ASX Release



Quarterly Activities Report for period ending 30th June 2015

Highlights

Double Magic Ni & Cu – West Kimberley

- Buxton acquired 100% Double Magic which is located in the Kimberley in a mirror tectonic position & within similar age mafic-ultramafic rocks as the Savannah Mine of Panoramic Resources Ltd (ASX: PAN) (3.1Mt @ 1.5% Ni, 0.9% Cu & 0.08% Co)
- Numerous strong EM conductors within a 2km² central area including conductor D with a conductance of ~15,000 siemens (Nova ~5,100 siemens)
- Previously drilled EM conductors shown to be due to nickeliferous sulphides (not graphite or barren iron sulphides)
- Historic drill results include 3m @ 1.3% Ni & 0.2% Cu with 1m @ 2.0% Ni & 0.2% Cu at conductor C
- High-grade Ni-Cu gossans located up dip of conductor A and primary Ni-Cu sulphides discovered in rock-chips up-dip of conductors D & C
- ~2,500m RC drilling program is planned to begin late July to test nine conductors, including three high priority targets for Ni-Cu sulphide mineralisation

Zanthus Ni & Cu – Fraser Range

- Buxton commenced a two hole, ~1,100m RC drilling program at its Zanthus Ni-Cu sulphide project to test two high priority conductors for Ni-Cu sulphide mineralisation
- Hole ZRC095 on conductor ZM02 was completed at 306m with a zone of disseminated pyrrhotite & minor chalcopyrite in gneiss over 20m explaining the conductor. Samples have been dispatched to the laboratory and assays will be reported when available
- Hole ZRC096 targeting the large ZM07 conductor at ~700m depth temporarily suspended at 256m due to difficulties associated with running sands in top 40m of the hole. ZRC096 to be continued at a later date once appropriate steel casing is manufactured
- The drilling contractor has also undertaken to re-mobilise to Zanthus and re-enter ZRC096 at no cost to Buxton

Yalbra Graphite – Gascoyne Region

- Metallurgical results show that commercial grades of flake graphite concentrate @ 91% C(t) can be produced with 30% in the medium and coarse flake categories with simple
- Buxton is ready to commercialise the Yalbra Graphite Project by bringing in a strategic partner for development and/or offtake

<u>Corporate</u>

- Buxton successfully raised \$1.2m for Double Magic & Fraser Range drilling by issuing 12,040,000 shares at 10c each
- Cash balance (30 June 2015) of approximately \$2.1 million
- Retirement of Stuart Fogarty as Director



Double Magic Ni & Cu – West Kimberley



Figure 1. Location of the Double Magic Ni-Cu Project in the Kimberley region of Western Australia. Also shown is the location of Panoramic's Savannah Ni-Cu Mine.

During the quarter, Buxton acquired a 100% interest in the Double Magic Nickel Project in the Kimberley region of Western Australia (Figure 1). The project contains at least three existing, "walk-up" drill targets that were either untested or only partially tested by previous drilling. Additionally, re-interpretation of geological and geophysical datasets by Buxton's consultants and experienced geological team has shown that all conductors occur within the known nickel host rock, the Ruins Dolerite, and therefore have a strong chance of being due to nickel sulphides (not graphite or barren iron sulphides).

Buxton has acquired a 100% interest in the four highly prospective tenements (the Double Magic Nickel Project totaling ~93km²) in return for issuing the vendors 1,666,666 fully paid Buxton shares. In addition, Buxton will issue the vendors up to three tranches of milestone shares when specific technical hurdles are met (total cumulative value of all three tranches is approximately \$120,000).

Regional Geology

The Double Magic Project lies within the King Leopold Orogen which is comprised of Palaeoproterozoic schists and igneous rocks of the Hooper Complex and the deformed margins of the Speewah and Kimberley Basins (Figure 1). Within the Hooper Complex, schists of the Marboo Formation are intruded by thick sills of Ruins Dolerite (Figure 2).

Sills of the Ruins Dolerite host the known nickel-copper sulphide mineralisation. The sills are indistinctly layered, contain pods of meta-peridotite and are up to several hundred metres thick. The Ruins Dolerite is very similar in age and composition to intrusions in the Halls Creek Orogen such as the Sally Malay Suite that hosts the Savannah Nickel-Copper Mine of Panoramic Resources.

