

BUXTON RESOURCES LTD (BUX)

Priority off-hole conductor being drill-tested at Merlin

Buxton (BUX) continues with nickel-copper exploration activities within its 100%-owned Double Magic Project in the West Kimberley region of WA.

The Company has now completed some 30 drill holes (9 diamond, 20 reverse circulation (RC) and 1 diamond tail) at the Merlin prospect since drilling commence in mid-July. Assays have been received for 13 of the completed holes, with further widespread nickel-copper sulphide mineralisation intersected, with assays (to date) largely from disseminated zones grading up to 0.5% Ni and 0.2% Cu in parts. Pleasingly visible sulphides have been intersected in all but one hole drilled thus far from the current program, providing further confirmation a very large magmatic sulphide system which spans over 1.5km of strike and extends down to depths in excess of 600m.

HP target within 65m of confirmed vein of Massive Ni Sulphide

Systematic exploration has seen key drill holes surveyed by down-hole electromagnetics (DHEM), with a strong off-hole conductor now being drill-tested ~450m south-east of Conductor D. The drill-testing of Conductor D in August 2015, led to the discovery of massive and net-textured nickel-copper sulphides returning **8m @ 3.05% Ni, 1.88% Cu** from 50m (DMRC003).

The new highly conductive (~12,000–28,000S) anomaly has modelled dimensions of ~50m x 150m with target depth anticipated to be reached in the coming days. What upgrades this target in our view is the intersection of a stringer and massive sulphide vein (over ~1m) in diamond hole DMDD0012, which was the platform for the DHEM to generate this high-priority (HP) conductor located ~65m down-dip. Assays are pending for DMDD0012, which is considered the best intercept (thus far) in the current program, and included a 10cm vein of massive (nickel-copper bearing) sulphide.

We look forward to the drilling of this target which remains well located within the Ruins Dolerite (mafic host), represents a higher intensity anomaly than the original Conductor D (which reported conductance of 10,000–15,000S), is good size feature (~50m x 150m) and the absence of graphite (to date) within the area, all bodes well for target-testing in our view. It should be noted, all EM conductors (airborne, ground and down-hole) drill-tested to date at Merlin have proven to be related to nickel-copper sulphide mineralisation.

Highly successful program getting more exciting – Spec Buy

BUX was originally planning to complete ~30 holes for up to 10,000m of drilling at Merlin in the 2017 field season. The aim of the program was to step out from known near-surface mineralisation, and test deeper geological and geophysical targets which included a large chargeable Induced Polarisation (IP) anomaly identified in 2016. The drill program has been highly successful in regards to intersecting sulphides (both visually and confirmed through assays) with the large system now appearing to highlight a potential highly conductive accumulation of nickel-copper sulphides (massive) to the south-east of the original discovery zone.

These higher grade massive nickel-copper sulphides, are the big prize potential, but to delineate in economic accumulations (if present) may take some time. The Company's current cash position (est) remains a healthy ~A\$3.6M. We maintain our Speculative Buy, with an EV of ~\$12.5M, we see a very good risk-reward profile especially with high-impact drilling underway.

22 Sep 2017

Share Price (last): \$0.145

Brief Business Description

Junior base metal explorer

Hartleys Brief Investment Conclusion

Nickel-copper discoveries made at Double Magic, West Kimberley. Formed new JV with IGO in the Fraser Range. Now drill-testing priority targets at Double Magic.

Issued Capital

- ord shares	110.9m
- ITM ops diluted	120.2m
- fully diluted	134.5m

Market Cap

- ord shares	\$16.1m
- ITM ops diluted	\$17.4m
- fully diluted	\$19.5m

Cash (est)

\$3.6m

EV

- ord shares	\$12.5m
- ITM ops diluted	\$12.7m
- fully diluted	\$11.7m

Main Projects

Double Magic	Base Metals (Ni, Cu)
Fraser Range JV	Base Metals (Ni, Cu)
Yalbra	Graphite
Dempster	Gold, Nickel
Northampton	Base Metals

Board & Management

Seamus Cornelius (NE Chairman)

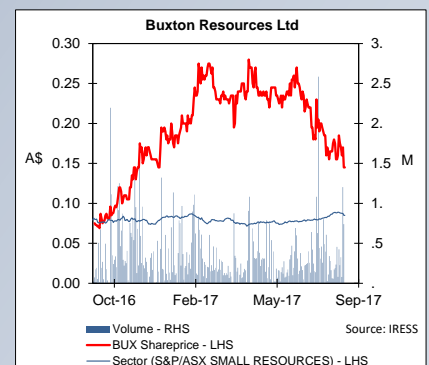
Eamon Hannon (MD)

Top Shareholders

National Business Holdings (VU) Ltd	9.8%
Directors & Management	2.6%

Company Address

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Hartleys has completed a capital raising in the past 12 months for Buxton Resources Limited ("BUX"), for which it has earned gross fees. Hartleys has provided corporate advice within the past 12 months and continues to provide corporate advice to BUX for which it has earned fees and continues to earn fees. The analyst has a beneficial interest in BUX shares.

