

ASX Release

14th December 2016

PGE RESULTS SUPPORT MAGMATIC GENESIS AT DOUBLE MAGIC PROJECT

- **Platinum-Group Element (PGE) concentrations confirm a primary magmatic genesis for the Ni-Cu sulphide mineralisation**
- **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**

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

Buxton's 2015 discovery of high-grade primary magmatic sulphides at Double Magic (Merlin prospect) confirmed better than economic grades and thicknesses at Merlin, with widespread, near-surface >1% Ni sulphide intersections over a 3 km² area, and >3% Ni assays returned from three separate prospects within that area (ASX 27/11/15).

During 2016, work focussed on better understanding the size, geometry and genesis of the Ni-Cu sulphide mineralised system at Merlin, de-risking planned drilling. An extensive work program of surface mapping and sampling, detailed structural studies, petrographic and petrophysical work on surface and drillhole samples was followed by a major pseudo-3D Induced Polarisation (IP) and resistivity geophysical survey. That survey detected a large chargeability anomaly beneath known surface and drillhole Ni-Cu mineralisation (ASX 24/10/16).

The identification of Ni-Cu sulphides in outcrop over a continuous 700 metre long zone (ASX 2/11/16) further confirmed that this exciting target area at Merlin requires comprehensive drill-testing for magmatic Ni-Cu sulphide deposits. Such drilling would initially be aimed at first demonstrating the presence of a large mineralised system, before systematically exploring for higher-grade zones within the >2km long corridor identified.

Platinum-Group Element (PGE) Results

Recently 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 DHTM 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."

2017 Program

Further evaluation of existing data in the light of Buxton's evolving geological interpretation will be completed over coming months. This will lead to finalisation of a 3D geological model with drill targets in February, pre-selection of contractors, and submission of a Program of Works application to the DMP.

Technical and logistics planning for the 2017 Kimberley field season is well underway. It is Buxton's intention to access the Double Magic site to begin preparations as early as possible towards the end of the northern wet season, most likely some weeks before heavy vehicles such as drill rigs will be able to access the area.

Buxton looks forward to updating the market early in the New Year on progress at this exciting project.

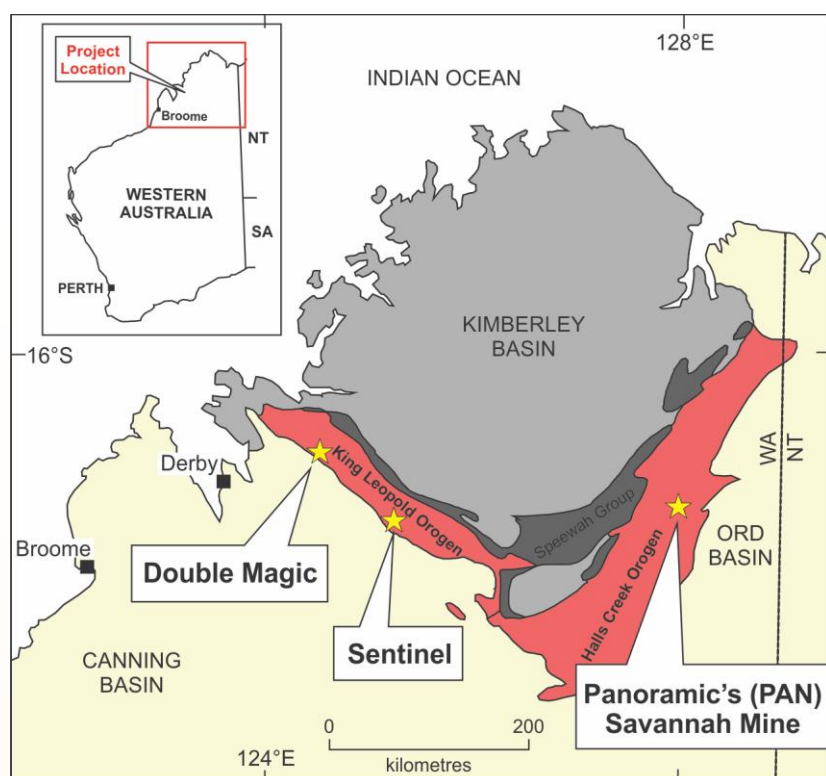


Figure 1 – Location of Buxton’s two West Kimberley projects (Double Magic and Sentinel) also showing the location of Panoramic’s Savannah Ni-Cu Mine

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)

For further information, please contact:

Eamon Hannon
Managing Director
ehannon@buxtonresources.com.au

Sam Wright
Company Secretary
sam@buxtonresources.com.au

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 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.

The information in this announcement that relates to Geophysical Exploration Results is based on information compiled by Mr Russell Mortimer, who is employed as a Consultant to the Company through geophysical consultancy Southern Geoscience Consultants Pty Ltd. Mr Mortimer is a member of the Australian Institute of Geoscientists and a member of the Australian Society of Exploration Geophysicists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and activities 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 Mortimer consents to the inclusion in the report of matters based on information in the form and context in which it appears.