Project Geology & Previous Exploration

The project area is characterized by mica schists of the Marboo Formation which are intruded by sills of Ruins Dolerite. Granitoids of the Paperbark Supersuite occur in the north-east of the project area (Figure 2).

At Jack's Hill, a copper-nickel gossan occurs near the contact of the Ruins Dolerite and the mica schists of the Marboo Formation. To the west and north-west of the gossans several large hills comprised of Ruins Dolerite occur.



Initial exploration at the project focused on the Jack's Hill gossan. In 2007, two RC drill programs and one ground EM survey highlighted wide spread low-grade (typically ~0.2-0.4% Ni) sulphide mineralisation in the vicinity of the gossan.

In 2013 a helicopter VTEM survey identified eight significant conductors (Figure 2), with five located within a ~1.5km radius and interpreted to be associated with the margins of multiple Ruins Dolerite sills. These five VTEM conductors were further followed up with ground EM which resulted in the definition of seven discrete bedrock conductors.

A four hole drill program was undertaken to test these ground EM conductors. Two of the holes (CHRC012 & CHRC013) intersected highly encouraging, significant Ni-Cu sulphide mineralisation. Importantly, both the most conductive target and separately the largest conductor, were not drill tested in the program.



Figure 2. Interpreted bedrock geology, VTEM conductors and tenure at the Double Magic Ni-Cu Project.

Observations from Mapping and Rock-chip Sampling

Buxton's geologists have conducted further detailed geological mapping and rock-chip sampling around the central zone of targets at Double Magic. Major observations and results include;

- Identification of a discrete, coarse grained gabbro unit interpreted to be located stratigraphically below a high-Mg dolerite unit (Ruins Dolerite)
- A rock-chip sample located up-dip from the modelled plate at Conductor D returned modal percentages of nickel, copper and iron sulphides indicative of a primary magmatic source. Conductor D is located just above a distinctive gabbro unit and thus is tentatively interpreted to be located toward the base of the high-Mg dolerite unit – an ideal location for an accumulation of sulphides (Figure 3)
- At Conductor A, a 200m+ long zone of high-grade nickel-copper gossan outcrop has now been defined
- At Conductor C, a number of highly anomalous nickel-copper assays were returned from rockchip samples
- Geochemical analysis of all anomalous nickel-copper rock-chip samples show that they are from a primary sulphide source and predominantly not related to surface enrichment (Figure 4)





Figure 3. Conductor D, TEM response, modelled conductor and planned drill-holes.



Figure 4. Double Magic mineralised rock-chip samples plotted on Bull & Mazzuchelli primary nickel sulphide discriminator.

The Company plans to drill test nine separate targets at the Double Magic project beginning in late July 2015. Three of the conductors are deemed high priority with each of these occurring within the known nickel host rock, the Ruins Dolerite;

 Conductor D: Untested with drilling. The ground EM response is an order of magnitude greater than the other conductors with a conductance of ~10,000-15,000S (Nova 5,100S). Magmatic Ni-Cu sulphides have been discovered in outcrop in a location directly up-dip from the modelled conductor plate. This strongly upgrades the target by suggesting the source of the conductor is nickeliferous sulphides (not graphite or barren iron sulphides). The modelled conductor has an extent of circa 100m x 30m (Figures 3 & 5).



- Conductor C: Previously partially drill tested with one hole that intersected nickel-copper sulphide mineralization (3m @ 1.3% Ni & 0.2% Cu and 6m @ 0.5% Ni & 0.2% Cu). No additional drilling or downhole EM was conducted on this target. The highest ground EM response (to the east) was not drill tested. Rock-chip samples with highly anomalous nickel and copper assays plus visual sulphides were taken near the up-dip extent of the conductor. The conductance is ~1,500S (Figure 5)
- Conductor B: Untested with drilling. The modelled conductor has the largest spatial extent of any of the targets. It is likely related to conductor A, where previous drilling intersected nickel-copper sulphide mineralisation (3m @ 0.7% Ni and 0.2% Cu) and rock-chip samples of up to 6.0% Ni + 1.1% Cu have been taken. The modelled conductor has an extent of circa 300m x 100m. The conductance is ~1,000S to ~2,000S (Figure 5)

Critically, all conductors effectively tested to date by historical drilling have been verified as being due to <u>nickeliferous sulphide mineralisation</u>. Importantly, no graphite, barren sulphides or any other conductive material was encountered. This significantly upgrades the potential of the target conductors to represent Ni-Cu sulphide mineralisation.

