

JUPITER MINES LTD (JMS)

Spot manganese prices fall

The manganese price has fallen to US\$2.70/dmtu (fob Port Elizabeth, 37% Mn). This is the lowest price for several years. It is a change for Jupiter Mines Ltd (JMS) since listing, as previously the spot price has always been well above consensus estimates and so the stock has always carried the suggestion of upside risks to dividends. The spot price is now lower than our base case estimates, and hence medium dividend risk is skewed to the downside (the 1H20 DPS – expected to be declared this week - could still be slightly higher than our estimate).

We estimate that on that on spot manganese prices, JMS can sustain a 1cps annual dividend. The stock is still cum a dividend for the first half (we assume 4cps), and on spot prices we estimate JMS to pay 0.5-1.0cps in 2H (we had assumed 1.75cps on base numbers). For FY21, we assume 1.0cps on spot prices (3.75cps on base case assumptions).

We expect a 4cps 1H20 DPS (expected to be declared this week). We previously expected a 2H DPS of 1.75cps, but have lowered that to 1.0cps.

Retain Buy recommendation

The Tshipi mine is a low cost operation, and South Africa is a low cost manganese jurisdiction with a large ability for swing production. We assume a rebound in manganese prices relatively shortly (which it has done many times before), as some swing production could be turned off at current manganese prices. Our base valuation is 42cps. Our spot valuation is 19cps.

We have a 40cps twelve month target + 5.0cps DPS (4.0cps + 1.0cps).

Tshipi (49.9%)	Unit	28 Feb 19		29 Feb 20			28 Feb 21	
		actual	Old	New	% chg	Old	New	% chg
Production (100%)	Mtpa	3.4	3.1	3.1	2.3%	3.0	3.0	0.0%
Received Price	US\$/dmtu	5.7	5.0	4.3	-14.6%	4.5	4.5	0.0%
AUD	US\$/A\$	0.72	0.68	0.68	0.0%	0.70	0.70	0.0%
ZAR	Rand/US\$	14.2	14.6	14.6	0.0%	14.6	14.6	0.0%
Tshipi Revenue (49.9%)	A\$m	497.9	407.9	356.4	-12.6%	347.9	347.9	0.0%
	ZARm	5079.4	4079.4	3564.0	-12.6%	3555.6	3555.6	0.0%
Tshipi Cash Costs (49.9%)	A\$m	-236.4	-216.7	-206.3	-4.8%	-209.6	-209.6	0.0%
	ZARm	-2411.8	-2167.3	-2063.5	-4.8%	-2142.2	-2142.2	0.0%
	ZAR/t	-1412.0	-1417.2	-1318.4	-7.0%	-1429.6	-1429.6	0.0%
Tshipi EBITDA (49.9%)	A\$m	261.5	191.2	150.0	-21.5%	138.3	138.3	0.0%
- margin		52.5%	47%	42%	-10.2%	40%	40%	0.0%
Tshipi, 100%, EBITDA	A\$m	522.9	383.2	300.7	-21.5%	277.1	277.1	0.0%
Tshipi, 100%, Cash dist	A\$m	316.1	272.1	214.4	-21.2%	163.7	163.7	0.0%
% of EBITDA		60%	71%	71%	0.4%	59%	59%	0.0%
Tshipi, 100%, Cash dist	ZARm	3,224	2,722	2,144	-21.2%	1,673	1,673	0.0%
Tshipi, 100%, EBITDA	ZARm	5345.9	3832.0	3007.0	-21.5%	2832.4	2832.4	0.0%
Tshipi, 100%, EBITDA	US\$	376.9	262.2	205.8	-21.5%	194.0	194.0	0.0%
Tshipi NPAT (49.9%)	A\$m	189.5	132.6	103.0	-22.3%	94.5	94.5	0.0%
payout		83%	103%	104%	1.4%	87%	87%	0.0%
DPS		0.075	0.0575	0.05	-13.0%	0.0375	0.0375	0.0%

Source: Hartleys Estimates

JMS.asx

	29 Oct 2019
Share Price	\$0.315
Valuation	\$0.42
12mth price target	\$0.40
Brief Business Description:	

Manganese producer in Sth Africa (via 49.9% interest in Tshipi mine)

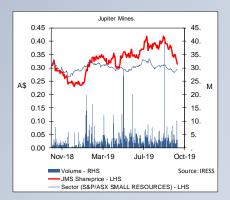
Hartleys Brief Investment Conclusion

Long mine life, low cost and highly incentivised management for shareholder friendly capital management. Risks are Sth Africa sovereign risk & manganese price volatility.

