packaging, Builders, Steel

John Purtell	(612) 8232 8633
Peter Steyn	(612) 8232 5144
Pelen Ji	(612) 8237 3523

Resources

Hayden Bairstow	(618) 9224 0838
Ben Crowley	(618) 9224 0839

Real Estate

Paul Checchin	(612) 8232 4197
Rob Freeman	(612) 8237 1152

Telcos / Media / Tourism & Leisure

Andrew Levy	(612) 8232 5165
Andrew Russell	(612) 8232 9390

Utilities

Ian Myles	(612) 8232 4157
-----------	-----------------

Commodities & Precious Metals

Colin Hamilton (Global)	(44 20) 3037 4061
Jim Lennon (London)	(44 20) 3037 4271
Graeme Train (Shanghai)	(8621) 2412 9035

New Zealand

Stephen Hudson	(649) 363 1414
Warren Doak	(649) 363 1416
Daniel Frost	(649) 363 1474
Nick Mar	(649) 363 1476
Andrew Levy (Telecommunications)	(612) 8232 5165

Emerging Leaders – Industrials

Adam Simpson	(612) 8232 4439
Andrew Wackett	(618) 9224 0867
Jodie Bannan	(612) 8232 2999
Jennifer Kruk	(612) 8232 6422
Michael Higgins	(612) 8232 3208

Quantitative

Gurvinder Brar (Global)	(44 20) 3037 4036
John Conomos (Australia)	(612) 8232 5157
Jeremy Lamplough	(612) 8232 1060

Data Services

Sheridan Duffy	(612) 8232 9786
----------------	-----------------

Economics and Strategy

Richard Gibbs (Head of Economics)	(612) 8232 3935
James McIntyre (Australia)	(612) 8232 8930
Rikki Bannan (Strategy)	(612) 8232 8676

Find our research at

Macquarie:	www.macquarie.com.au/research
Thomson:	www.thomson.com/financial
Reuters:	www.knowledge.reuters.com
Bloomberg:	MAC GO
Factset:	http://www.factset.com/home.aspx
CapitalIQ	www.capitaliq.com
Contact Gareth Warfield for access	(612) 8232 3207

See and hear our analysts at

www.macquarie.com.au/macquariedigital

Toll free from overseas

Canada	1800 989 8159
Hong Kong	800 96 2049
Japan	0053 161 6437
New York	1888 622 7862
Singapore	800 616 1037

Email addresses

FirstName.Surname@macquarie.com

eg. john.oconnell@macquarie.com

Sales

Equities

Dan Ritchie (Australia)	(612) 8232 3124
Dave Robertson (New Zealand)	(649) 363 1498

Sales

Matt Nacard (Head of Sales)	(612) 8232 8518
Kristen Edmond (Australia)	(612) 8232 3111
Gavin Maher (Australia)	(612) 8232 4151
Nick Rehak (Australia)	(612) 8232 4053
Charlotte Edelman (Australia)	(612) 8232 4565
Mike Johnson (Desk Head – Hong Kong)	(852) 3922 2050
Adam Millhouse (Hong Kong)	(852) 3922 2055
Dan Pittorino (Desk Head - London)	(44 20) 3037 4831
Andrew Haigh (London)	(44 20) 3037 4843
Clare McCartney (London)	(44 20) 3037 4833
Brendan Waller (Desk Head - Melbourne)	(613) 9635 8177
Leighton Patrick (Desk Head - New York)	(1 212) 231 2552
Rowly Hirst (New York)	(1 212) 231 2553
Michael McNair (New York)	(1 212) 231 2571

Sales Trading

Ben Clifford (Head of Sales Trading)	(612) 8232 4012
Sam Molina (Sydney)	(612) 8232 5935
John Ogle (Sydney)	(612) 8232 3118
Francis Sarks (Sydney)	(612) 8232 4458
Antony Kirwan (Sydney)	(612) 8232 4003
John Alessi (Melbourne)	(613) 9635 9183
Jon Holland (Auckland)	(649) 363 1471
Mike Keen (London)	(44 20) 3037 4905
Andrew Donald (Melbourne)	(613) 9635 8270

Trading

Tim Shaw (Desk Head – Sydney).	(612) 8232 4386
--------------------------------	-----------------

Specialist Sales

Julia Thomas (Property)	(613) 9635 9323
Phil Zammit (Emerging Leaders)	(612) 8232 3122
Owen Johnston (Emerging Leaders)	(612) 8232 3328

Alternative Strategies

Kurt Dalton (Merger Arb)	(612) 8232 5943
Greg Mann (Equity Finance)	(612) 8232 1820
Shannon Donohoe (Stock Borrow & Loan)	(612) 8232 6997

Syndication

Paul Staines	(612) 8232 7781
Angus Firth	(612) 8232 4039
Kate Herfort	(612) 8232 5956

Fixed Income, Currencies & Commodities

James Mactier (Metals & Energy)	(618) 9224 0612
Will Richardson (Currencies)	(612) 8232 3666
Sarah Milne (Fixed Income)	(44 20) 3037 4625
David Castle (Fixed Income)	(612) 8232 8300
Ian Miller (Futures)	(612) 8232 3555