ASX Release **31st January 2017**

Quarterly Activities Report for period ending 31st December 2016

Highlights

Double Magic Project Ni & Cu – West Kimberley

- **A large, advanced Induced Polarisation (IP) and Resistivity survey was completed at Double Magic**
- **Results indicate a very large, previously-unknown body of chargeable material is present at depth under the entire Merlin prospect**
- **Modelling indicates a flat-lying pipe-like body >2 km long between approximately 60m to 400m below surface, extending to beyond 500m depth at the eastern end**
- **This body has so far been intersected only at the very top, by 2 holes (DMRC0004, DMDD0003), confirming the presence of Ni-Cu sulphides with 18m @ 0.51% Ni 0.21% Cu, and 9.6m @ 0.59% Ni, 0.21% Cu**
- **Platinum-Group Element (PGE) concentrations confirm a primary magmatic genesis for the Ni-Cu sulphide mineralization**
- **Final Induced Polarisation (IP) results and report have been received**
- **Planning for an intense 2017 fieldwork season is well underway with site works expected to commence from March 2017**
- **Mapping and rock chip sampling has identified a zone over 700 metres long of disseminated Ni-Cu sulphides in outcrop**
- **These disseminated Ni-Cu sulphides in outcrop occur directly up dip from the 2015 drilling at Conductor D and materially increase the strike length of known mineralization**
- **The disseminated Ni-Cu sulphide mineralisation corroborates the geological model and interpretation that the very large IP chargeability anomaly eflects the presence of Ni-Cu sulphides at depth**

Corporate

- **Cash balance (31 December 2016) of approximately $1.9 million**

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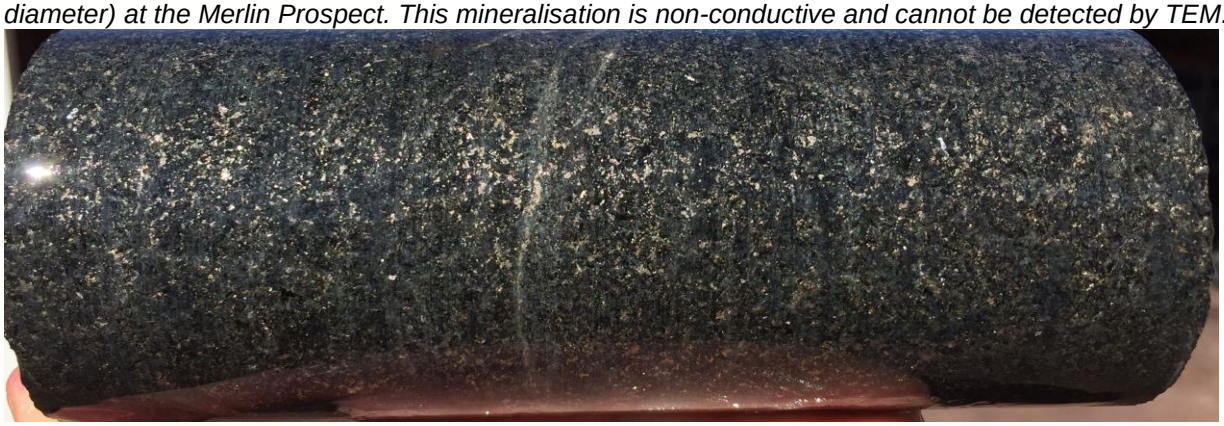
Double Magic Ni & Cu – West Kimberley

During the quarter, Buxton confirmed that the most attractive exploration target at Double Magic is a primary magmatic Ni-Cu sulphide deposit. Conceptually, this is likely to be a core of high-grade stringer or net-textured sulphides within a larger disseminated envelope (see Figure 1 below). Remobilised massive sulphide veins may or may not be present anywhere within several hundred metres.

Figure 1 – Disseminated primary Ni-Cu sulphides in hole DMDD001 (56.37-56.53 metres, HQ3 61mm diameter) at the Merlin Prospect. This mineralisation is non-conductive and cannot be detected by TEM.



Previous electrical surveys in the region have been confined to various types of Transient Electro-Magnetic (TEM) surveys such as VTEM, FLTEM and DHTEM. These surveys have effectively detected highly conductive but thin veins of remobilized massive sulphide at Double Magic. Critically however, TEM may not detect high-grade but much less conductive stringer or net-textured "massive matrix" sulphide zones or pods, and will not detect disseminated sulphides, which have been found to be completely non-conductive.