Chairman & MD

Brian Gilbertson (Chairman)	
Priyank Thapliyal (CEO)	
Top Shareholders	
AMCI	17.2%
Stichting Pensioenfonds	12.9%
Posco	6.9%

Company Address Level 10, 16 St Georges Terrace Perth WA, 6000, Australia 1959.0m Issued Capital 1959.0m - fully diluted Market Cap A\$617.1m - fully diluted A\$617.1m Cash (31 Aug 19p) A\$133.0m Debt (31 Aug 19p) A\$0.0m EV A\$484.1m Mt Mn grade Resources (Mt) 459.5 33% 86.41 36.32 Reserves (Mt)



Authors Trent Barnett Resource Analyst Ph: +61 8 9268 3052 E: trent.barnett@hartleys.com.au

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Jupiter Mines Ltd					
JMS					
Key Market Information					
Share price					A\$0.315
Issued Capital					1959.0m
Options, performance rights and pa	artly paid share	is ITM			0.0m
Options, performance rights and pa	artly paid share	s			0.0m
Issued Capital (fully diluted inc. all	options)				1959.0m
Issued Capital (fully diluted inc. all	options and ne	w capital)			1959.0m
Net Cash					\$133.0m
Twelve month price target					A\$0.40
Valuation					A\$0.42
Tshipi (49.9%)	Unit	28 Feb 18a	28 Feb 19a	29 Feb 20f	28 Feb 21
Tshipi Revenue (49.9%)	A\$m, CFR	371.4	497.9	356.4	347.9
	ZARm	3659.7	5079.4	3564.0	3555.6
Tshipi Cash Costs (49.9%)	A\$m CFR	-214.2	-236.4	-206.3	-209.6
	ZARm	-2110.8	-2411.8	-2063.5	-2142.2
Tshipi EBITDA (49.9%)	A\$m	157.2	261.5	150.0	138.3
- margin		42%	53%	42%	40%
Tshipi, 100%, EBITDA	A\$m		524.0	300.7	277.1
Tshipi, 100%, Cash dist	A\$m	161.0	316.1	214.4	163.7
% of EBITDA			60%	71%	59%
Tshipi, 100%, EBITDA	ZARm		5345.9	3007.0	2832.4
Tshipi, 100%, EBITDA	US\$		376.9	205.8	194.0
Tshipi, 100%, EBITDA - reported	A\$m		585.3	344.4	321.0
Tabini NDAT (40.0%)	A\$m	96.3	189.5	103.0	94.5
Tshipi NPAT (49.9%) payout	Аэш	90.3 84%	83%	103.0	94.5 87%
payour		0470	0070	10470	0770
JMS	Unit	28 Feb 18a	28 Feb 19a	29 Feb 20f	28 Feb 211
JMS Reported Revenue	A\$m	-0.4	0.0		
JMS Reported COGS	A\$m	0.3	0.0		
JMS Reported GP	A\$m	-0.1	0.0		
JMS Reported Profit	A\$m	92.2	142.2		
JMS Balance Sheet	Unit	28 Feb 18a	28 Feb 19a	29 Feb 20f	28 Feb 21f
Cash	A\$m	76.5	72.8	44.5	79.0