JORC Table: Section 1 – Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down-hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i>	Early stage exploration drilling at the Double Magic project has been undertaken utilizing a Reverse Circulation (RC) rig and a separate diamond (DD) rig.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Sampling was carried out under Buxton protocols and QAQC procedures are per industry best practice.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i>	RC drilling was employed to generate 1m samples. A rig mounted cyclone and cone splitter was used to provide a bulk sample and a representative split sample for assay. Either the 1m split or a composite (hand speared) sample was collected for assay purposes. DD drilling was employed to generate HQ3 orientated diamond core. Selected intervals of core are sawn into quarter and submitted for assay purposes.
Drilling techniques	<i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i>	Buxton has drilled a total of 3,123m of RC at Double Magic, using contractor WBH Drilling. Holes are all a nominal 135mm in diameter. Buxton has completed a total of 4 holes for 495.3m of orientated HQ3 diamond drilling at the Double Magic Project, core a nominal 61.1mm in diameter. Contractor was Terra Drilling.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	The RC bulk sample recovery is routinely examined for representivity. It is not believed that any bias has occurred due to loss or gain of sample. Diamond core recovery averaged 98.7% overall with minor core losses experienced having no discernable relationship to mineralisation.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	
	<i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	
Logging	<i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i>	100% of the drill holes are geologically logged in real time by qualified and experienced geologists, recording relevant data to a set template. All logging included lithological features, mineral assemblages and estimated mineralization percentages. All data was codified to a set of company code systems. All DD drill core and RC chips are photographed.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	
	<i>The total length and percentage of the relevant intersections logged.</i>	
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	All 1m RC intervals were split with a rig mounted cone splitter. Less mineralised analysis samples were prepared as multiple metre (generally 4m composites) spear samples. Diamond core was quartered by diamond saw
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	

	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	consistently with respect to orientation mark-ups.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Sample preparation is consistent with industry best practice. Field QC procedures involved the use of certified reference material assay standards, blanks and duplicates for company QC measures, and laboratory standards, replicate assaying and barren washes for laboratory QC measures. The insertion rate of each of these QAQC measures averaged 1:20. The sample size is deemed appropriate for the material and analysis method.
	<i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i>	
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	
<i>Quality of assay data and laboratory tests</i>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Samples were analysed at Intertek Genalysis in Perth, Australia. Sample preparation included drying, crushing, splitting and pulverizing. A four acid digest followed by a 33 element ICP analysis was conducted on all samples. Follow-up specialist low-level PGE analyses were conducted by Bureau Veritas Minerals in Perth, Australia. Sample preparation included drying and splitting to a nominal 25g charge, then mixing with flux for Fire Assay Nickel Sulphide Collection firing at 1200C, with ICP-MS finish. Detection limits are 0.1 to 0.5 ppb. The laboratory procedures are considered to be appropriate for reporting according to industry best practice.
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	IP survey specifications reported in full on 24/10/16.
	<i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i>	The results of the laboratory-inserted standards, blanks and sample repeats demonstrate the accuracy and precision of methods employed. Buxton also insert certified standards and duplicate samples which have been reviewed and deemed acceptable.
<i>Verification of sampling and assaying</i>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Significant mineralization has been verified by alternative company personnel and independent consultants.
	<i>The use of twinned holes.</i>	There have been two twinned holes completed, both at Conductor D. The 'Discovery' hole (DMRC0003), and the significantly mineralised hole to the south of the dyke (DMRC0017), both RC holes, were twinned by core holes DMDD001 and 2 respectively to better understand the textures and structure of the mineralisation.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	All data is collected initially on paper and handheld GPS. This data is hand entered to spread sheets and validated by Company geologists. This data is then imported and validated using MapInfo software. Physical data sheets are stored at the company office. Digital data is securely archived on and off-site.
	<i>Discuss any adjustment to assay data.</i>	No adjustments to assay data have been made.
<i>Location of data points</i>	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	Drillhole collars were located by a licensed surveyor using precision DGPS equipment, to accuracies of +/- 0.025m in east and north, +/- 0.05m in RL.
	<i>Specification of the grid system used.</i>	MGA51 (GDA94).
	<i>Quality and adequacy of topographic control.</i>	Initial topographic elevation was recorded via handheld GPS and checked against remote sensing data. An accurate DTM of the central area was constructed by licensed surveyor using DGPS equipment.
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	Drill holes are based on geophysical and geological targets and not equally spaced. Not applicable – No Mineral Resource or Ore Reserve calculations have been performed.
	<i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>	
	<i>Whether sample compositing has been applied.</i>	

<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	Within the limits of present (early stage) geological knowledge, drillholes are planned to intersect mineralised zones at high angles. Orthogonal and some scissor holes are also drilled to minimize any bias risk.
	<i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	All mineralized intervals are down hole intervals, not true width.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	Samples were packaged and stored in secure storage from the time of gathering through to submission. Laboratory best practice methods were employed by the laboratory upon receipt. Returned pulps will be stored at a secure company warehouse.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No audits of the sampling techniques or data were carried out due to the early stage of exploration. It is considered by the Company that industry best practice methods have been employed at all stages of the exploration.

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.
<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 th November 2015.
	<i>o easting and northing of the drill hole collar</i>	

	- o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar - o dip and azimuth of the hole - o down hole length and interception depth - o hole length 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.	Details of drillholes referenced in this release are again included as Table 2.
Data aggregation methods	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. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated.	No weighting, truncations, aggregates or metal equivalents were used.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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').	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. Any 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
Diagrams	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.	Included in full in multiple ASX releases during the second half of 2015, most recently on 27 th November 2015.
Balanced reporting	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.	All currently available exploration results have been reported.
Other substantive exploration data	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.	There is no other exploration data that is deemed to be meaningful or material.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	See text in body of release. 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.