



AUSTRALIA

CAS AU

Stock price as of 16/04/2012	A\$	0.68
GICS sector	Metals and Mining	
Market cap	A\$m	75
Avg Value Traded (3m)	A\$m	7.5
12m high/low	A\$	1.50 / 0.61
Cash (as at 31/03/2012)	A\$m	10.6
EV	A\$m	64
P/BV FY 11	x	2.6x

Resource / Reserve table

Borborema, Gold (0.5g/t Au cut-off grade)

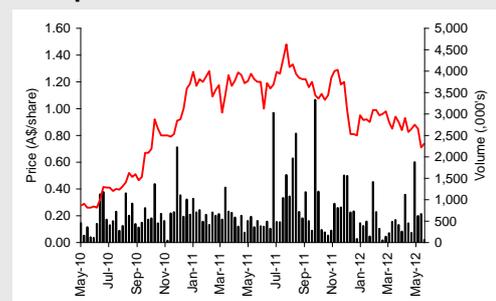
Category	Tonnes (Mt)	Average.		Contained Gold (koz)
		Grade (g/t Au)	Grade (g/t Au)	
Indicated	31.57	1.18		1,201
Inferred	36.10	0.96		1,110
Total	67.68	1.06		2,311

Posse, Iron Ore

Category	Tonnes (Mt)	Average.	
		Grade (% Fe)	Grade (% Fe)
Indicated	4.83	47.39	
Inferred	31.18	42.89	
Total	36.02	43.50	

Source: FactSet, Crusader Resources, May 2012

Gold price and volume



Source: IRESS, Macquarie Research, May 2012

Analyst(s)

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23 May 2012
Macquarie Securities (Australia) Limited

Crusader Resources

An attractive Brazilian gold play

- We add Crusader to our *Emerging Resources Watchlist*.
- Crusader is an emerging gold developer focussed on its primary project, the Borborema deposit in Brazil. That said, near-term cash flow is potentially underpinned by the Posse iron ore project, also in Brazil.
- Borborema is an 100%-owned, 2.3moz resource that Crusader believes could be in production as soon as late 2014 and has potential for a +10 year mine life at ~150koz Au per annum. With the bankable feasibility study currently on track for a 2H 2012 completion, the scene is set for a consistent stream of newsflow on the project over the course of 2012.
- **We visited Crusader's Borborema project with Managing Director Rob Smakman.** We examined the potential size and scale of the project and gained an understanding of the existing infrastructure on site. We also gained an insight into the timeline and strategy for bringing Borborema into production.
- Posse, while not the primary focus for Crusader, represents a potential source of funding for the company following the much awaited licensing approval. Posse currently has a 36Mt @43.5% Fe resource, and has the potential to produce ~0.9mtpa of product for sale at the mine gate into the domestic iron ore market.

A new gold project in Brazil

- As part of our recent site visit we were struck by the high level of existing infrastructure at site, which potentially enables Crusader to bring Borborema into production at a faster rate than many companies at similar stages in their development. Existing infrastructure includes:
 - ⇒ 2x 230kva power lines which cut through the site, and a further 138kva line 6km away;
 - ⇒ 1.2million m³ dam (equivalent to ~3.5 months of water supply for a 4.0mtpa plant);
 - ⇒ Dual lane paved highway to site (160km from provincial capital); and
 - ⇒ Site office & mess.

Key takeaways

- As Crusader progresses Borborema and Posse we believe that there could be a steady stream of positive newsflow. An indicative timetable is:
 - ⇒ Jun 2012 – Borborema Resource upgrade
 - ⇒ Jul 2012 – Initial Borborema Reserve
 - ⇒ Jul 2012 – Posse licensing
 - ⇒ Sep 2012 – Commence production from Posse
 - ⇒ Sep 2012 – Bankable Feasibility Study completed
 - ⇒ Sep 2012 – All Borborema licensing signed off
 - ⇒ Dec 2012 – Financing for Borborema secured

Company overview

Ownership

Borborema gold project, Brazil:

- Crusader owns 100% of the project. The project includes freehold title to the property over the main prospect area covering ~752ha.
- Borborema represents a multi-million ounce deposit with the potential to increase in scale both along strike and at depth. Borborema is an 100% owned, 2.3moz resource which Crusader believes could be in production as soon as late 2014 and has potential for a +10 year mine life at ~150koz Au per annum.