Benchtop testwork on Buxton's 2015 drillcore indicates even high-grade (>3% Ni) net-textured sulphide zones are only around 1/20th as conductive as the thin massive sulphide veins. The risk that extreme EM responses from remobilised massive sulphide veins could mask any response from primary Ni-Cu sulphides is considered by Buxton to be substantial, and real.

Induced Polarisation/Resistivity surveys measure electrical chargeability and resistivity properties of the rock mass, unlike TEM, which measures conductivity. Therefore, IP will detect the demonstrably chargeable disseminated, stringer, or net-textured zones but will not "see" distracting highly conductive bodies such as massive sulphide veins or graphite, for example.

Buxton chose to proceed with a ground-breaking IP survey at Double Magic because it has been recognized that the main exploration target type - primary magmatic sulphides - may not be detected by TEM, the only electrical survey technique applied in the region to date. Buxton's pioneering use of IP represents a paradigm shift for exploration in the West Kimberley. This IP survey is using some of the highest powered transmitters available as part of a complex array laid out over approximately 67 kilometres of transmitting and receiving lines.

Results from the Induced Polarisation (IP) survey completed during the quarter are considered by Buxton to be outstanding.

This work has detected a previously unknown, very large body of moderately chargeable material at depth, beneath the entire Merlin prospect. The body appears to be >2 km long and at least several hundred metres across, ranging in depth between ~60 to 400m below surface. Adding to potential, this body appears to plunge down and be open beyond 500m depth at the eastern end, possibly indicating a magmatic feeder zone (see Figure 2).

At this early stage, Buxton considers that supporting surface and drillhole geochemistry, supporting geology, geometry and location of the body, as well as the structural/tectonic setting all indicate that the chargeable body will prove to be related to Ni-Cu sulphides within the Ruins Dolerite.

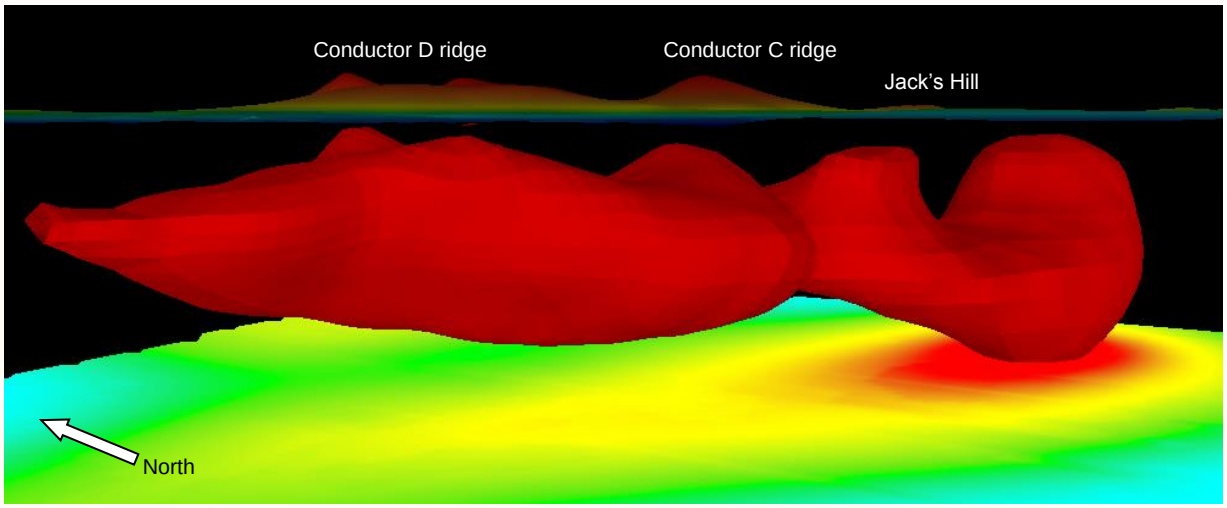


Figure 2 – Merlin IP survey volume looking north-east, chargeability iso-surface 20 mV/V displayed, topography above, horizontal model slice displayed at base is ~530m below surface (-420RL)

So far, only two drillholes have intersected this chargeability anomaly, being DMRC0004 and DMDD0003 drilled under Conductor C in 2015. Both holes may have just intersected the very top of the chargeable body (see Figure 3), returning intersections of;

- 18 metres @ 0.51% Ni, 0.21% Cu (DMRC0004 152-170m downhole, reported 2/11/15), and;
- 9.6 metres @ 0.59% Ni, 0.21% Cu (DMDD0003 142.4-152.0m downhole, reported 27/11/15).

