

ASX Release

29<sup>th</sup> August 2016**MAJOR GEOPHYSICAL SURVEY BEGINS AT DOUBLE MAGIC Ni-Cu PROJECT**

- **A large, advanced Induced Polarisation (IP) and Resistivity survey now underway**
- **2016 field program ongoing since early June, focused on de-risking targets for future drilling**
- **Significant steps made in better understanding the structure, litho-geochemistry, geophysics and genesis of mineralisation across the project and at the Merlin Prospect**
- **This enhanced geological picture is already yielding new, specific drill-ready targets**
- **Initial fieldwork completed on the new 100% Buxton owned Sentinel Project confirms significant occurrences of highly prospective Ruins Dolerite 110 km along-strike from Double Magic.**

Buxton Resources is pleased to provide an exploration update for its 100% owned nickel-copper projects located in the West Kimberley region of Western Australia. For project locations, see Figure 1 at the end of this announcement.

**Double Magic - Geophysics**

Buxton's 2015 discovery of high-grade primary magmatic sulphides at Double Magic (Merlin prospect) came after more than 50 years of exploration in the area by other parties, validating Buxton's acquisition of the Double Magic project in late April 2015. Drilling in 2015 confirmed better than economic grades and thicknesses at Merlin, with widespread >1% Ni sulphide intersections over a 3 km<sup>2</sup> area, and >3% Ni assays returned from three separate prospects within that area (ASX 27/11/15).

Last year's previously-reported results from Double Magic (highlight DMRC003, 8m down-hole at 3.05% Ni and 1.88% Cu) have driven ongoing detailed technical investigations and the re-establishment of a full-time site presence since early June.

Drill results from 2015 and ongoing work during 2016 has 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 2 below). Remobilised massive sulphide veins may or may not be present anywhere within several hundred metres.

*Figure 2 – 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 1/20<sup>th</sup> 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.

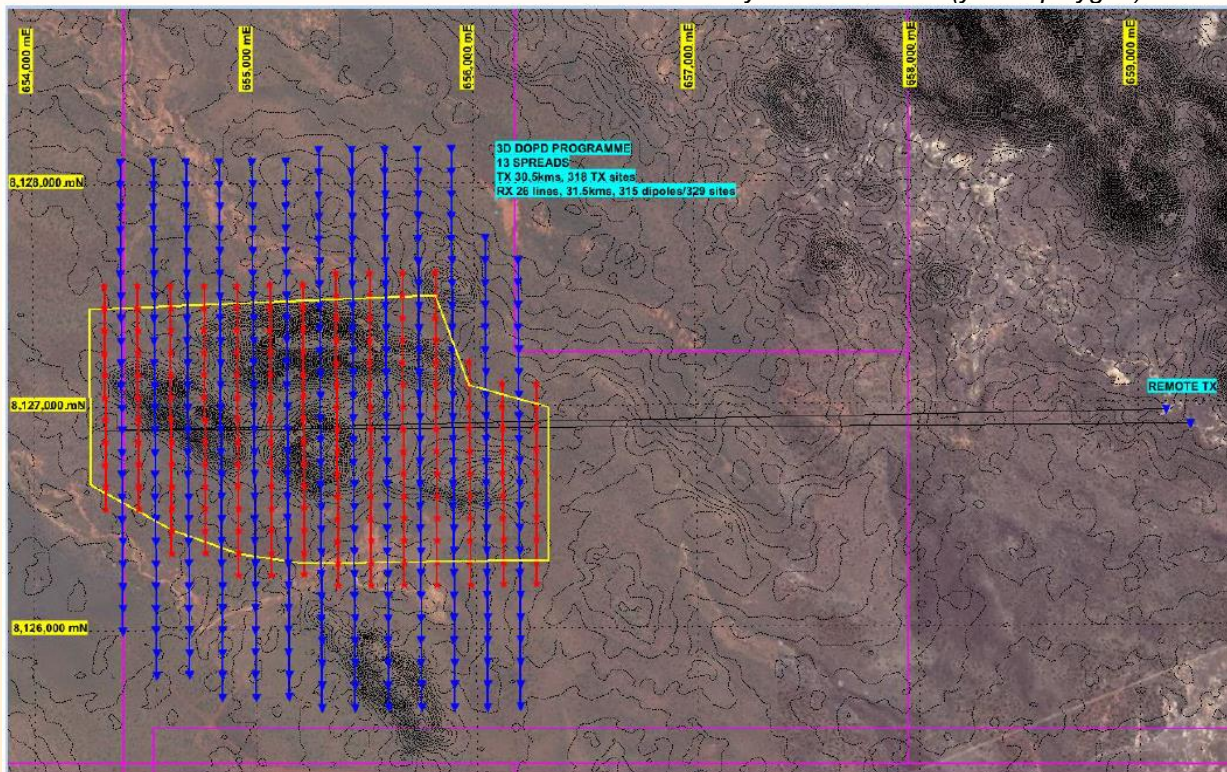
Induced Polarisation/Resistivity surveys measure electrical chargeability and resistivity properties of the rock mass, unlike TEM, which measures conductivity. Therefore, IP will detect the demonstrably chargeable disseminated, stringer, or net-textured zones but will not “see” distracting highly conductive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