Posse iron ore project, Brazil:

- Crusader owns 100% of the project.
- Posse, while not the primary focus for Crusader, represents a potential source of funding for the company. Posse currently has a 36Mt @ 43.5% Fe resource, which has the potential to produce ~1mtpa of ROM product for sale at the mine gate to the domestic iron ore market.

Fig 1 2x 100% owned assets in Brazil



Source: Crusader Resources, Macquarie Research, May 2012

History and corporate governance

- Crusader's Posse Iron Project near Belo Horizonte was acquired in September 2007. Posse has the benefit of being close to infrastructure within a major iron ore province and in close proximity to local markets and has the potential to be Crusader's first mining operation in Brazil.
- In August of 2010, Crusader finalised the purchase of 100% of the Borborema gold project, located in Tuio grande do Nort state, northeast Brazil. The total purchase price paid was ~A\$2.4m. The project has historical production of ~250koz of gold from a combination of Garimpeiro (small-scale artisinal miners) and open pit, heap leach mining.

Balance sheet data (as at 31 March 2012)

Cash on hand	\$10.6m
Debt	-
Last quarter free cash outflow	\$4.3m

Source: Crusader Resources, Macquarie Research, May 2012

Shareholders

Directors and Management	~10%
Institution A	19%
Institution B	10%
Institution C	5%
Institution D	5%

Source: Crusader Resources, Macquarie Research, May 2012

Capital structure

Total shares on issue	110.1m
Options on issue	4.5m @ a range of exercise prices ranging from A\$0.44-1.35/share. Expiry date ranges from 31 Dec 2012 – 30 Jun 2016.
Market capitalisation	\$71m (at last close price of A\$0.645/share)

Source: IRESS, Crusader Resources, Macquarie Research, May 2012

Management and Directors

David Archer,
Non-Executive Chairman

Mr Archer has over 25 years' experience in the resources industry both in Australia and overseas. He is a barrister (non-practising) of the Supreme Court of NSW.

Robert Smakman,
Managing Director and
Executive Director

Mr Smakman is an honours graduate of Monash University and has had a successful international career as a geologist and manager over the past 19 years. He has been associated with a variety of different commodities including gold, iron, uranium, copper, silver and rare earths. He has had management roles in various countries and has served in senior public company management for several years. Mr Smakman has been a resident of Brazil since 2006.

Paul Stephen,
Executive Director

Mr. Stephen has over 18 years experience in the financial services industry. He Holds Bachelor of Commerce from University of Western Australia.

Murray Hodges,
Non-Executive Director

Mr Hodges was involved for 15 years in his early working life exclusively in the mineral exploration industry, initially working as exploration geologist for major companies, then in consultancy capacity. His primary experience is in base metal and gold exploration.

David Netherway,
Non-Executive Director

Mr Netherway is a mining engineer with over 35 years experience in the mining industry. He was, until the 2010 takeover by Gryphon Minerals Limited (GRY-ASX), the CEO of Shield Mining Limited, an Australian listed company exploring for gold and base metals in Mauritania. Mr Netherway is a mine developer and operator who was involved in the construction and development of the Iduapriem, Siguiiri, Samira Hill and Kiniero gold mines in West Africa and has mining experience in Australia, India, Nepal, Oman and Malaysia.

Justin Evans,
Non-Executive Director

Mr Evans is the Managing Director of Sigma Companies Group Pty Ltd, which manufactures and distributes chemical supplies and accessories worldwide. Prior to joining Sigma Companies Group in 1999 Justin worked in stockbroking for 12 years.

Andrew Beigel,
Company Secretary

Mr Beigel has more than seventeen years corporate experience across a range of industries and has held executive positions with other ASX listed companies in the resources sector. He has previously been involved in development and funding of projects and bankable feasibility studies.

