

BUXTON RESOURCES LIMITED (BUX)

Magmatic Ni-Cu Sulphide Intersected at Zanthus

Buxton Resources recently completed RC drilling at the Zanthus project in the Fraser Range, confirming the presence of highly prospective mafic/ultramafic rocks and more importantly identified magmatic nickel-copper sulphide mineralisation (Ni-Cu sulphide blebs) through petrology and assay results.

No ore-grade intervals were reported but two holes returned nickel values around 0.12% Ni within ultramafic rocks while testing conductive targets located within 3kms of one another.

Prior to further exploration BUX plans to undertake a full technical review of the data collected over the project area. Results to date clearly warrant further work in and around targets ZV10 and ZV07, which we would expect could involve more detailed geophysical surveys (magnetics and/or electromagnetics (EM)) and more drilling.

Western margin of intrusive structure upgraded by drilling

The aim of the first pass drilling program was to test 20 bedrock conductors originally identified through airborne EM surveys but followed up with ground EM prior to drilling. A vast majority of the conductors tested were explained by graphitic rocks or iron sulphide accumulations, considered to be of low interest for magmatic nickel-copper mineralisation; however, the drilling of six targets intersected gabbro (mafic) and ultramafic rocks considered to be priority hosts. Five of the six holes which intersected gabbro and/or ultramafic rocks are located along the western margin, a large interpreted intrusive structure which spans over 10kms of strike. This zone or corridor may provide a focus for future exploration.

Target ZV10 – large conductor with confirmed Ni mineralisation

Out of all the drill results reported the standout hole is ZRC086, which returned 4m @ 1,219ppm (0.12%) Ni, 114ppm Cu from 96m, contained within a 12m zone of ultramafic host rock. The hole was drilled to test conductive target ZV10, defined by as strong conductor, coincident to some low tenor nickel geochemical anomalism. The target has a north-south orientation and a ~1km strike extent, and was previously considered to be a moderate priority anomaly. Petrographic analysis of the mineralised zones (from 96-100m) identified “definitively magmatic sulphide blebs of inter-grown iron sulphide (pyrrhotite), nickel sulphide (pentlandite) and minor copper sulphide (chalcopyrite) from within ultramafic”.

Fraser Range still the hottest address for nickel

The Zanthus project has been upgraded by the confirmation of magmatic nickel-copper sulphide mineralisation, but further work will be required to locate potential higher grade zones of mineralisation. Our opinion that Buxton has highly prospective ground within the Fraser Range has been validated by the drilling. A full technical review will determine the level of next exploration within the project area.

Greenfield nickel exploration remains high risk but can be highly rewarding, especially within the Fraser Range. Buxton has a tight capital structure, low market cap of ~\$12m (EV of ~\$10m), and has now confirmed magmatic nickel sulphides, which could translate to discovery success. We maintain our Speculative Buy recommendation.

14 May 2014

Share Price (last): \$0.220

Brief Business Description

Junior base metal explorer

Hartleys Brief Investment Conclusion

Base metal explorer in the Fraser Range, WA. Drilling has confirmed magmatic nickel sulphides. Technical review of results underway. Well positioned for exploration success.

Issued Capital

- ordinary	54.5m
- ITM diluted	55.0m

Market Cap

- ordinary	\$12.0m
- ITM diluted	\$12.1m

Cash (31 Mar '14a)

	\$2.0m
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EV

- fully diluted	\$9.9m
	\$10.1m

Main Projects

<i>Zanthus</i>	Base Metals (Ni, Cu)
<i>Widowmaker</i>	Base Metals (Ni, Cu)
<i>Yalbra</i>	Graphite
<i>Dempster</i>	Gold, Nickel
<i>Northampton</i>	Base Metals

Board & Management

Seamus Cornelius (NE Chair)

Anthony Maslin (MD)

Julian Stephens (NED)