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Directors				Company	Informatio
Brian Gilbertson (Chairman)			Level 1	0, 16 St Georg	
Priyank Thapliyal (CEO)				Perth WA, 60	
Paul Murray (Non-exec) Andrew Bell (Non-exec)					8 9346 55 8 9481 59
Yeongjin Heo (Non-exec, Posco Nomin	ee)		v	Veb: www.jupit	
Hans Mende (Non-exec, AMCI nomine				· · · · · · · · · · · · · · · · · ·	
Melissa North - CFO					
Top Shareholders					
AMCI					17.2
Stichting Pensioenfonds Posco					12.9 6.9
					0.0
D		0/ 88		A 44 - 11	
Reserves & Resources Measured	Mt 103	% Mn 34.1			able to JN Atrib: 51N
Indicated	119	33.5			S Atrib: 511
Inferred	237	32.5			Atrib: 119N
TOTAL Resources	460	33.1		JMS A	trib: 229M
Reserve	86	36.3	00 5 1		Atrib: 43M
Production Summary	Unit Mt	28 Feb 18a	28 Feb 18a	29 Feb 20f	28 Feb 2
Mill Throughput Saleable Product	Mt Mt	3.8 3.4	3.8 3.4	3.4 3.1	3.3 3.0
- grade Mn	Mt	36.5%	36.5%	36.5%	36.5
Saleable Product (attrib to JMS)	Mt	1.7	1.7	1.6	1
Mass recovery		91.0%	90.3%	91.0%	91.0
Mine Life	%	49.25	49.25	47.25	46.2
Assumed Mine Inventory (end)	Mt	135.2	135.2	127.8	124.
Costs Cost per milled tonne	Unit A\$/t	28 Feb 18a 108.9	28 Feb 18a 108.1	29 Feb 20f	28 Feb 2 114.
EBITDA / tonne milled ore	A\$/t	83.6	138.0	87.1	83.
	US\$/t	64.8	99.3	59.6	58.
Total cost / tonne product cfr	A\$/t	125	138	132	14
	ZAR/t	1,236	1,412	1,318	1,43
	ZAR\$/dmtu	34	39	36	3
	US\$/t	97	100	90	9
Price Assumptions	US\$/dmtu Unit	2.7 28 Feb 18a	2.7 28 Feb 19a	2.5 29 Feb 20f	2. 28 Feb 2
AUDUSD	A\$/US\$	0.78	0.72	0.68	0.70
USDZAR		12.71	14.18	14.61	14.60
AUDZAR		9.85	10.20	10.00	10.22
Manganese: 44% benchmark cfr	US\$/dmtu	6.32	7.31	5.13	5.09
Manganese: 44% benchmark cfr Iron Ore 62% benchmark cfr	US\$/t	278 66.0	322 73.6	226 91.5	224 73.2
from One 62% benchmark cm	US\$/t	00.0	73.0	51.5	13.2
Tshipi received price cfr	US\$/t	168.6	209.7	155.8	162.5
	US\$/dmtu	4.6	5.7	4.3	4.5
	ZAR\$/dmtu	58.7	81.5	62.4	65.0
	A\$/dmtu	6.0	8.0	6.2	6.4
Valuation multiples @ 0.315 EV/EBITDA		28 Feb 18a	28 Feb 19a	29 Feb 20a	28 Feb 21
Div Yield	x %	3.1 0.0%	1.9 23.8%	3.2 15.9%	3. 11.9
Hedging	Unit	28 Feb 18a	28 Feb 19f	29 Feb 20f	28 Feb 2
none				-	
Sensitivity Analysis					
		Valuation	FY21 p	pro-froma EBI	TDA
Base Case Spot Prices		0.42 0.19 (-54.5%)		138.3	46.1 (-66.79
Spot USD/AUD 0.68, USD/ZAR 14.6,	44% Mn CFR \$3.7/		b Sth Africa \$		
AUDUSD +/10%		0.52 (-19.9% / 24		.8 / 170.6 (-19	.1% / 23.4%
Manganese +/10%	0.53 /	0.31 (25.7% / -2	5.7%) 171	.8 / 104.7 (24.	3% / -24.3%
Production +/10%	0.51 /	0.33 (21.7% / -2	1.7%) 167	.1 / 109.4 (20.	9% / -20.99
Unpaid Capital		Sec.	Aug p=1 **	/ ord	
Year Expires 28-Feb-19		<u>\$m</u> 0.0	Avg price 9 0.00	<u>6 ord</u> 0%	
29-Feb-20		0.0	0.00	0%	
28-Feb-21		0.0	0.00	0%	
28-Feb-22		0.0	0.00	0%	
28-Feb-23		0.0	0.00	0%	
TOTAL		0.0	nm	0%	
Valuation	of 100/1				A\$/s
49.9% Tshipi (pre-tax NAV at disc. rate Tshipi Tax (NPV future liability)	: UI 10%)				0.9 -0.1
Marketing					-0.
Other Assets/Exploration					0.0
Forwards					0.0
Corporate Overheads					-0.0
Net Cash (Debt)					0.0
Withholding Tax					-0.0
Options & Other Equity					0.0
Ontines & Other Family					