SUMMARY PAGE

Buxton Resources Limited		Share Price		Sep-17	
BUX		\$0.145		Speculative Buy	
Key Market Information				Directors	
Share Price	\$0.145	Seamus Cornelius (NE Chairman)		1st Floor, 14-16 Rowland St,	
Market Capitalisation	\$16.1m	Eamon Hannon (MD)		Subiaco, WA, 6008	
Net Cash (debt)	\$3.6m	Anthony Maslin (NED)		+61 8 9380 6063	
Issued Capital	110.9m	Feng (Frank) Xue (NED)			
Issued Capital (fully diluted ITM options)	120.2m	Stuart Fogarty (NED)		www.buxtonresources.com.au	
Issued Capital (fully diluted)	134.5m				
Options	23.63m @ A\$0.18				
EV - ords	\$12.5m	Top Shareholders (est)			
EV - ITM options	\$12.7m	National Business Holdings (VU) Ltd		m shs	%
EV - fully diluted	\$11.7m	Directors & Management		2.84	2.6%
12Mth Price Target	N/A				
Projects				Investment Summary	
Interest	Location	Commodity		Exposure to base metal (nickel-copper) exploration in the West Kimberley and Fraser Range of WA.	
Double Magic	100%	WA	Ni, Cu	Multiple drill-ready targets providing strong newsflow and has already discovered potentially significant nickel-copper mineralisation.	
Zanthus*	10%	WA	Ni, Cu, Fe	Portfolio of opportunities including high-grade graphite project.	
Widowmaker*	10%	WA	Ni, Cu		
Yalbra	100%	WA	Graphite		
Dempster	90%	WA	Au, Ni		
Northampton	100%	WA	Base Metals		
* Fraser Range JV with IGO (90%), BUX free-carried to decision to mine					
Resources				Newsflow	
Mt	Grade	Metal	Attr.	Project	
Base Metals - no JORC resources					
Iron Ore - Magnetite					
Inferred	103.6	26.5%	Fe	Q1 CY17	Target generation
Graphite					
Inferred	4.0	16.2%	TGC	Q1/Q2 CY17	Drill planning and approvals
P&L					
	FY2015F	FY2016F	FY2017F	Q3 CY17	Merlin target testing
Net Revenue	na	na	na	Q3/Q4 CY17	Review results, follow-up activities
Total Costs	na	na	na		
EBITDA	na	na	na		
Deprec/Amort	na	na	na		
EBIT	na	na	na		
Net Interest	na	na	na		
Pre-Tax Profit	na	na	na		
Tax Expense	na	na	na		
NPAT	loss	loss	loss		
Abnormal Items	na	na	na		
Reported Profit	loss	loss	loss		
				Unpaid Capital	
				No (m)	\$ (m)
				Ave Pr	% Ord
				Options	
				30-Jun-17	0.00
				30-Jun-18	3.76
				30-Jun-19	6.92
				30-Jun-20	12.95
				Total	23.63
					4.2
					0.18
					21%
				Comments	
Exploration success already demonstrated at Double Magic. Priority targets now being drill-tested. IGO JV partner for Fraser Range tenure.					
Analyst: Mike Millikan				Last Updated: 22/09/2017	
Phone: +61 8 9268 2805					
Sources: IRESS, Company Information, Hartleys Research					

Located ~100 km north-east from Derby in the Kimberley Region of WA

The Double Magic – Merlin discovery hole - DMRC003 included 8m @ 3.05% Ni, 1.88% Cu from 50m