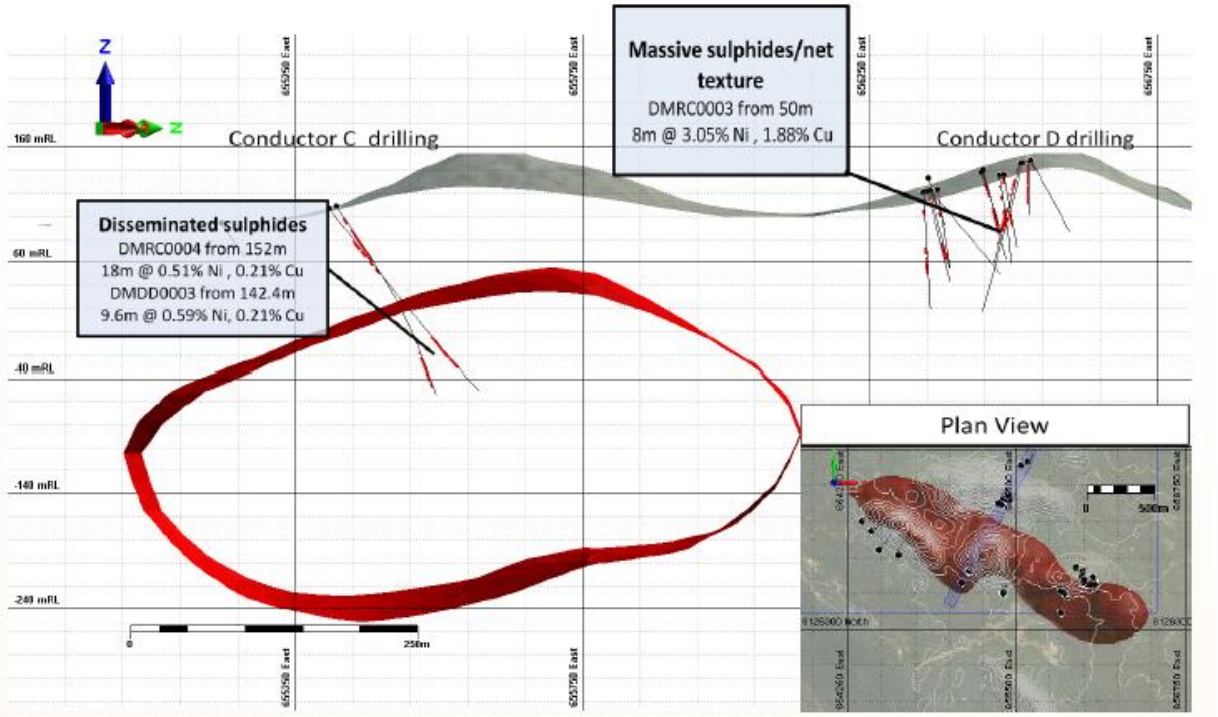


Figure 3 – Cross-section looking north-west showing chargeability iso-surface 20mV/V with drilling

This chargeable body may represent a large volume of mafic rock which is prospective for accumulations of nickel-copper sulphides. It exhibits irregular geometries in places, which may further enhance potential for sulphide accumulations.

Buxton reminds readers that this chargeability anomaly could represent a number of different geological entities, such as;

- Mafic rock with variable grade nickel-copper sulphide mineralisation
- Disseminated magnetite within later mafic rocks, or within surrounding schists, or
- Some other mass of chargeable rock of an unexpected nature.

However, considering the supporting surface and drillhole geochemistry, size, location, geometry, lack of magnetic expression of the body, possible geological model/s as well as the structural and tectonic setting, it is Buxton's opinion that that the chargeable body will prove to be a reflection of nickel-copper sulphides within a large volume of Ruins Dolerite.

The contraction and focussing to depth of the chargeability anomaly at the eastern end, extending beyond the depth of investigation, may suggest a magmatic feeder chamber to the more flat-lying portion. Importantly, previous shallow drilling targeting TEM conductivity anomalies appears to have largely missed these deeper targets.