JMS	Unit	28 Feb 18a	28 Feb 19a	29 Feb 20f	28 Feb 21f
JMS Reported Revenue	A\$m	-0.4	0.0		
JMS Reported COGS	ASm	0.3	0.0		
JMS Reported GP	A\$m	-0.1	0.0		
JMS Reported Profit	A\$m	92.2	142.2		
JMS Balance Sheet	Unit	28 Feb 18a	28 Feb 19a	29 Feb 20f	28 Feb 21f
Cash	A\$m	76.5	72.8	44.5	79.0
Other Current Assets	ASm	45.9	85.2	85.2	85.2
Total Current Assets	A\$m	122.5	158.0	129.7	164.2
Property, Plant & Equip.	A\$m	0.0	0.0	0.0	0.0
Exploration	ASm	8.7	10.8	10.8	10.8
Investments/other	ASm	386.6	424.8	424.8	424.8
Tot Non-Curr. Assets	A\$m	395.3	435.6	435.6	435.6
Total Assets	A\$m	517.8	593.6	565.2	599.7
Short Term Borrowings	A\$m	-			
Other	A\$m	49.1	132.9	132.9	132.9
Total Curr. Liabilities	A\$m	49.1	132.9	132.9	132.9
Long Term Borrowings	A\$m	-			
Other	A\$m	2.6	51.2	51.2	51.2
Total Non-Curr. Liabil.	A\$m	2.6	51.2	51.2	51.2
Total Liabilities	A\$m	51.6	184.1	184.1	184.1
Net Assets	A\$m	466.2	409.5	381.2	415.7
Net Debt (net cash)	A\$m	-76.5	-72.8	-44.5	-79.0
		10.0	72.0	11.0	10.0
JMS Cashflow	Unit	28 Feb 18a	28 Feb 19a	29 Feb 20f	28 Feb 21
Operating Cashflow	A\$m	90.6	158.4	104.2	78.4
Income Tax Paid	A\$m	0.0	-12.4	-5.2	-4.7
Interest & Other	A\$m	0.3	0.3	0.0	0.0
Operating Activities	A\$m	90.9	146.4	99.0	73.7
Property, Plant & Equip.	A\$m	0.0	0.0	0.0	0.0
- off JMS b/s (ie Tshipi)		0.0	-6.6	-6.5	-6.5
Exploration and Devel.	ASm	-0.9	-0.9	0.0	0.0
Other	A\$m	3.1	0.0	0.0	0.0
Investment Activities	A\$m	2.2	-0.9	0.0	0.0
Borrowings	A\$m	0.0	0.0	0.0	0.0
Equity or "tbc capital"	ASm	-102.4	-51.1	0.0	0.0
Dividends Paid	A\$m	-102.4	-97.9	-127.3	-39.2
Financing Activities	A\$m	-102.4	-97.9	-127.3	-39.2
Tinaneing Activities	ΑψIII	-102.4	-140.1	-127.5	-55.1
Net Cashflow	A\$m	-9.3	-3.6	-28.3	34.5
Shares	Unit	28 Feb 18a	28 Feb 19a	29 Feb 20f	28 Feb 21
Ordinary Shares - End	m	2064.5	1959.0	1959.0	1959.0
Ordinary Shares - Weighted	m	2173.2	1967.8	1959.0	1959.0
Diluted Shares - Weighted	m	2173.2	1967.8	1959.0	1959.0
Diluted Onares - Weighted	m				
· · · · · ·	Unit	28 Feb 18a	28 Feb 19a	29 Feb 20f	28 Feb 21
Ratio Analysis			28 Feb 19a 7.4	29 Feb 20f 5.1	
Ratio Analysis Cashflow Per Share	Unit A\$ cps	28 Feb 18a 4.2	7.4	5.1	3.8
Ratio Analysis Cashflow Per Share Earnings Per Share	Unit A\$ cps A\$ cps	28 Feb 18a	7.4 nm	5.1 nm	3.8 nm
Ratio Analysis Cashflow Per Share Earnings Per Share Dividends Per Share	Unit A\$ cps	28 Feb 18a 4.2 nm	7.4 nm 0.075	5.1 nm 0.050	3.8 nm 0.0375
Ratio Analysis Cashflow Per Share Earnings Per Share Dividends Per Share Franking	Unit A\$ cps A\$ cps AUD	28 Feb 18a 4.2 nm - 0%	7.4 nm 0.075 0%	5.1 nm 0.050 0%	3.8 nm 0.0375 0%
Ratio Analysis Cashflow Per Share Earnings Per Share Dividends Per Share Franking Net Debt / Net Debt + Equity Interest Cover	Unit A\$ cps A\$ cps	28 Feb 18a 4.2 nm	7.4 nm 0.075	5.1 nm 0.050	28 Feb 211 3.8 0.0375 0% na