Buxton has chosen 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.

Specialist contractors have been mobilised, with this pioneering high-power and high density pseudo-3D IP and resistivity survey currently underway. The survey area covers the entire Merlin Prospect and any extensions, with data acquisition expected to be completed by end-September.

See Figure 3 below for survey area location and array layout.

*Figure 3 – IP/Resistivity survey array being executed at Merlin. 1 km grid. Red lines are to receive only, blue lines transmit but are also used to receive within the survey area of interest (yellow polygon).*



Compared with conventional 2D IP surveys, this advanced, overlapping double-offset pole-dipole array of transmitters and receivers massively increases the amount of raw data acquired, improving spatial accuracy/confidence, resolution, and depth of investigation, providing a dataset which can be processed to yield robust targets defined in three dimensions. The high power transmitters being utilised (4,000 volt 50kVa Search Ex) and array configuration means that detection depths can exceed 400 metres.

Apart from design and commencement of the ongoing IP survey, related geophysical work conducted since Buxton's last ASX update in November 2015 includes;

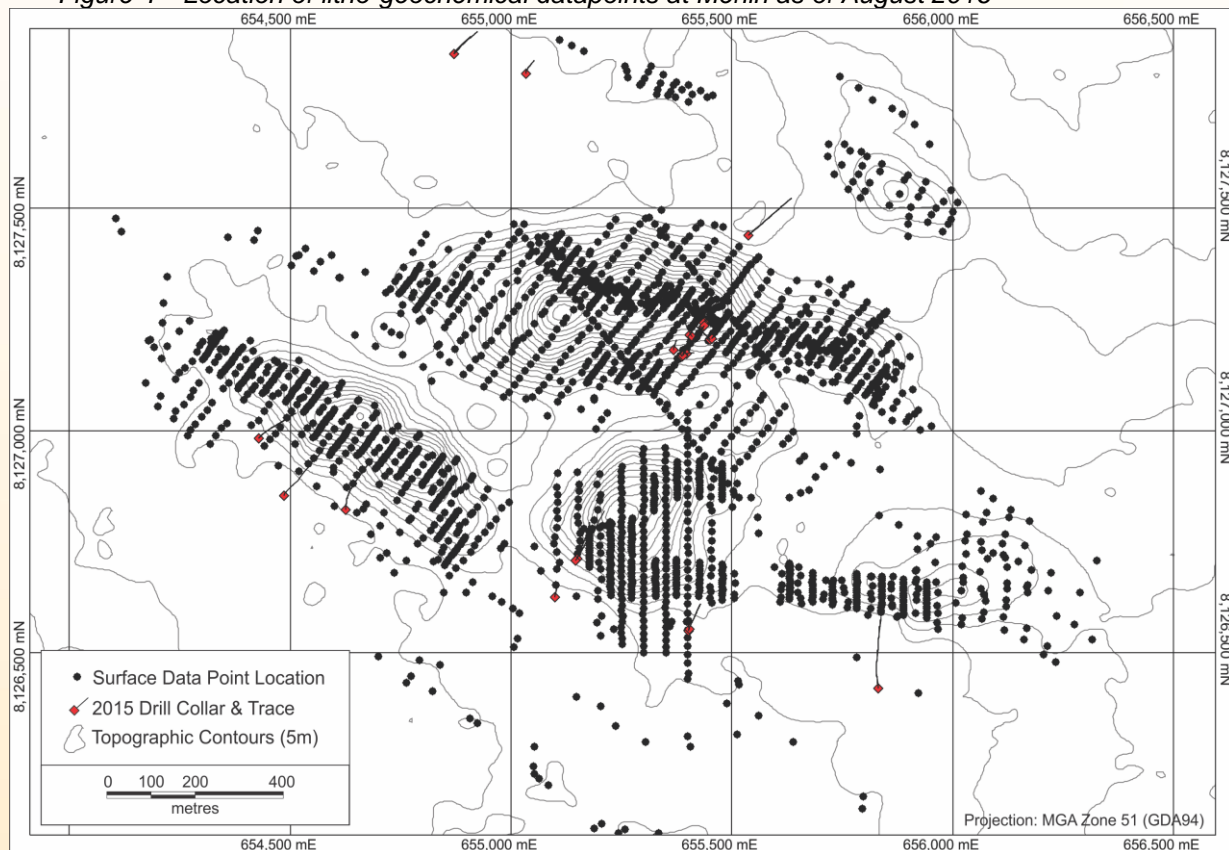
- Re-processing of existing aeromagnetics data over all of Double Magic
- A detailed ground magnetic survey over the entire Merlin area
- Benchtop petrophysical electrical testwork on 30 representative core and rock samples from Merlin. Properties tested include magnetic susceptibility, conductivity, resistivity, chargeability.

### Double Magic – Geology and Geochemistry

Recent work has focused on refining understanding of the controls on mineralisation, the Merlin prospect area being the priority. This ongoing work is significantly de-risking the project technically, in particular with regard to best-possible targeting of future drillholes. Several new zones of interest, as well as specific target locations, have already been defined. Recent and ongoing geological and geochemical work at Merlin includes;