Source: Crusader Resources, Macquarie Research, May 2012

Asset overview

Borborema Gold Project, Borborema province, Brazil

- We visited Crusader's Borborema project with Managing Director Rob Smakman. We examined the potential size and scale of the project and gained an understanding of the existing infrastructure on site. We also gained an insight into the timeline and strategy for bringing Borborema into production.
- Borborema represents a multi-million ounce deposit with the potential to increase in scale both along strike and at depth. Borborema is an 100%-owned, 2.3moz resource which Crusader believe could be in production as soon as late 2014 and has potential for a +10 year mine life at ~150koz Au per annum.
- Crusader completed a Pre-Feasibility Study in September 2011 which highlighted the economic nature of the Borborema deposit. It has subsequently progressed this towards a bankable feasibility study which is examining an increased plant throughput and is currently on track for a 2H 2012 completion.

Fig 2 Borborema – Strong potential

	PFS	Potential for BFS
Mining inventory (in-pit Inferred & Indicated Resources, US\$1,150 Au)	1.18moz (27mt @ 1.39g/t)	1.58moz (40mt @ 1.2g/t)
Mining throughput rate	3mtpa	4mtpa
Mine life	9 years	10 years
Ave annual production	130koz	150koz
Estimated capex	US\$169m	US\$220-250m
Estimated opex	US\$558/oz	US\$615/oz
Metallurgical recovery	96%	95%
Strip ratio	4.23:1	5:1
NPV (10%) pre-tax, US\$1,300/oz Au	US\$250m	
IRR (pre-tax)	32.9%	

Source: Crusader Resources, May 2012

- With four drill rigs on site the company is focussed on conducting drilling to increase the quality of the Resource (as ounces are moved from Inferred to Indicated). Management expects to announce a Resource upgrade in June. Based on our preliminary technical analysis of the Borborema Project, we forecast a modest ~10% increase to the Resource at that point in time to 2.5moz. That said, based on lightly drilled portions of the 3km strike length we believe that the long term potential for a +3.0moz resource is evident.

Fig 3 Borborema Project JORC Mineral Resource Estimate (November 2011)

Cut-off Grade (g/t Au)	Indicated			Inferred			Total		
	Tonnes (Mt)	Average Grade (g/t Au)	Contained Gold (koz)	Tonnes (Mt)	Average Grade (g/t Au)	Contained Gold (koz)	Tonnes (Mt)	Average Grade (g/t Au)	Contained Gold (koz)
0.5	31.57	1.18	1,201	36.10	0.96	1,110	67.68	1.06	2,311
1.0	15.77	1.65	838	12.67	1.35	549	28.44	1.52	1,388

Source: Crusader Resources, May 2012

- Recent drill results (that are not included in the current resource) suggest mineralisation is increasing in width and grade at depth, which Crusader believe indicates potential for a future underground resource. Recent drill results include:
 - ⇒ 27m @ 8.49g/t Au from 278m
 - ⇒ 26m @ 3.17g/t Au from 301m
 - ⇒ 26m @ 2.73g/t Au from 294m
- As part of our recent site visit we were struck by the high level of existing infrastructure at site which we believe is above average for companies at similar stages in their development to Crusader. Existing infrastructure includes:
 - ⇒ 2x 230kva power lines which cut through the site, and a further 138kva line 6km away;
 - ⇒ 1.2million m³ dam (equivalent to ~3.5 months of water supply for a 4.0mtpa plant);
 - ⇒ Dual lane paved highway to site (160km from provincial capital); and
 - ⇒ Site office & mess.

Fig 4 Drilling out the deposit along strike to the South-West



Fig 5 De-watered pit (Site dam circled on left; 230kva power line circled in background)



Source: Macquarie Research, May 2012

- That said, Crusader stated one of the largest hurdles to overcome is supply of water for the proposed mill. One of the likely solutions at this point of time is to build a ~100km pipeline from the nearby Barragem Armando Ribeiro Gonçalves dam. Initial studies suggest that there is already adjustment with an existing pipe the majority of the distance, making the largest hurdle the construction as opposed to licensing. While costing for the pipeline is still being finalised first pass indicative costs associated with the pipeline are ~US\$30m. This costing is included in the BFS capex number of US\$220-250m.