Buxton believes this survey has dramatically enhanced the prospectivity of Double Magic for magmatic nickel-copper sulphide deposits and added a massive amount of information to the evolving 3D geological picture. These results have also validated the innovative use of high-power 3D IP at Merlin.

Outcropping Ni-Cu Sulphides supports IP Results

As part of the extensive work program carried out at Double Magic during the 2016 field season detailed mapping and rock chip sampling defined nickel-copper sulphides in outcrop with a strike length of over 700m (Figure 4). This nickel-copper sulphide zone is directly up dip from the 2015 drilling at Conductor D and also interpreted to be directly related to the recent IP chargeable anomaly (announced 24/10/2016). Additional nickel-copper mineralisation was also identified at surface on Conductor C.

All geological indications are pointing towards potentially a much larger Ni-Cu mineralised system existing than was previously understood at Double Magic. The surface mineralisation extends the strike length of the Conductor D mineralisation from ~65m in drilling to over 700m on surface. The occurrence of this mineralisation adds confidence to the interpretation that the IP chargeability anomaly represents a large disseminated Ni-Cu sulphide target, with the top of the IP anomaly ranging from 60m to 100m from surface.

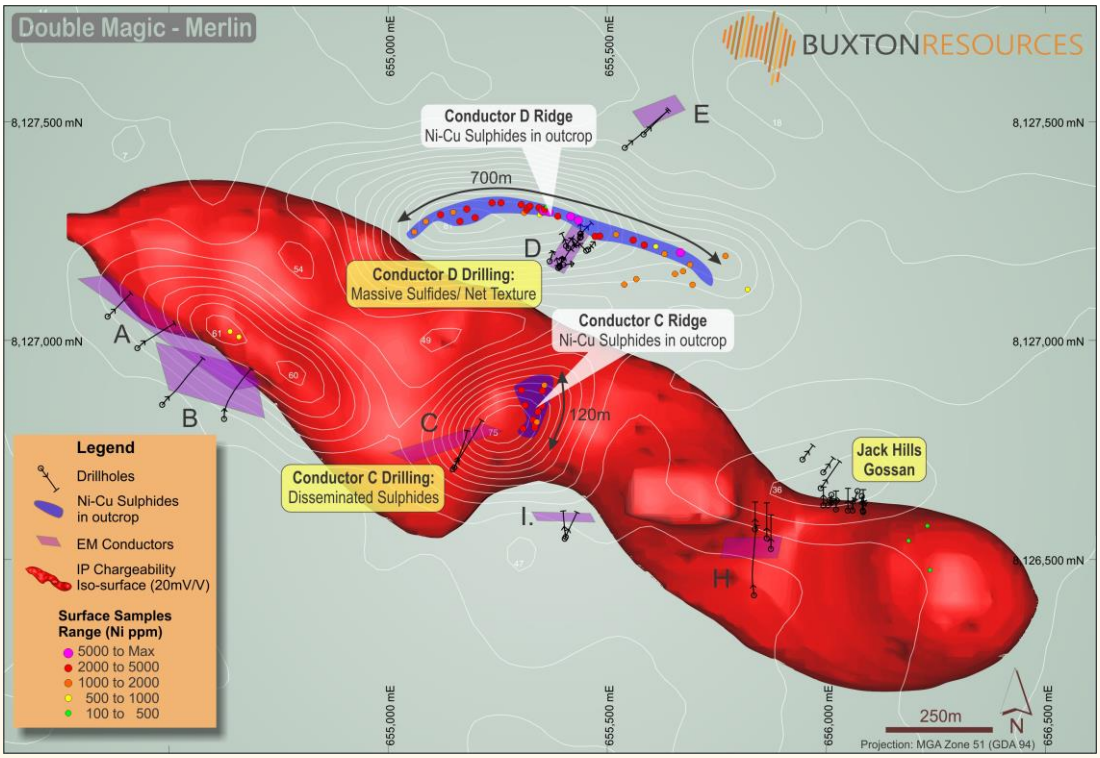


Figure 4 *– Plan view of 2016 rock chip assay results Ni (ppm), highlighting ~700m strike of Ni-Cu sulphides in outcrop up dip from the drilling at Conductor D, showing the recently defined IP chargeability anomaly (20mV/V)*

Comment: Eamon Hannon, Managing Director

"For over 18 months the Double Magic project has ticked all the key technical criteria required to host a large sulphide body. The latest round of results has added yet another layer of strong supporting evidence for the existence of a large Ni-Cu mineralised system."