Analyst: Trent Barnett +61 8 9268 3052 "tbc capital" could be equity or debt. Our valuation is risk-adjusted for how this may be obtained. Sources: IRESS, Company Information, Hartleys Research

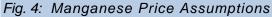
Fig. 2: Earnings Changes

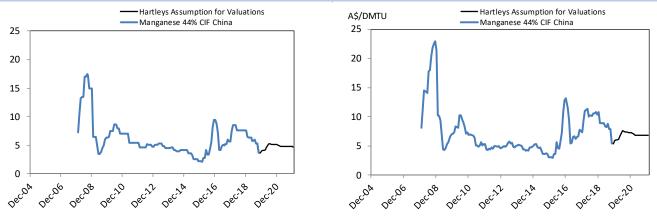
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payout		83%	103%	104%	1.4%	87%	87%	0.0%	87%	87%	0.0%
DPS		0.075	0.0575	0.05	-13.0%	0.0375	0.0375	0.0%	0.030	0.030	0.0%

Source: Hartleys Estimates

Assumption	Risk of not realising assumption	Downside risk to valuation if assumption is incorrect	Comment
Mine life	Low	High	We assume a long mine life. The mining right expires in 2040 but we assume it is extended.
Discount rate	Moderate	Upside	We assume a discount rate of 10%, real.
FX	Moderate	Meaningful	We assume that the Rand appreciates modestly in near term, and then depreciates again.
Selling prices rise from current prices	Moderate	Most significant	We assume manganese selling prices rebound but remain well below recent peak.
Project interest	Low	Modest	We assume JMS retains its 49.9% interest in Tshipi.
Conclusion	We believe our assumptions around manganese selling prices are the most important for our valuation.		

Source: Hartleys



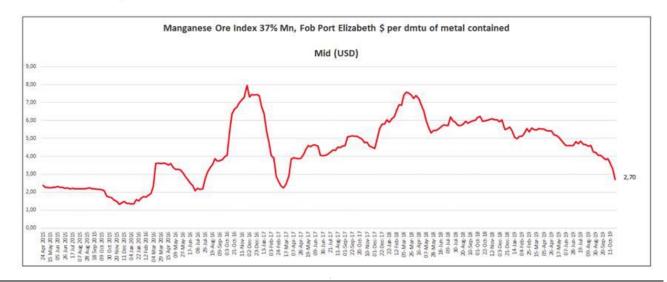


Source: Asian Metal, Hartleys estimates

Fig. 5: Manganese Price (37% DMTU, fob)

Manganese Ore Index 37% Price (FOB Port Elizabeth/US\$ per dmtu):

Week commencing 28/10/2019 - US\$2.70 (last week US\$3.30)



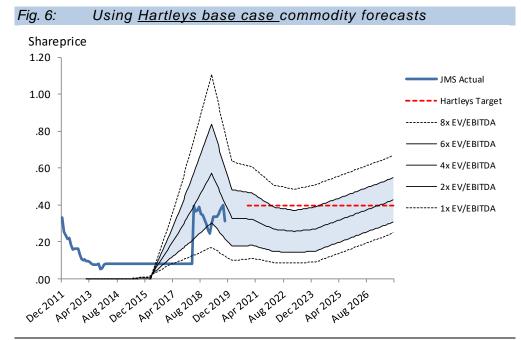
Source: JMS

PRICE TARGET

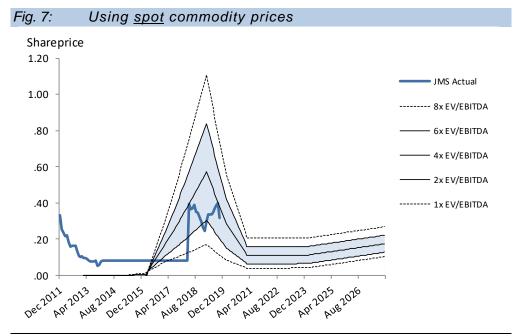
We have a twelve month price target of 40cps (down from 44cps previous).