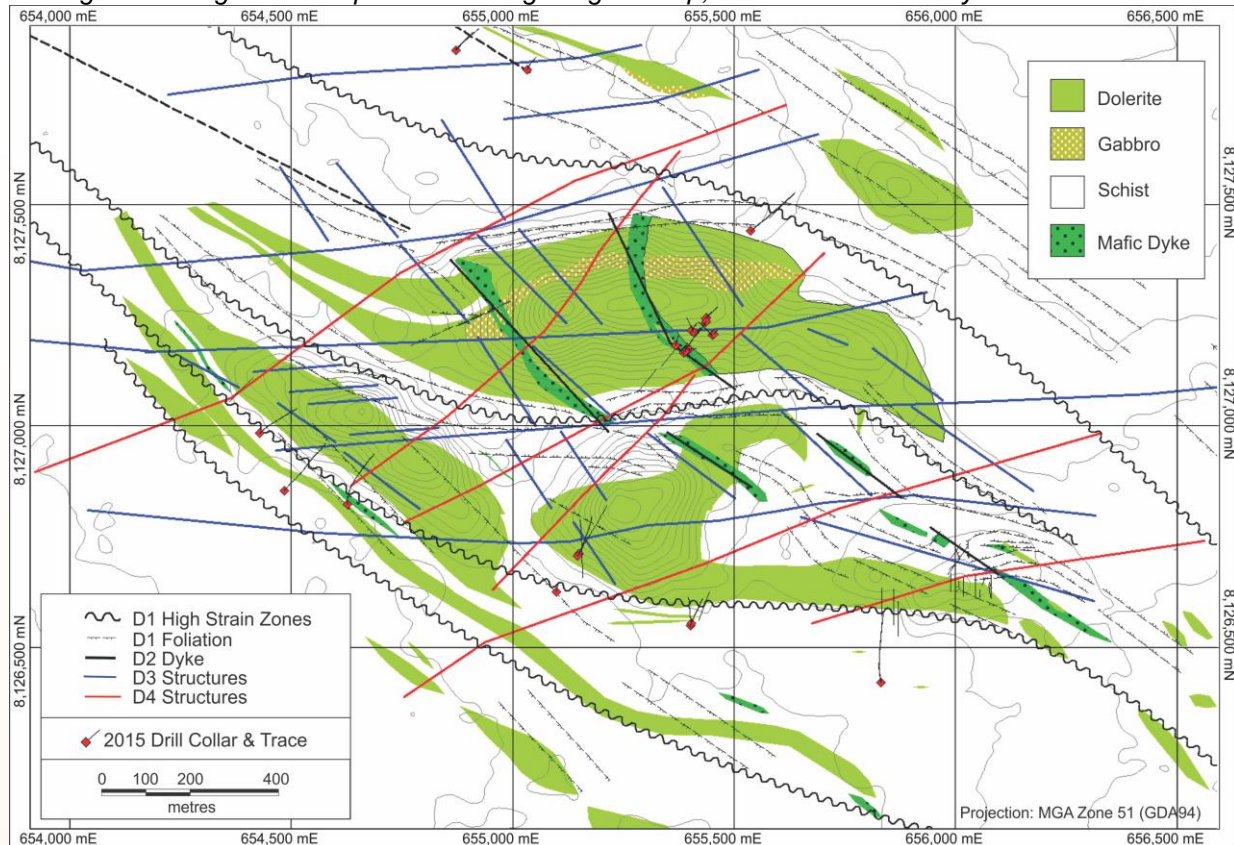
- Detailed lithological mapping
- Further petrographic observations from drillcore
- Detailed specialist structural mapping, integrating surface and core observations
- Detailed litho-geochemical mapping focusing on specific features identified first in diamond core and more recently, on surface (see Figure 4 below). Lab results are awaited for rock chip samples to confirm absolute geochemical values
- Recognition of several bulk rock attributes related to or associated with mineralisation. The combination of this with a clearer picture of the genetic model has advanced understanding of 2015 VTEM, FLTEM and DHTeM results.

*Figure 4 – Location of litho-geochemical datapoints at Merlin as of August 2016*



As a part of this ongoing work, the Merlin interpreted geological map has also been extensively refined. The current version of this map, with structural overlay based on detailed field mapping by structural specialists integrated with the enhanced aeromagnetics data, is presented below as Figure 5.

*Figure 5 – August 2016 updated Merlin geological map, with structural overlay*



Elsewhere at Double Magic, recent and ongoing work at the Fireant Prospect to the east includes;

- Detailed ground reconnaissance over selected VTEM anomalies;
- More regional geological mapping traverses;
- Regional and detailed lithogeochemical traverses in selected areas.

Buxton is planning a significant drill program at Double Magic for the 2017 field season. The West Kimberley in particular remains acutely under-explored. The detailed investigations underway by Buxton during 2016 will give future drilling programs the best possible chance of yielding exciting results.

The Company's confidence in the region has again been supported by the WA State Government through the Exploration Incentive Scheme. In June 2016, Buxton was successful in securing a refund of up to the cap of \$150,000 for 50% of the cost of a multi-hole drill programme through the Co-funded Drilling Program. The Company is extremely grateful for this support, with the refund grant adding to the scope of drilling which can be planned for 2017.

Buxton expects to be providing ongoing market updates for this exciting project during the coming months.

### Regional – New E04/2408 “Sentinel” Project

Buxton has taken advantage of a softer nickel price and quieter market sentiment during the first half of 2016 to consolidate the Company’s strategic position, in the West Kimberley particularly. Leveraging off the Company’s large and growing proprietary technical knowledge base, Buxton has pegged three new Exploration Licenses in the West Kimberley, being pending applications E04/2406, E04/2407 and the March 2016 granted E04/2408, now named Sentinel (see Fig 1 at the end of this document for locations of granted licenses).