Drilling is due to start on or around 31st July 2015.



Figure 5. Updated, simplified map of the central area of the Double Magic Project with modelled ground EM conductors, interpreted extent of the Ruins Dolerite, selected drilling and rock chip results.





Figure 6. Photomicrograph of rock-chip taken up-dip from Conductor D showing magmatic nickel and copper sulphides. viol = secondary violarite after magmatic pentlandite; po = magmatic pyrrhotite; cp = magmatic chalcopyrite.

Zanthus – Fraser Range (100% BUX)

The Company's 100% owned, highly prospective Zanthus Ni-Cu Project is located 60km along strike from Sirius Resources' Nova-Bollinger Ni-Cu discovery in the Fraser Range Nickel province, Western Australia.

The Company's drilling program targeted two conductors, ZM02 and ZM07. Hole ZRC095 on conductor ZM02 was completed at 306m with a zone of disseminated pyrrhotite and minor chalcopyrite in gneiss over 20m explaining the conductor. Samples have been dispatched to the laboratory and assays will be reported when available.

Zanthus hole ZRC096 targeting the large ZM07 conductor at ~700m depth has been temporarily suspended at 256m due to technical difficulties associated with running sands in the top 40m of the hole. ZRC096 is to be continued at a later date once appropriate steel casing is manufactured to case the top 40m of the hole. Additionally, the drilling contractor has undertaken to re-mobilise to Zanthus and re-enter ZRC096 at no cost to Buxton.

Yalbra Graphite – Gascoyne Region

Buxton reported initial flotation and acid purification test-work results for its high-grade Yalbra Graphite Project in Western Australia.

Flotation batch test results from a representative fresh rock diamond drill sample grading 20.0% C(t) returned a concentrate grade of 91% C(t). This concentrate showed a good proportion of medium to coarse flake material with 30% falling into categories above +149 microns in size (Table 1). The overall recovery of graphite was 80%, although this should be improved in future locked cycle tests. The process involved a primary grind, a rougher flotation stage, 2 stages of polishing grind and 5 cleaner flotation stages.

A final leaching stage using a combined H_2SO_4/HF solution to upgrade the concentrate was also completed and showed that a final concentrate grading 99.5% C(t) could be achieved, with the coarser size fractions grading as high as 99.7% C(t).

Yalbra is Australia's highest reported grade graphite resource at 4.0Mt @ 16.2% TGC (Inferred) and has considerable potential to be expanded along strike, and for discovery of additional resources.



Additionally, Buxton has shown commercial products can be produced from its very high grade Yalbra Graphite Project. As such, the Company is now in a position to seek a development and/or offtake partner to assist in commercialising the project.

Size	Size	Assays	Assays	Distribution
		Flotation Conc.	Purified Conc.	
Microns (µm)	Tyler Mesh	C (t) %	C (t) %	C (t) %
+297 μm	+48 mesh	91.8	99.7	6.6
+149 µm	+100 mesh	90.6	99.7	22.8
+74 μm	+200 mesh	90.0	99.5	31.2
-74 µm	-200 mesh	91.7	99.1	39.5
Weighted Avg.		<u>90.9</u>	<u>99.5</u>	<u>100.0</u>

Table 1. Flotation and purification results for the Yalbra Graphite Project.

Corporate

During the quarter, the Company issued 12,040,000 Shares at 10c per share to raise approximately \$1.2 million in a placement to sophisticated and professional investors.

Funds raised pursuant to the Placement will be used to fund:

- RC drilling of high priority targets, further ground EM surveys and further drilling (to be determined) at the Company's newly acquired, 100%-owned Double Magic Ni-Cu Project in the West Kimberley, WA;
- Diamond drilling of priority nickel-copper targets and further EM surveys at the Company's 100%-owned Zanthus Ni-Cu Project in the Fraser Range, WA;
- Further metallurgy work and commercialisation activities at the Company's Yalbra Graphite Project in WA; and for working capital purposes.

Buxton shareholders approved a further 250,000 shares to be issued to a Director, Dr Julian Stephens under the same terms as the placement.

Mr Stuart Fogarty resigned as a director of the Company, effective 30 June 2015. Buxton Resources Chairman, Seamus Cornelius, commented:

"Stuart has been a director of Buxton since 11 July 2013 and has been a valuable contributor to the Board and the Company. The Company wishes him well in his future endeavours."