Highly prospective, proven Ni-Cu mineralisation and still largely un-explored

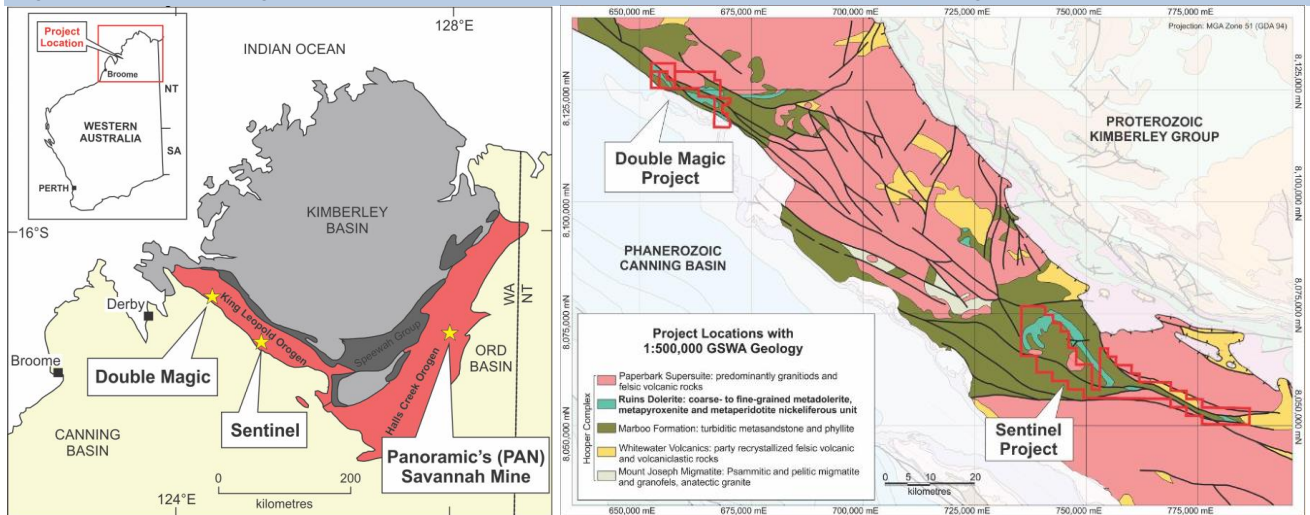
DOUBLE MAGIC PROJECT (100% BUX)

The Double Magic Nickel-Copper Project is situated ~100 km north-east of Derby in the Kimberley Region of WA. Access to the project is via the Gibb River Road to Napier Downs Station and use of station tracks. The properties which comprise Double Magic are tenements E04/1533, E04/2026 and E04/2142, and E04/2060. BUX secured a 100% interest in the project tenements (covering ~93km²) in April 2015. BUX also holds tenure at the Sentinel Project, to the south-east of Double Magic.

On the 10th of August 2015, BUX announced the discovery intercept (Hole **DMRC0003**) of 17m (down-hole) @ 1.78% Ni, 1.16% Cu from 46m, including **8m @ 3.05% Ni, 1.88% Cu from 50m**, while drill-testing Conductor D, within the Merlin prospect. The intersection of high-grade mineralisation from very shallow depths was a great outcome in only the third hole into the Company's maiden drill program. The result validated and upgraded the project area and the prospectivity of the Proterozoic Ruins Dolerite (host rock).

The Merlin prospect lies within a similar tectonic setting as Panoramic Resources (PAN) Savannah nickel-copper mine. Double Magic lies within the King Leopold Orogen, whereas, Savannah lies within the Halls Creek Orogen.

Fig. 1: Double Magic Project Location (LHS); West Kimberley Geology (RHS)