"The Buxton team believes that we could have a tiger by the tail and all of the work to date suggests there is a high possibility for a significant Ni-Cu deposit to exist at our Double Magic project. Very exciting times ahead!"

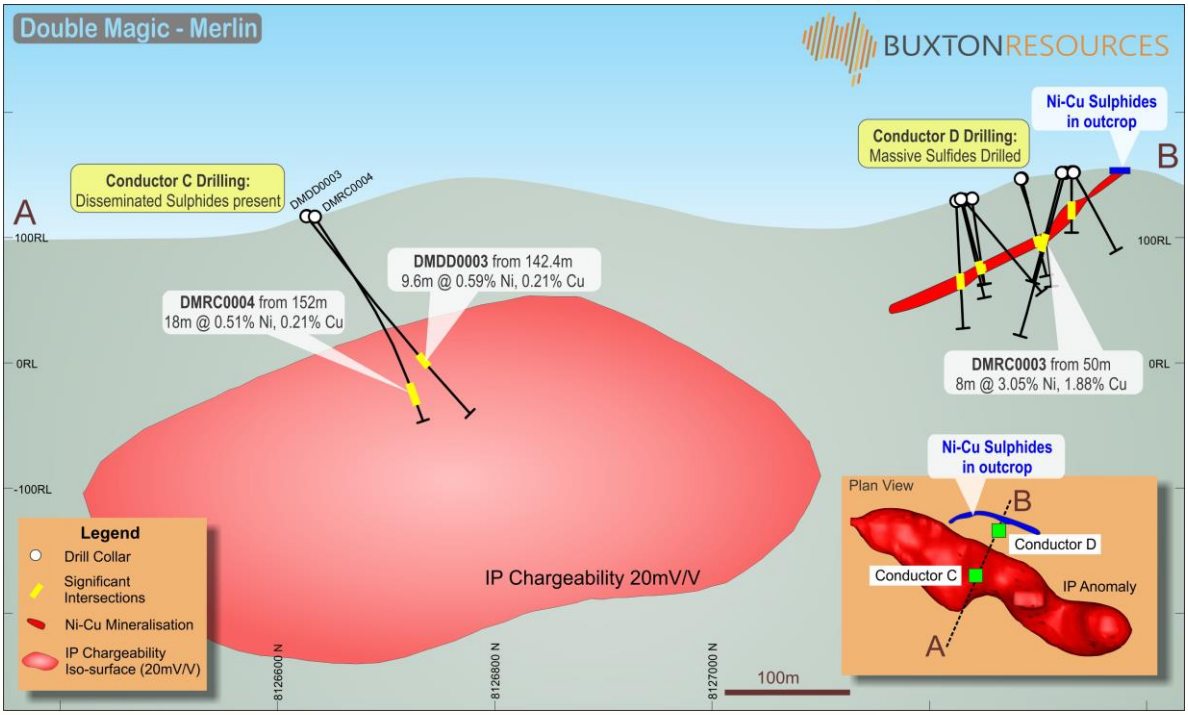


Figure 5 – *Cross-section looking north-west showing IP chargeability iso-surface 20mV/V with drilling and surface Ni-Cu sulphides*

PGE Results Support Magmatic Genesis At Double Magic

During the quarter a selection of mineralised surface and diamond core samples were analysed for the full suite of six PGE elements (Os, Ir, Ru, Rh, Pt and Pd) using the fire assay method with a nickel sulphide collector at Bureau Veritas Ultra Trace, Canning Vale, Western Australia.

The samples selected were across a range of mineralisation styles (disseminated, net/matrix and massive sulphide) and grade ranges (0.47 - 6.35% Ni). These were selected as being representative of mineralisation so far identified at the Double Magic Ni-Cu Project.

Results just received show elevated levels across the entire range of PGEs, see Table 1. Note that Ni and Cu results are from previous analysis of the same samples by Intertek Genalysis. Drillhole locations are listed in Table 2.

Of particular significance are the IPGE results (Os, Ir and Ru). These elements are only present in magmatic systems as they are immobile therefore cannot be transported, for example by hydrothermal systems. This is of genetic importance and adds an additional layer of confidence to the interpretation that the Double Magic Project hosts a primary magmatic mineralising system with potential to host significant accumulations of Ni-Cu sulphides.

It should be noted that these PGE results would not be expected to result in economic credits.