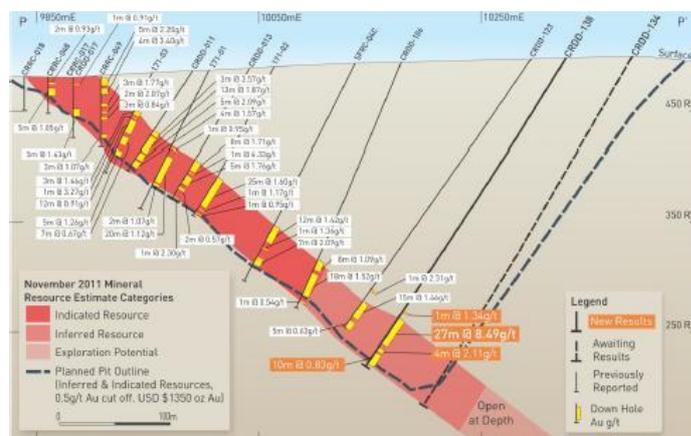
- Crusader has stated that environmental studies are in the final stages and license applications are expected to be lodged in May. Crusader has recently presented project development plans to the state government and the local municipality authorities and received strong support from all departments. Further, the state governor and her government have signed a 'letter of intent' pledging support for the project.
- The shear hosted gold mineralisation at Borborema occurs in quartz and sulphide rich veins, within a series of monotonous biotite schists. The mineralised shear dips to the southeast at $\sim 35^\circ$ and trends to the northeast. A series of continuous sub-parallel zones are mineralised up to 45m thick which have been drill tested along 3km of strike, to a maximum depth of 300m vertical.

Fig 6 Borborema's 35° southeast dip apparent in outcropping mineralisation (Photo taken on Western edge of existing pit, facing South).



Source: Macquarie Research, May 2012

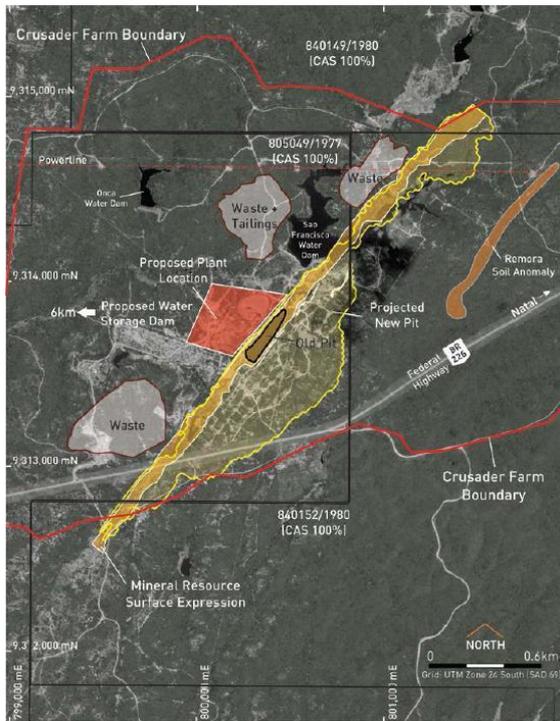
Fig 7 Borborema's simple ore body supports bulk open-pit mining (cross section of proposed pit facing North)



Source: Crusader Resources, Macquarie Research, May 2012

- Initial metallurgical testwork has revealed free milling ore with recoveries of $\sim 96\%$ of the contained gold at a 106 m grind. The ore body has a bond work index of 17. That said, metallurgical studies are progressing with a five tonne sample of mineralised material, aimed at accurately determining the power consumption in the milling circuit.
- Crusader has secured approximately 1,300km² in the Serido Belt in which Borborema is hosted. The belt is a very favourable geological terrain that has never been systematically explored for gold and holds considerable potential for further Borborema style discoveries.