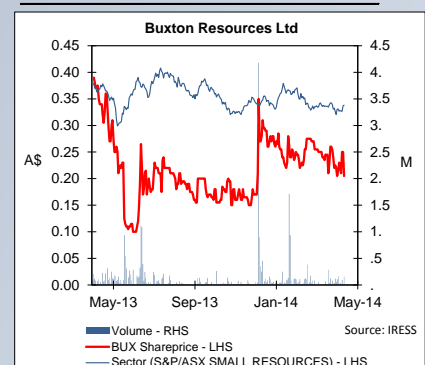
Liu Xing Zhou (NED)

Stuart Fogarty (NED)

Top Shareholders

National Business Holdings (VU)	15.9%
Montezuma Mining Company	4.4%

Company Address

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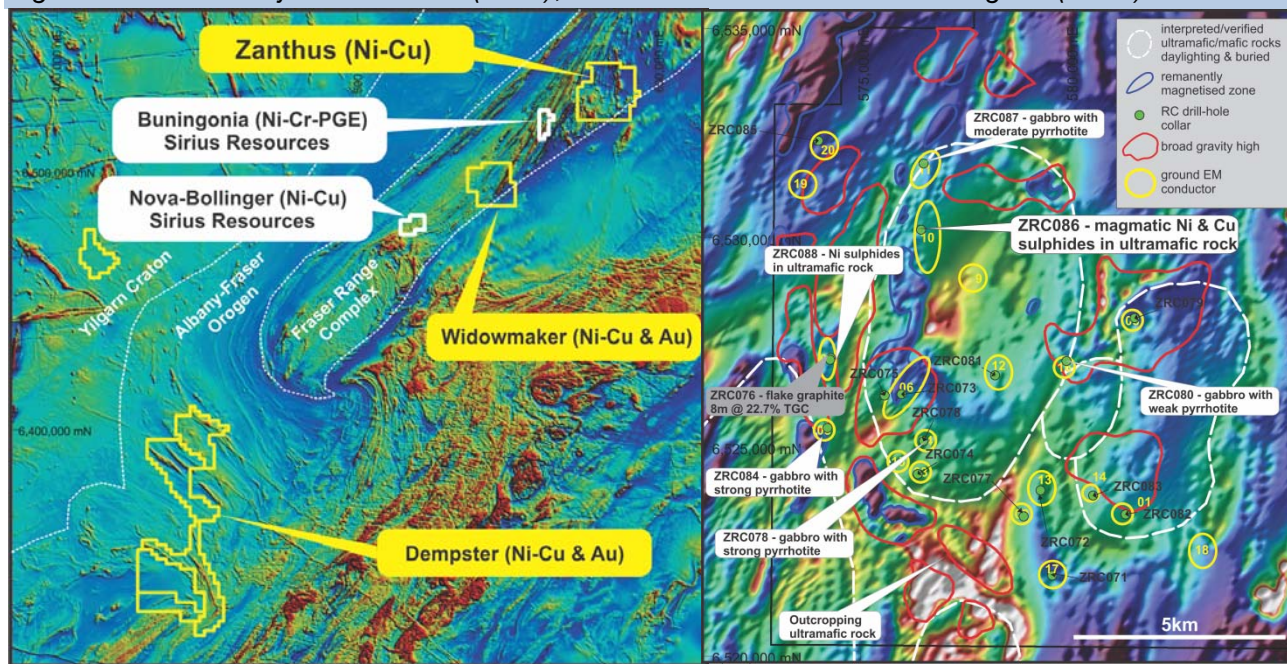
E: mike_millikan@hartleys.com.au

Hartleys has provided corporate advice within the past 12 months and continues to provide corporate advice to Buxton Resources, for which it has earned fees and continues to earn fees. See back page for full disclosure.