Buxton’s wholly owned E04/2408 Sentinel Project was granted on the 16<sup>th</sup> of March 2016. The Project is located approximately 110km along strike to the southeast from the Double Magic Project (See Fig 6 overleaf for regional geology).

The ground was applied for based on the likely presence of prospective rocks assigned to the Ruins Dolerite, similar to the rocks seen at Double Magic. Buxton’s 2015 results proved that the Ruins Dolerite does host better-than-economic Ni-Cu sulphide grades. The granted Sentinel Project, as well as other tenement applications made by Buxton in the Hooper Complex, all contain significant but under-explored mapped occurrences of Ruins Dolerite.

Not only does Sentinel contain significant quantities of mapped Ruins Dolerite, it has the only recorded occurrence of peridotite within the Ruins Dolerite (Derrick and Playford, 1973, Lennard River Explanatory Notes). Peridotite (an ultramafic rock predominantly composed of olivine and pyroxene) indicates a more primitive part of the magmatic system, typically the most prospective part of mafic-ultramafic systems for primary magmatic Ni-Cu sulphide mineralisation.

An initial field reconnaissance trip to the Sentinel Project was undertaken during July, with regional geological and litho-geochemical traverses completed. Rock chip samples have also been collected for petrographic review. Assessment of results is ongoing.