Fig 8 Proposed layout for mine



Source: Crusader Resources, Macquarie Research, May 2012

Fig 9 1,300km² secured in the Serido Belt

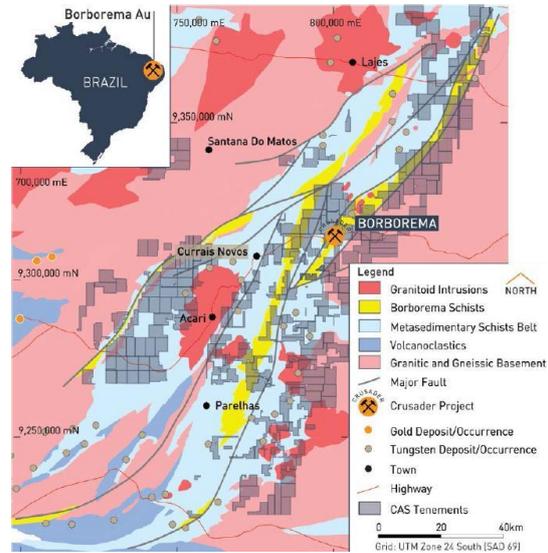
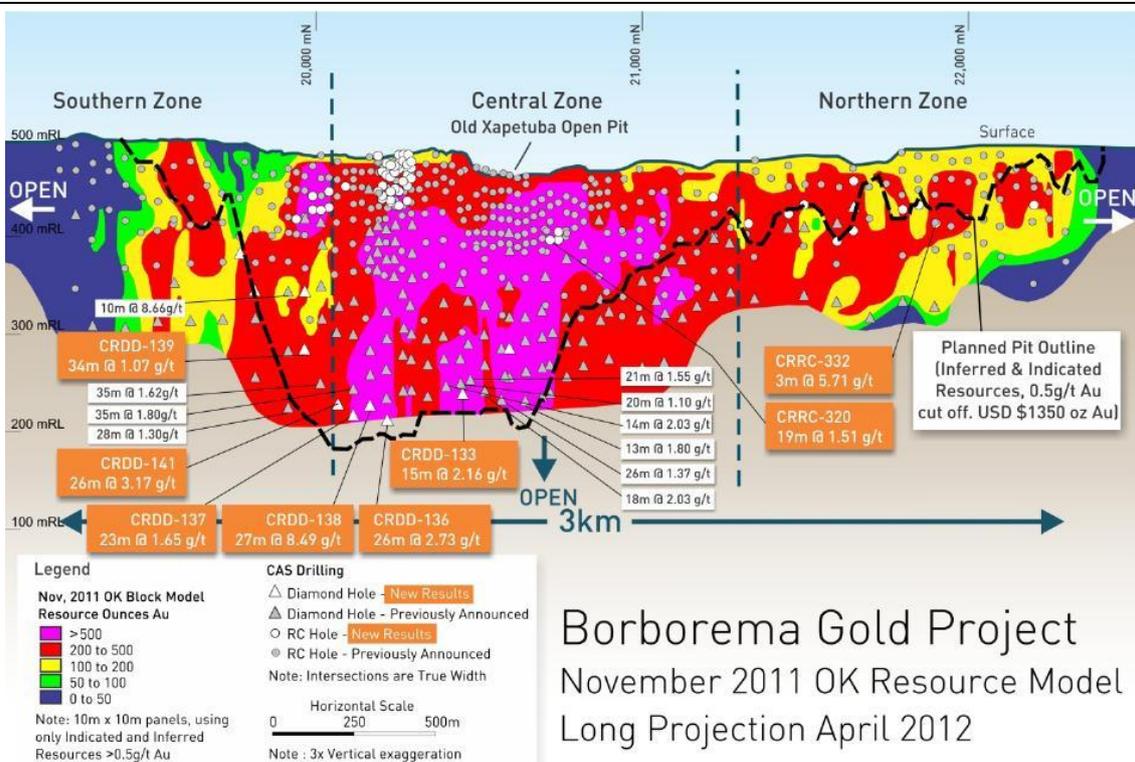