Source: Buxton Resources Limited

Drilling ongoing and now testing priority conductors

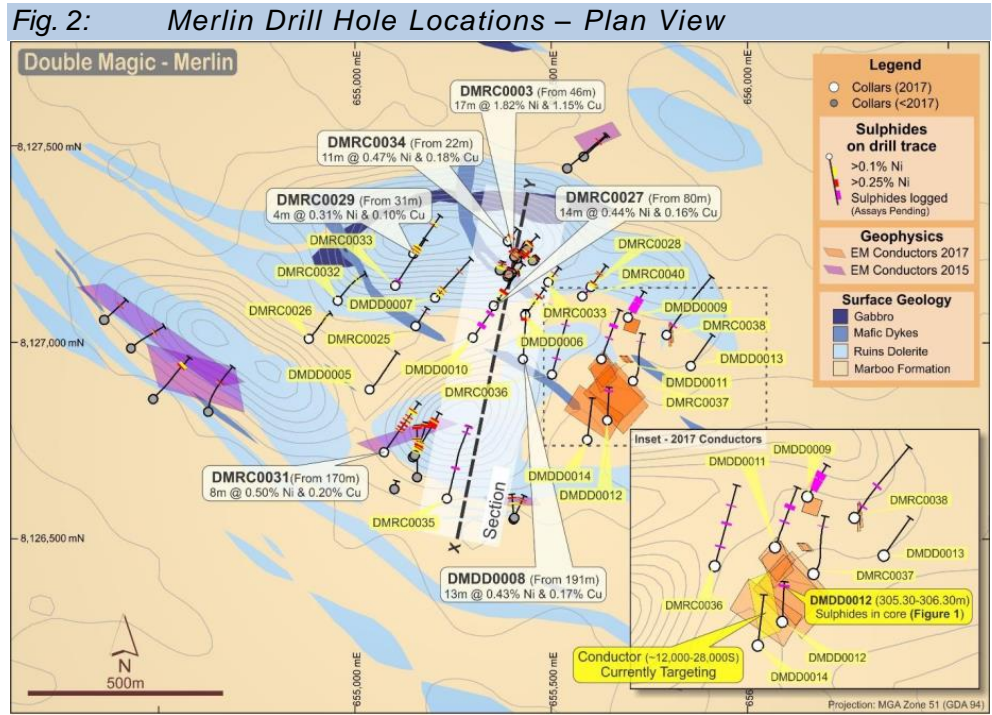
BUX recommenced drilling at its Double Magic project in the West Kimberley in mid-July 2017. The Company has now completed some 30 drill holes at the Merlin prospect, with assays received for 13 of the completed holes. Assays results (to date) have been largely from disseminated zones grading up to 0.5% Ni and 0.2% Cu in parts. Pleasingly visible sulphides have been intersected in all but one drill hole (thus far), further confirmation a very large magmatic sulphide system which spans over 1.5km of strike and has been confirmed to extend down to depths in excess of 600m.

Further widespread nickel-copper sulphide mineralisation intersected

As part of due process, BUX also completed high-powered DHEM on selected holes, with off-hole conductors representing high priority follow-up targets (potential higher grade massive sulphide accumulations). It should be noted, all EM conductors (airborne, ground and down-hole) drill-tested to date at Merlin have proven to be related to nickel-copper sulphide mineralisation.

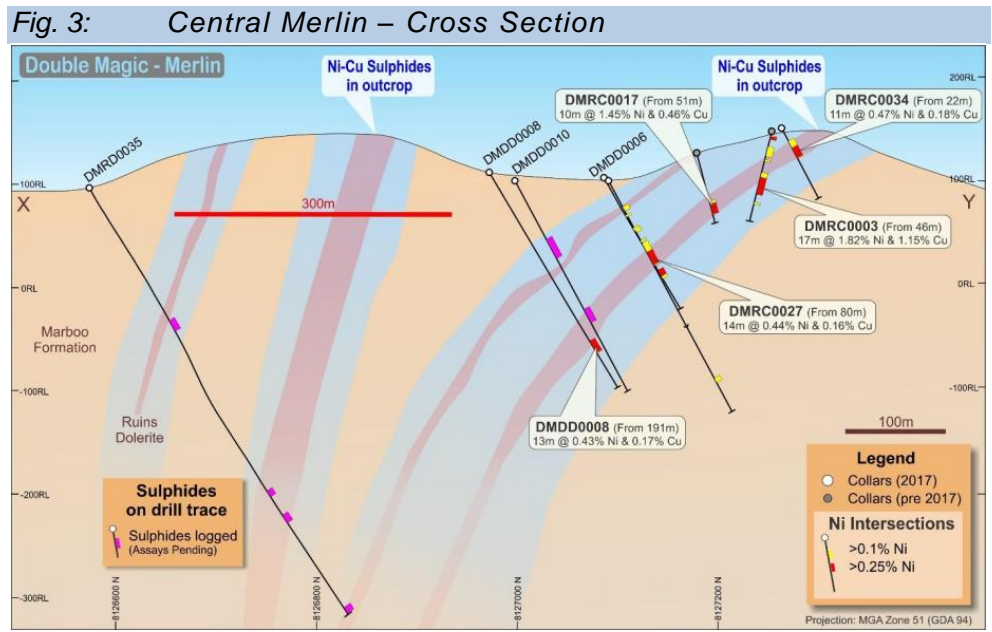
A strong off-hole conductor is now being drill-tested ~450m south-east of Conductor D. The new highly conductive (~12,000–28,000S) anomaly has modelled dimensions of ~50m x 150m with target depth anticipated to be reached in the coming days.