**Figure 6 – Detailed location and regional geology for Buxton’s West Kimberley projects**

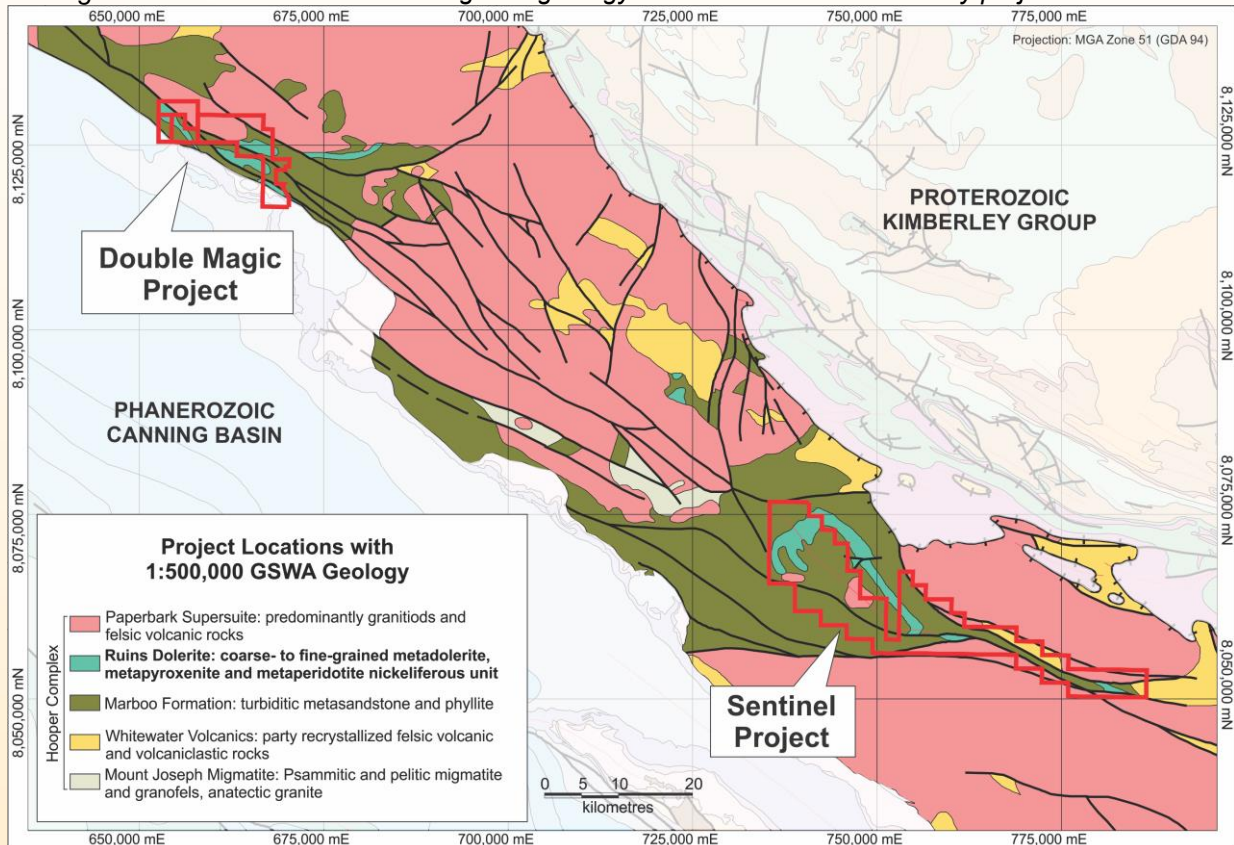
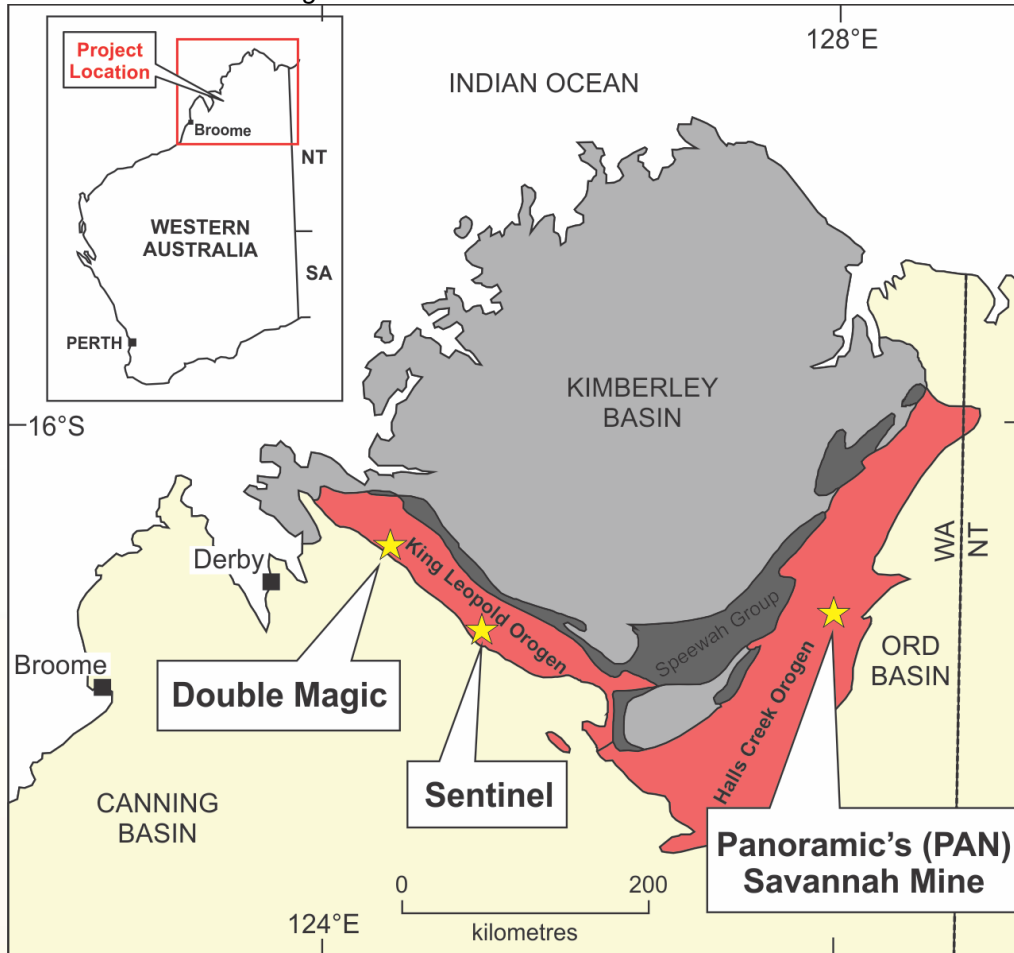