SUMMARY PAGE

Buxton Resources Limited		Share Price		May-14	
BUX		\$0.220		Speculative Buy	
Key Market Information				Directors	
Share Price		\$0.220		Company Details	
Market Capitalisation		\$12m		Seamus Cornelius (NE Chair) 1st Fl, 14-16 Rowland St,	
Net Debt (cash)		-\$2.0m		Anthony Maslin (MD) Subiaco, WA, 6008	
Issued Capital		54.5m		Julian Stephens (NED) +61 8 9380 6063	
Issued Capital (fully diluted ITM options)		55.0m		Liu Xing Zhou (NED)	
Options		15.28m @ A\$0.42		Stuart Fogarty (NED) www.buxtonresources.com.au	
Issued Capital (fully diluted all options)		69.8m			
EV		\$9.9m			
Valuation		N/A			
12Mth Price Target		N/A			
Projects				Top Shareholders	
Interest	Location	Commodity		m shs	%
Zanthus 100%	WA	Ni, Cu, Fe		National Business Holdings (VU) Ltd	8.67 15.9%
Widowmaker 100%	WA	Ni, Cu		Montezuma Mining Company	2.37 4.4%
Yalbra 85%	WA	Graphite		Directors & Management	2.20 4.0%
Dempster 90%	WA	Au, Ni			
Northampton 100%	WA	Base Metals			
Resources				Investment Summary	
Mt	Grade	Metal	Attr.		
Base Metals					
No JORC resources					
Iron Ore - Magnetite					
Inferred	103.6	26.5%	Fe	100%	
Graphite					
Inferred	2.3	20.1%	TGC	85%	
P&L				Newsflow	
	FY2013F	FY2014F	FY2015F	Project	
Net Revenue	na	na	na	Q1 CY14	Target drill-testing - completed Zanthus
Total Costs	na	na	na	Q1 CY14	Infill calcrete sampling - completed Widowmaker
EBITDA	na	na	na	Q1 CY14	Maiden graphite resource - completed Yalbra
Deprec/Amort	na	na	na	Q2 CY14	RC drill results - received Zanthus
EBIT	na	na	na	Q2 CY14	Resource drilling/met-testwork Yalbra
Net Interest	na	na	na	Q2 CY14	Technical Review Zanthus
Pre-Tax Profit	na	na	na	Q3 CY14	Expected follow-up exploration Zanthus
Tax Expense	na	na	na		
NPAT	loss	loss	loss	Unpaid Capital	
Abnormal Items	na	na	na	No (m)	\$(m)
Reported Profit	loss	loss	loss	Ave Pr	% Ord
				In The Money (ITM) Options	
				30-Jun-14	0.000 0.00 0.00 0%
				30-Jun-15	0.000 0.00 0.00 0%
				30-Jun-16	0.000 0.00 0.00 0%
				30-Jun-17	0.000 0.00 0.00 0%
				Performance Rights	0.500 0.00 0.00 1%
				Comments	
				Early stage exploration company with no production assets, ongoing funding will be required. Leveraged to exploration success/improved market sentiment.	
Analyst: Mike Millikan				Last Updated: 14/05/2014	
Phone: +61 8 9268 2805					
Sources: IRESS, Company Information, Hartleys Research					

Fig. 1: Zanthus Project Location (LHS); Drill Hole Locations over Targets (RHS)