Fig 10 Current pit design remains open along strike and at depth



Source: Crusader Resources, Macquarie Research, May 2012

Posse Iron Ore Mine, Belo Horizonte province, Brazil

- Posse, while not the primary focus for Crusader, represents a potential source of funding for the company. Posse currently has a 36Mt @ 43.5% Fe resource, which has the potential to produce ~0.9mtpa of product for sale at the mine gate to the domestic iron ore market. At current selling prices Posse could produce ~A\$2m of free cashflow per month.
- The project will be staged over two phases.
 - Phase 1 – processing ~1mtpa of ore at operating costs of ~A\$15/t. Product mix of:
 - 450kt of lump product (currently selling at A\$50-80/t in Brazil); and
 - 550kt of a mix of fines and waste.
 - Phase 2 – processing +1mtpa of ore at operating costs of ~A\$20/t. Product mix of:
 - 850kt of lump product (currently selling at A\$50-80/t in Brazil); and
 - 150kt of waste.
- Preliminary metallurgical sampling has confirmed that following minimal beneficiation both the hematite and itabirite iron mineralisation can be easily upgraded to a high grade iron ore at +63% Fe, with very low contaminants, creating premium lump and fine products.
- That said, Crusader continues to seek mines department (DNPM) and environmental (SUPRAM) licensing for the Posse Iron Ore Project before it can commence production. The remaining steps to final approval for stage 1 are:
 - ⇒ Federal DNPM approval (imminent);
 - ⇒ State DNPM approval; and
 - ⇒ State SUPRAM approval.
- While the approval process was commenced in August 2010, current indications are that this will be completed in the coming months. State DNPM and SUPRAM approvals are forecast to be received by July 2012. A second round of approvals is required to progress to Stage 2 beneficiation.

Fig 11 Posse Iron Ore Project – Awaiting approval for mine gate sales of 1mtpa +63% Fe



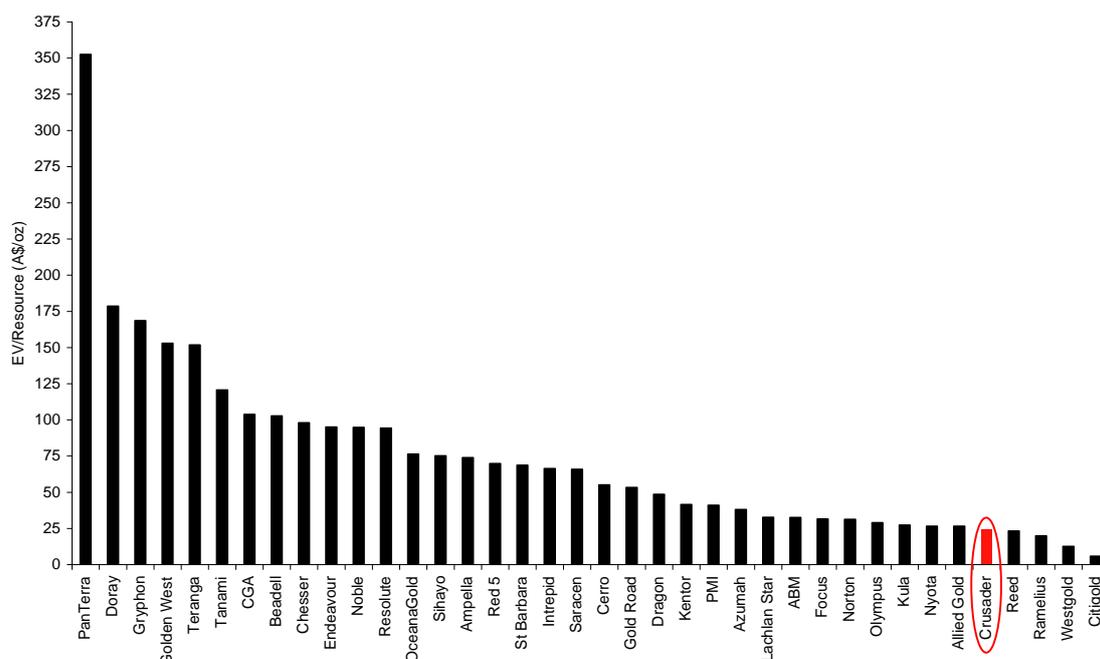
Source: Crusader Resources, Macquarie Research, May 2012

- From a corporate perspective, Crusader has stated that Posse provides it with a degree of optionality for funding company growth. In short, Crusader can hold the project and use the cashflow to finance a small portion of Borborema development or alternatively it can choose to sell the project thus diminishing the level of dilution to existing shareholders from external capital.