Figure 1 – Location of Buxton’s two West Kimberley projects, also showing the location of Panoramic’s Savannah Ni-Cu Mine



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## Competent Persons

*The information in this report that relates to Exploration Results is based on information compiled by Mr Rolf Forster, Member of the Australasian Institute of Mining and Metallurgy, and Mr Eamon Hannon, Fellow of the Australasian Institute of Mining and Metallurgy. Mr Forster is an Independent Consultant to Buxton Resources Limited and Mr Hannon is Managing Director of Buxton Resources Limited. Mr Forster and Mr Hannon 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 Hannon consent to the inclusion in this report of the matters based on the information in the form and context in which it appears.*

## Section 2 – Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i>	The Double Magic Project is located in the Kimberley region of Western Australia and consists of four exploration licences (E04/1533, E04/2142, E04/2026 & E04/2060) held by Alexander Creek Pty Ltd. Alexander Creek Pty Ltd is a wholly (100%) owned subsidiary of Buxton Resources Limited. The Sentinel project consists of one exploration licence (E04/2408) granted to Buxton Resources on 16/03/16.
	<i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i>	The tenements are in good standing with the DMP and there are no known impediments for exploration on these tenements.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Data used during the appraisal of the Double Magic Project (previously known as the Alexander Creek Project, Clara Hills, Jack's Hill, Limestone Springs & Maura's Reward) has been collected by numerous exploration parties, including Alexander Creek Pty Ltd, Victory Mines Limited (ASX:VIC), Proto Resources and Investments Limited (ASX:PRW), and Ram Resources Limited (ASX:RMR). All geophysical data has been independently reviewed by Southern Geoscience Consultants. All historical data presented has been previously reported under JORC 2004 and there has been no material change. The Sentinel project has previously only been subject to regional mapping by the GSWA and other government bodies.
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	The Project areas lie within the Palaeoproterozoic Hooper Province of the King Leopold Orogen in the Kimberley region of Western Australia. The geology of the Project is characterized by mica schists of the Marboo Formation which are intruded by thick sills of the Ruins Dolerite. The Ruins Dolerite is a medium- to fine-grained mafic-ultramafic intrusive that is host to the known nickel-copper sulphide mineralization. This mineralization is interpreted to represent primary orthomagmatic sulphide mineralization, however there appears to be significant re-mobilisation and alteration of the mineralization in places (in particular at the Jack's Hill Gossan where the mineralization is dominated by copper carbonates and contains limited nickel). Importantly the gossan at Jack's Hill does not have an electromagnetic (EM) signature, whereas the EM targets tested to date all appear to be due to nickel and copper enriched sulphide mineralization.
<i>Drill hole Information</i>	<i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i>	Included in full in multiple ASX releases during the second half of 2015, most recently on 27 <sup>th</sup> November 2015.
	<i>o easting and northing of the drill hole collar</i>	
	<i>o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i>	
	<i>o dip and azimuth of the hole</i>	
	<i>o down hole length and interception depth</i>	
	<i>o hole length</i>	
	<i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	

<i>Data aggregation methods</i>	<i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i>	No weighting, truncations, aggregates or metal equivalents were used.
	<i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i>	
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	Due to the locally complex geometry of high-grade zones observed in orientated drillcore (particularly remobilised massive sulphides) true widths of intersections are difficult to determine with full confidence. However, the true width estimates provided represent the best possible estimate, based on gross orientation of mineralised zones as interpreted from drilling, geophysical data, and surface mapping
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	
	<i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i>	
<i>Diagrams</i>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	Refer to figures/tables in body of release.
<i>Balanced reporting</i>	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	All currently available exploration results have been reported.
<i>Other substantive exploration data</i>	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	There is no other exploration data that is deemed to be meaningful or material.
<i>Further work</i>	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	See text in body of release.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Additional zones of interest are currently being identified based on new information (such as mapping, drilling, geochemical or geophysical data). Regionally, the extensive land package containing significant exposure of the nickeliferous host Ruin's Dolerite are of exploration interest.