Source: Buxton Resources Limited

Fig. 2: RC Drilling Summary Table

Target	Priority	Target Comments	Drill Hole	Result	Conductive source
ZV01	Med	Weak to moderate conductor	ZRC082	NSR	Graphite
ZV02	High	Strong but small bedrock conductor	ZRC077	7m @ 6.5% TGC from 99m	Graphite
ZV03	Med	Weak, small conductor	ZRC074	NSR	Target not reached
ZV04	Low	Moderate strength within intrusive structure	ZRC078	52m of gabbro with DS Fe sulphide (pyrr)	Fe sulphides
ZV05	Low	Weak response from a small or deep conductor	ZRC084	15m of gabbro with Fe sulphides (pyrr) from 166m	Fe sulphides
ZV06west	Low	Weak, probable stratigraphic conductor	ZRC075	NSR	Graphite
ZV06east	Med	Strong, probable stratigraphic conductor	ZRC073	NSR	Graphite, minor Fe sulphides
ZV07north	High	Moderate strength conductor located between two broad gravity highs	ZRC088	12m @ 1,244ppm Ni and 11ppm Cu from 76m	Sulphides (remobilised)
ZV07	High	High strength conductor located near gravity highs	ZRC076	8m @ 22.7% TGC from 99m	Graphite
ZV08	Med	Weak, near surface conductor	ZRC079	NSR	Graphite, minor Fe sulphides
ZV10	Med	Strong conductor, possibly stratigraphic, some weak Ni geochemical anomalism	ZRC086	4m @ 1,219ppm Ni and 114ppm Cu from 96m	Sulphides (magmatic)
ZV11	Med	Strong conductor, possibly stratigraphic	ZRC087	38m of gabbro with Fe sulphides (pyrr) from 56m	Fe sulphides
ZV12	Low	Weak conductor	ZRC081	NSR	Graphite
ZV13	Low	Moderate strength, probable stratigraphic conductor	ZRC072	NSR	Graphitic clays
ZV14	Low	Weak conductor coincident with gravity high	ZRC083	NSR	Fe sulphides
ZV15	Low	Weak conductor within interpreted intrusive	Not drilled	NA	Not explained
ZV16	High	Strong, discrete conductor, with associated surface Ni geochemical anomalism	ZRC080	104m of gabbro with Fe sulphides (pyrr)	Fe sulphides
ZV17	Low	Strong conductor, probably stratigraphic	ZRC071	NSR	Graphite, minor Fe sulphides
ZV19	Low	Weak conductor, probably stratigraphic	Not drilled	NA	Not explained
ZV20	Low	Moderate conductor, probably stratigraphic	ZRC085	NSR	Fe sulphides

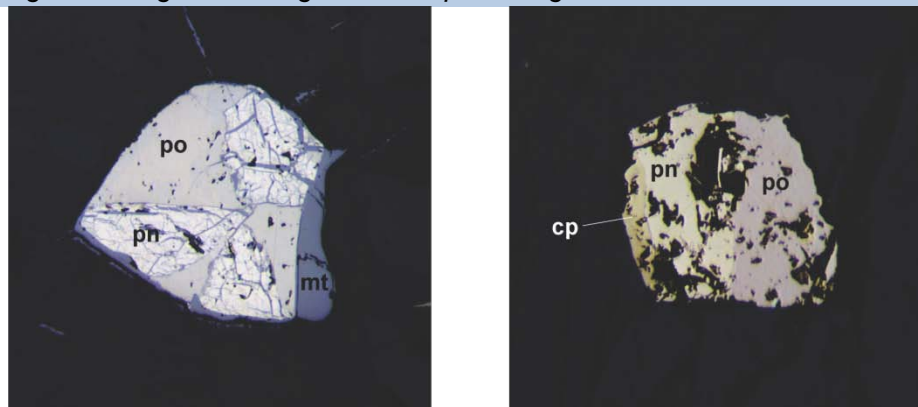
NSR = no significant result; NA = not applicable; DS = disseminated sulphide; Fe = iron; pyrr = pyrrhotite; py = pyrite

Source: Buxton Resources Limited; Hartleys Research

Fig. 3: Images of magmatic sulphides grains with Ni and Cu

The confirmation magmatic nickel sulphide mineralisation is a massive tick for the project

Future exploration will be focused on finding the economic zones of this mineralised system



Photomicrographs of magmatic composite sulphide grains containing nickel and copper ore minerals from ZRC086 96-100m. po = pyrrhotite, pn = pentlandite, cp = chalcopyrite, mt = magnetite, field of view on both images is 300 microns.

Source: Buxton Resources Limited

Risks

Key risks for Buxton include making an economic discovery and obtaining funding for ongoing exploration. Weather, land access, drill rig availability, retaining key people are all risks.