Cash balance as at 30 June 2015 was approximately \$2.1 million.

For further information please contact:

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Competent Persons

The information in this report that relates to exploration results and geology is based on information previously compiled and/or reviewed by Dr Julian Stephens, Member of the Australian Institute of Geoscientists and Non-Executive Director for Buxton Resources Limited reported on 27/04/2015, 11/05/2015, 29/06/2015 and 13/07/2015. Dr Stephens has sufficient experience which is relevant to the activity being undertaken to qualify as a "Competent Person", as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves and consents to the inclusion in this report of the matters reviewed by him in the form and context in which they appear. There have been no material changes to the information reported in the previous reports.

The information in this report that relates to in-situ Mineral Resources is based on information compiled by David Williams of CSA Global Pty Ltd and previously reported 24/10/2014. David Williams is a Member of the Australasian Institute of Mining and Metallurgy, and a Member of the Australian Institute of Geoscientists and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2012 Edition). David Williams previously consented to the inclusion of such information in the previous report in the form and context in which it appeared. There have been no material changes to the information reported in the previous report.

The information in this report that relates to all other historical exploration results is information previously reported by Victory Mines Limited (ASX: VIC) under the 2004 edition of The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("JORC Code") on 12/09/2012, 10/10/2012, 25/10/2012, 16/01/2013, 13/03/2013, 24/04/2013, 29/05/2013, 11/06/2013, 20/06/2013, 05/07/2013, 06/08/2013, 12/08/2013 and 13/09/2013. There have been no material changes to the Exploration Results reported in the announcements of Victory Mines Limited. Buxton has not yet been able to completely verify all of the historical Exploration Results. Buxton will report further in relation to the project once sufficient work has been completed to report under the 2012 Edition of the JORC Code.

Appendix 1: Changes in interests in mining tenements - Buxton Resources Ltd 01/04/15 - 30/06/15

	Tenement	Location	% at beginning of quarter	% at end of quarter
Interests in mining	E 09/2022	Yalbra	100	0
tenements relinquished,				
reduced or lapsed				
				T
Interest in mining	E 66/90	Northampton	0	100
tenements acquired or	E 66/91	Northampton	0	100
increased	E 66/92	Northampton	0	100
	E 70/4730	Northampton	0	100
	E 04/2406	Derby/West Kimberley	0	100
	E 04/2407	Derby/West Kimberley	0	100
	E 04/2408	Derby/West Kimberley	0	100
	E 04/2411	Derby/West Kimberley	0	100
	E04/1533	Derby/West Kimberley	0	100
	E04/2026	Derby/West Kimberley	0	100
	E04/2060	Derby/West Kimberley	0	100
	E04/2142	Derby/West Kimberley	0	100
	E 28/2201	Zanthus	100	100
	E 28/1959	Zanthus	100	100
e mining tenements held at end of the guarter and their				
location	E 63/1595	Dempster	100	100



		P. Contraction of the second sec	
E 63/1582	Dempster	90	90
E 63/1720	Dempster	100	100
ELA 63/1675	Dempster	100	100
ELA 63/1676	Dempster	100	100
ELA 63/1677	Dempster	100	100
ELA 63/1685	Dempster	100	100
ELA 63/1686	Dempster	100	100
ELA 63/1687	Dempster	100	100
ELA 63/1688	Dempster	100	100
E 09/1985	Yalbra	85	85
E 09/1972	Yalbra	90	90
ELA 09/2101	Yalbra	100	100
ELA 66/87	Northampton	100	100
ELA 66/88	Northampton	100	100
E 66/90	Northampton	0	100
E 66/91	Northampton	0	100
E 66/92	Northampton	0	100
E 70/4730	Northampton	0	100
ELA 77/2237	Yilgarn	100	100
ELA 77/2238	Yilgarn	100	100
E 04/2406	Derby/West Kimberley	0	100
E 04/2407	Derby/West Kimberley	0	100
E 04/2408	Derby/West Kimberley	0	100
E 04/2411	Derby/West Kimberley	0	100
E04/1533	Derby/West Kimberley	0	100
E04/2026	Derby/West Kimberley	0	100
E04/2060	Derby/West Kimberley	0	100

Derby/West Kimberley

0

100

Abbreviations and Definitions used in Tenement Schedule: E Exploration Licence

E04/2142

ELA **Exploration Licence Application**