Sample	Os	Ir	Ru	Rh	Pt	Pd	Ni	Cu	Description
UNITS	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppm	
Detection limit	0.1	0.1	0.1	0.1	0.5	0.5	1	1	
33589	13.3	19.9	41.1	34.1	347.0	255.0	63504	1347	Massive, DMDD0003 144m
BRC3385	3.9	6.6	17.5	7.7	15.5	53.0	32213	9979	Net/matrix, DMDD0001 52.1m
33590	0.8	1.5	3.4	0.5	25.5	34.5	4695	1940	Disseminated, DMDD0003 144.2m
33648	0.8	2.1	3.2	0.9	24.5	20.0	7293	2450	Disseminated, DMDD0004 48.5m
BRC3683	1.2	1.8	6.1	2.4	26.5	27.5	5628	2312	Disseminated, 655,417mE 8,127,283mN

***Table 1** – Platinum-Group Element results for selected mineralised samples from Double Magic*

Finalised Induced Polarisation Survey Results

Final results, interpretation and documentation of the IP survey (first reported to the ASX 24/10/16) have been received from Buxton's geophysical consultants, Southern Geoscience Consultants. Final evaluation of data confirmed that "*overall the acquired dataset is deemed to be of high quality and consistent/repeatable across the full survey areal coverage*". The depth investigation level "*has conservatively been estimated to be ~500m for larger volumetric targets within the central target corridor*". However, the 100-400+ metre depth focus of the survey and resultant dipole spacing of 100 metres means that "*shallow/localised IP anomalism will not be resolved in any great amount of detail",* meaning that the implications of any IP responses, or lack thereof, within about 100m of surface should be considered with care.

Indications are that the chargeability anomaly may have three discrete internal zones, two isolated features to the east and a longer, broader feature to the west. Possible structural influences can be observed. Broadly speaking, the IP chargeability anomaly lies within a corridor beneath, and flanked by, known EM conductors (from VTEM, FLTEM and DHTEM surveys). Drilling has proven every one of those conductors to be the result of Ni-Cu sulphide accumulations.

In conclusion, Southern Geoscience Consultants (SGC) commented that "*In the case of Double Magic and geological observations from mapping/limited drilling to date it is believed that the most likely source of the main/primary IP anomalism is disseminated sulphides (whether mineralised/non-mineralised remains to be tested). There is also the possibility that IP anomalism could be related to disseminated magnetite within later mafic rock types....It is believed unlikely that the IP anomalism is sourced by either graphite bearing rock types or clays/alterations/structure.*"

Hole ID	Conductor	East	North	RL	Az	Dip	EOH (m)
DMDD0001	D	655,437	8,127,236	151	214	-75	134.6
DMDD0003	C	655,146	8,126,706	117	030	-52	204.2
DMDD0004	D	655,409	8,127,210	147	337	-60	75.2