Key takeaways

- The simple structure of the Borborema ore body, coupled with its 96% recoveries from CIL processing demonstrates the relatively straight forward nature of the project. With limited licensing required at Borborema (previous mining on site), high level of infrastructure and a +2.3moza resource the ability for the project to be progressed through to production in 2014 on a compressed timeframe is highly achievable.
- Management expects to announce a Borborema Resource upgrade in June. We would highlight the potential for a modest ~10% increase to the Resource at that point in time to ~2.5moz based on our preliminary technical analysis of Borborema Project. That said, based on lightly drilled portions of the 3km strike length we believe that the long term potential for a +3.0moz resource is evident.
- Recent initial approvals for Posse production have increased the likelihood of the project being in production during the course of 2012. At current prices the project has the ability to deliver ~\$2m of cashflow per month. A level which could support continued exploration of Borborema and the completion of the BFS without requiring further capital funding.
- Crusader is trading at an EV/Resource multiple of A\$24/oz, compared to its peer group of A\$74/oz.

Fig 12 Crusader trading on an EV/Resource of A\$24/oz vs peer average of A\$74/oz



Source: Capital IQ, Macquarie Research, May 2012

Upcoming catalysts

- As Crusader progresses Borborema and Posse we believe that there could be a steady flow of positive newsflow. An indicative timetable is:
 - ⇒ Jun 2012 – Borborema Resource upgrade
 - ⇒ Jul 2012 – Initial Borborema Reserve
 - ⇒ Jul 2012 – Posse licensing
 - ⇒ Sep 2012 – Commence production from Posse
 - ⇒ Sep 2012 – Bankable Feasibility Study completed
 - ⇒ Sep 2012 – All Borborema licensing signed off
 - ⇒ Dec 2012 – Financing for Borborema secured

The main risks

- Crusader has stated that it is uncertain of the timing for final approval for the Posse project. While Federal DNPM approval has been received, both state DNPM and environmental approval is required. The company stated that the earliest that this could be resolved is in June and a worst-case scenario of final approval in December. We note an increasing trend for project approvals in Brazil to be delayed.
- If Crusader look to divest the Posse project to fund further development of Borborema there is no guarantee that this will be successful or that the final price achieved will be sufficiently material to impact the requirement for additional funding sources.
- Crusader had A\$10.6m of cash on hand as at 31 March. It has stated that it requires ~A\$2m to complete the Borborema BFS. Given the funds required to develop Borborema project Crusader will need to seek further capital financing. The ability to access this funding and the price of it will depend on the prevailing market conditions at the time.
- At 1.06g/t Au we classify the Borborema resource as a low-grade deposit. That said, we note the presence of several typical mitigants to this including: the free-milling nature of the deposit; existing infrastructure; and reasonable strip ratio.
- As previously highlighted one of the largest hurdles to overcome at Borborema is supply of water for the proposed mill. One of the likely solutions at this point of time is to build a US\$30m, ~100km pipeline from the nearby Barragem Armando Ribeiro Gonçalves dam. Any delays to approvals for the pipeline could delay initial production.

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 Australian/NZ/Canada stocks only

Recommendations – 12 months

Note: Quant recommendations may differ from Fundamental Analyst recommendations

Financial definitions

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

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

All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

Recommendation proportions – For quarter ending 31 March 2012

	AU/NZ	Asia	RSA	USA	CA	EUR	
Outperform	53.90%	60.60%	57.50%	43.59%	66.67%	46.89%	(for US coverage by MCUSA, 10.86% of stocks covered are investment banking clients)
Neutral	31.56%	23.00%	32.50%	51.09%	30.00%	32.60%	(for US coverage by MCUSA, 9.50% of stocks covered are investment banking clients)
Underperform	14.54%	16.40%	10.00%	5.32%	3.33%	20.51%	(for US coverage by MCUSA, 1.36% of stocks covered are investment banking clients)

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