Price Target Methodology	Weighting	Spot	12 mth out
NPV base case valuation	70%	\$0.42	\$0.38
NPV spot valuation	8%	\$0.19	\$0.16
4x EV/EBITDA	5%	\$0.32	\$0.29
10x EV/EBITDA	5%	\$0.76	\$0.67
Dividend yield 6.0% base case	10%	\$0.83	\$0.63
Dividend yield 6.0% spot prices	2%	\$0.17	\$0.17
Risk weighted composite		\$0.45	
12 Months Price Target		\$0.40	
Shareprice - Last		\$0.3150	
12 mth total return		41%	

Source: Hartleys Research Estimates



Source: Hartleys Estimates, IRESS



Source: Hartleys Estimates, IRESS

HARTLEYS CORPORATE DIRECTORY

Research

Trent Barnett	Head of Research	+61 8 9268 3052
Mike Millikan	Resources Analyst	+61 8 9268 2805
John Macdonald	Resources Analyst	+61 8 9268 3020
Paul Howard	Resources Analyst	+61 8 9268 3045
Aiden Bradley	Research Analyst	+61 8 9268 2876
Oliver Stevens	Research Analyst	+61 8 9268 2879
Michael Scantlebury	Associate Analyst	+61 8 9268 2837
Janine Bell	Research Assistant	+61 8 9268 2831

Corporate Finance

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Dale Bryan	Director & Head of	+61 8 9268 2829
	Corp Fin.	
Richard Simpson	Director	+61 8 9268 2824
Ben Crossing	Director	+61 8 9268 3047
Ben Wale	Director	+61 8 9268 3055
Stephen Kite	Director	+61 8 9268 3050
Scott Weir	Director	+61 8 9268 2821
Scott Stephens	Associate Director	+61 8 9268 2819
Rhys Simpson	Associate Director	+61 8 9268 2851
Michael Brown	Executive	+61 8 9268 2822

Registered Office

Level 6, 141 St Georges Tce Postal Address:

Perth WA 6000GPO Box 2777AustraliaPerth WA 6001PH:+61 8 9268 2888FX: +61 8 9268 2800www.hartleys.com.auinfo@hartleys.com.auNote: personal email addresses of company employees are structuredin the following manner: firstname.lastname@hartleys.com.au

Hartleys Recommendation Categories

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

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Institutional Sales

Institutional Sales	
Carrick Ryan	+61 8 9268 2864
Justin Stewart	+61 8 9268 3062
Simon van den Berg	+61 8 9268 2867
Digby Gilmour	+61 8 9268 2814
Jayme Walsh	+61 8 9268 2828
Veronika Tkacova	+61 8 9268 2836
Wealth Management	
Nicola Bond	+61 8 9268 2840
Bradley Booth	+61 8 9268 2873
Adrian Brant	+61 8 9268 3065
Nathan Bray	+61 8 9268 2874
Sven Burrell	+61 8 9268 2847
Simon Casey	+61 8 9268 2875
Tony Chien	+61 8 9268 2850
Tim Cottee	+61 8 9268 3064
David Cross	+61 8 9268 2860
Nicholas Draper	+61 8 9268 2883
John Featherby	+61 8 9268 2811
Ben Fleay	+61 8 9268 2844
James Gatti	+61 8 9268 3025
John Goodlad	+61 8 9268 2890
Andrew Gribble	+61 8 9268 2842
David Hainsworth	+61 8 9268 3040
Murray Jacob	+61 8 9268 2892
Gavin Lehmann	+61 8 9268 2895
Shane Lehmann	+61 8 9268 2897
Steven Loxley	+61 8 9268 2857
Andrew Machaughtan	+61 8 9268 2898
Scott Metcalf	+61 8 9268 2807
David Michael	+61 8 9268 2835
Jamie Moullin	+61 8 9268 2856
Chris Munro	+61 8 9268 2858
Michael Munro	+61 8 9268 2820
lan Parker	+61 8 9268 2810
Matthew Parker	+61 8 9268 2826
Charlie Ransom	+61 8 9268 2868
Heath Ryan	+61 8 9268 3053
David Smyth	+61 8 9268 2839
Greg Soudure	+61 8 9268 2834
Sonya Soudure	+61 8 9268 2865
Dirk Vanderstruyf	+61 8 9268 2855