***Table 2** – Details of text-referenced diamond drillholes (all previously reported). MGA Zone 51 (GDA94)*

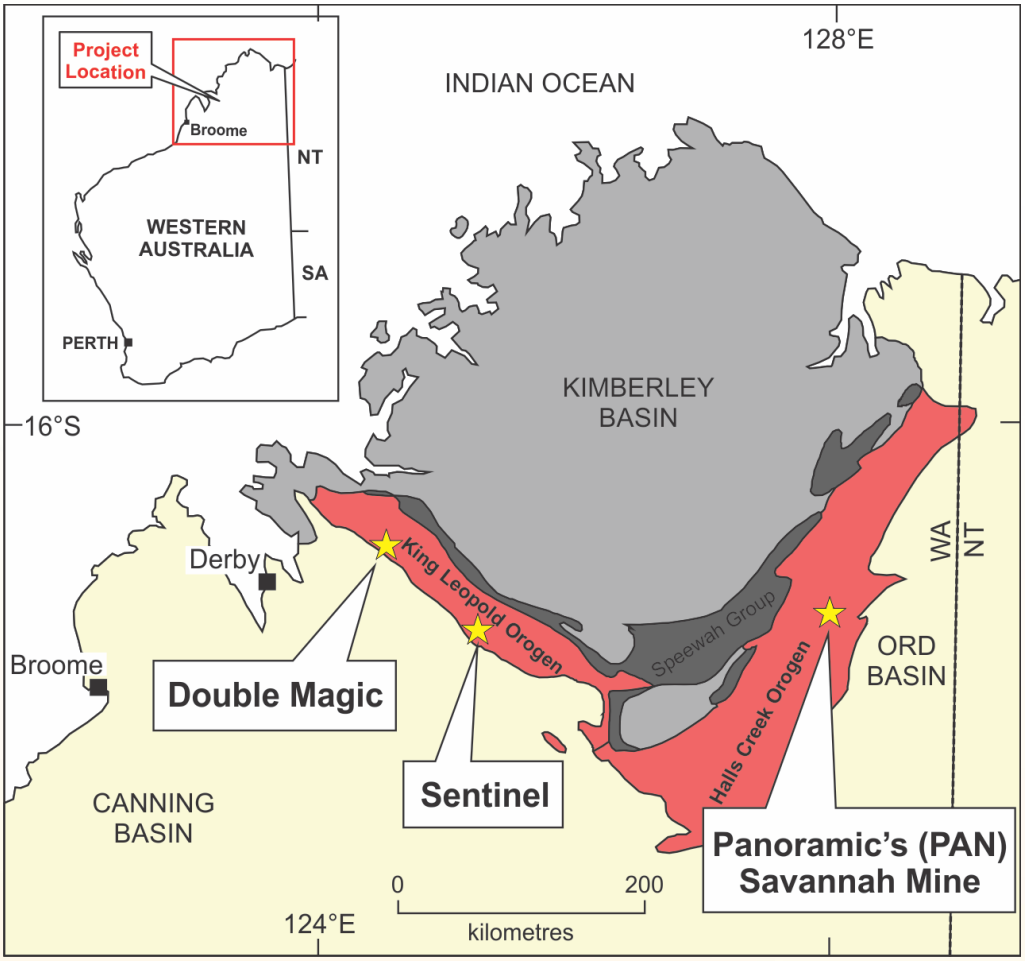


Figure 6 – Location of Buxton's two West Kimberley projects, also showing the location of Panoramic's Savannah Ni-Cu Mine

Corporate

Buxton continues to meet all necessary expenditure needs and is, per usual, operating with demonstrable financial constraint and responsibility.

Cash balance as at 31 December 2016 was approximately $1.9 million.

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Competent Persons Statement

The information in this report that relates to exploration results and geology for the Double Magic Project is based on information previously reported under the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves based on information compiled by Mr Rolf Forster, Member of the Australasian Institute of Mining and Metallurgy, and Mr Derek Marshall, Member of the Australian Institute of Geoscientists. Mr Forster is an Independent Consultant to Buxton Resources Limited and Mr Marshall is a full-time employee. Mr Forster and Mr Marshall have sufficient experience which is relevant to the activity being undertaken to qualify as a "Competent Person", as defined in the 2012 edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Forster and Mr Marshall consent to the inclusion in this report of the matters based on the information in the form and context in which it appears.

Appendix 1: Changes in interests in mining tenements - Buxton Resources Ltd 01/10/16 – 31/12/16

	Tenement	Location	% at beginning of quarter	% at end of quarter
Interests in mining tenements relinquished, reduced or lapsed				

Interest in mining tenements acquired or increased				

The mining tenements held at the end of the quarter and their location	E 28/2201	Widowmaker	10	10
	E 28/1959	Zanthus	10	10
	E 63/1595	Dempster	100	100
	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	100	100
	E 09/1972	Yalbra	90	90
	E 09/2101	Yalbra	100	100
	E 66/87	Northampton	100	100
	E 66/88	Northampton	100	100
	E 70/4730	Northampton	100	100
	E 66/90	Northampton	100	100
	E 66/91	Northampton	100	100
	E 66/92	Northampton	100	100
	ELA 77/2237	Yilgarn	100	100
	ELA 77/2238	Yilgarn	100	100
	E04/1533	Derby/West Kimberley	100	100
	E04/2026	Derby/West Kimberley	100	100
	E04/2060	Derby/West Kimberley	100	100
	E04/2142	Derby/West Kimberley	100	100
	E04/2408	Derby/West Kimberley	100	100
	ELA 04/2406	Derby/West Kimberley	100	100
	ELA 04/2407	Derby/West Kimberley	100	100
	ELA 04/2411	Derby/West Kimberley	100	100
	P04/269	Derby/West Kimberley	100	100
	ELA 28/2620	Dundas	100	100

Abbreviations and Definitions used in Tenement Schedule:

E Exploration Licence ELA Exploration Licence Application P Prospecting Licence