We look forward to the drilling of this target which remains well located within the Ruins Dolerite (mafic host), represents a higher intensity anomaly than the original Conductor D, is a good size feature (~50m x 150m) and absence of graphite (to date) within the area, all bodes well for testing



Source: Buxton Resources Limited

All EM conductors (airborne, ground and down-hole) drill tested to date at Merlin have proven to be related to nickel-copper sulphide mineralisation

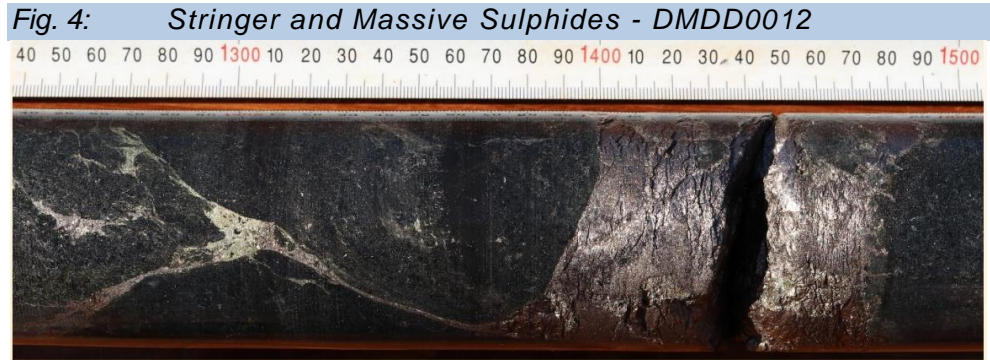


Source: Buxton Resources Limited

An upgrading factor for this target in our view is the intersection of a stringer and massive sulphide vein (over ~1m) in diamond hole DMDD0012, which was the platform for the DHEM to generate this high-priority (HP) conductor ~65m down-dip.

Assays are pending for DMDD0012, which is considered the best intercept (thus far) in the current program, and included a 10cm vein of massive sulphide (which is anticipated to be nickel-bearing) from ~306m. Variable trace to massive sulphide was also reported over a 38.1m intersection from 288.2-326.3m downhole.

The best sulphide intersection from the current drill program has been in diamond hole DMDD0012 was a ~1m intersection of stringer and massive sulphide vein (305.4 - 306.7m downhole), including a 10cm vein of massive sulphide – assays are pending



Source: Buxton Resources Limited; from 305.4m-305.7m

Preliminary met-testwork highlights good recoveries

BUX has also completed preliminary metallurgical testwork on selected drill samples from the 2015 drilling which highlights good recoveries from a relatively coarse grind (106 microns).

Nickel recoveries of 94% for a mixture of disseminated and net textured sulphides, 95% for the net textured sulphides and 79% for the disseminated sulphides have reported. Copper recoveries of 88% for the mixed disseminated and net textured sulphides, 92% for the net textured sulphides and 60% for the disseminated sulphides have also been reported.

Good recoveries from a relatively coarse grind has been reported from preliminary met-testwork

Further metallurgical test work is planned for the later in the year.

Sample #	Sample type	Ni% Head Grade	Recovery Ni%	Cu% Head Grade	Recovery Cu%	Co% Head Grade	Recovery Co%	Grind Size
DM_Met#1	Mixture of disseminated and net textured	1.82%	94%	0.51%	99%	0.06%	88%	106µm
DM_Met#2	Net textured Mineralisation	3.17%	95%	0.90%	98%	0.10%	92%	106µm
DM-Met#3	Disseminated Mineralisation	0.55%	79%	0.26%	91%	0.024%	60%	106µm

Source: Buxton Resources Limited

RISKS

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

Fig. 6: Key Risks

Assumption	Risk of not realising assumption	Downside risk to share price if assumption is incorrect	Comment
Funding for ongoing exploration	Med	Med-High	We estimate BUX has a current cash position ~\$3.6M. 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 drilling in 2017.
Discovery Success	Med-High	Med	The Company has confirmed a new Ni-Cu sulphide discovery but with only a few holes into mineralisation, size and overall grade cannot be determined (economic viability is unknown). 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.
<i>Conclusion</i>	<i>At this stage we consider the assumptions have a medium 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.</i>		

Source: Hartleys Research

HARTLEYS CORPORATE DIRECTORY

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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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