Fig. 4: Key Risks

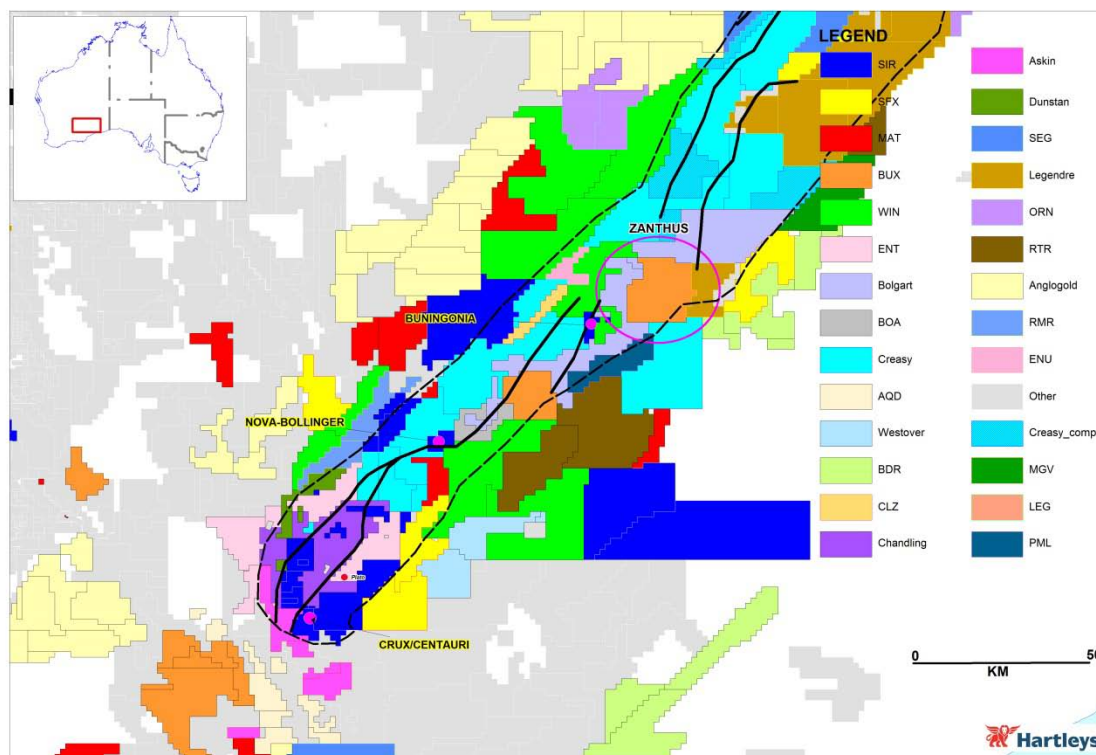
Assumption	Risk of not realising assumption	Downside risk to shareprice if assumption is incorrect	Comment
Funding for ongoing exploration	Med	Med-High	We estimate BUX has a current cash position ~\$2m. The Company has a number of options to raise additional funds for future exploration, including new equity issuances and potential new joint venture deals. The Company operates under a lean corporate structure (low cost base). The Company is funded for planned exploration.
Discovery Success	Med	Low-Med	Though the Company has some good targets this does not guarantee success. BUX's management team has a high level of technical expertise and will now commence a full technical review of data prior to planning the next phase of exploration, which does provide some level of comfort in the program(s) ahead.
Commodity Prices	Med	Med-High	The projects remain highly sensitive to commodity price movements and sentiment. Current exploration focus is nickel, copper and gold.

Conclusion

At this stage we consider the assumptions have a low to high risk of not being achieved. At this stage we have no valuation for BUX, but the Company's extensive project portfolio with high prospectivity and low current market cap, implies the Company is undervalued.

Source: Hartleys Research

Fig. 5: Fraser Range (Southern) Tenure Map



Disclaimer: This is for internal Hartleys use only. Note tenement holder information may not be current, but is accurate as at our last tenement download.

Source: Hartleys Research

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Hartleys Recommendation Categories

Buy	Share price appreciation anticipated.
Accumulate	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 / Take profits	It is anticipated to be unlikely that there will be gains over 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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