

ASX Release

23rd July 2018

Significant Massive Sulphide Mineralisation at Conductor J

Double Magic Project-Merlin

- **Significant brecciated massive sulphide intersections within broad mineralised sequence at Conductor J**
- **Coarse grained Pentlandite, Chalcopyrite and Pyrrhotite visible throughout sulphide sequences**
- **Drill hole stepped out 40m from DMDD0014 testing an open ~25,000 Siemen Conductor J. DMDD0014 intersected sulphides assaying up to 7.1% Ni**
- **Conductor remains open and plunging towards gravity high**
- **DMDD015 reported 3 separate zones of brecciated massive sulphides enveloped by stringer and disseminated mineralisation**



Figure 1. Brecciated massive sulphide from DMDD0015 with visible Pentlandite, Chalcopyrite & Pyrrhotite, photograph is of NQ whole core, 310.25-310.72m downhole.

Buxton Resources updates the market that the first hole of the 2018 field season has intersected well-developed brecciated massive sulphide (Figures 1 - 4) within a broad, approximately 44m, interval of mineralised sequence.



Figure 2. Brecciated massive sulphide interval from DMDD0015, core is NQ, from 306.5-315.3m downhole.

Hole DMDD0015 is a 40m step out hole from DMDD0014 that intersected high grade brecciated sulphide that returned nickel grades as high as 7.1% (ASX:BUX, 15/05/18). The brecciated massive sulphide intervals within DMDD0015 contains abundant visible coarse grained Pentlandite crystals associated with Pyrrhotite and Chalcopyrite. (Figure 3 & 4).

Three separate zones of brecciated massive sulphides of differing thickness have been recorded within DMDD0015 encompassed by a broader mineralised sequence (Figures 1 – 4). Estimated sulphide percentage and species is listed in Appendix 1.

- Zone 1 308.96 to 316.43m downhole
- Zone 2 326.50 to 327.40m downhole
- Zone 3 342.24 to 343.70m downhole

DMDD0015 is continuing at the time of writing this release.



Figure 3. Brecciated massive sulphide interval from Zone 1 DMDD0015 312.28 – 312.52m downhole



Figure 4. Massive sulphide from Zone 3 DMDD0015 342.2 – 342.46m downhole

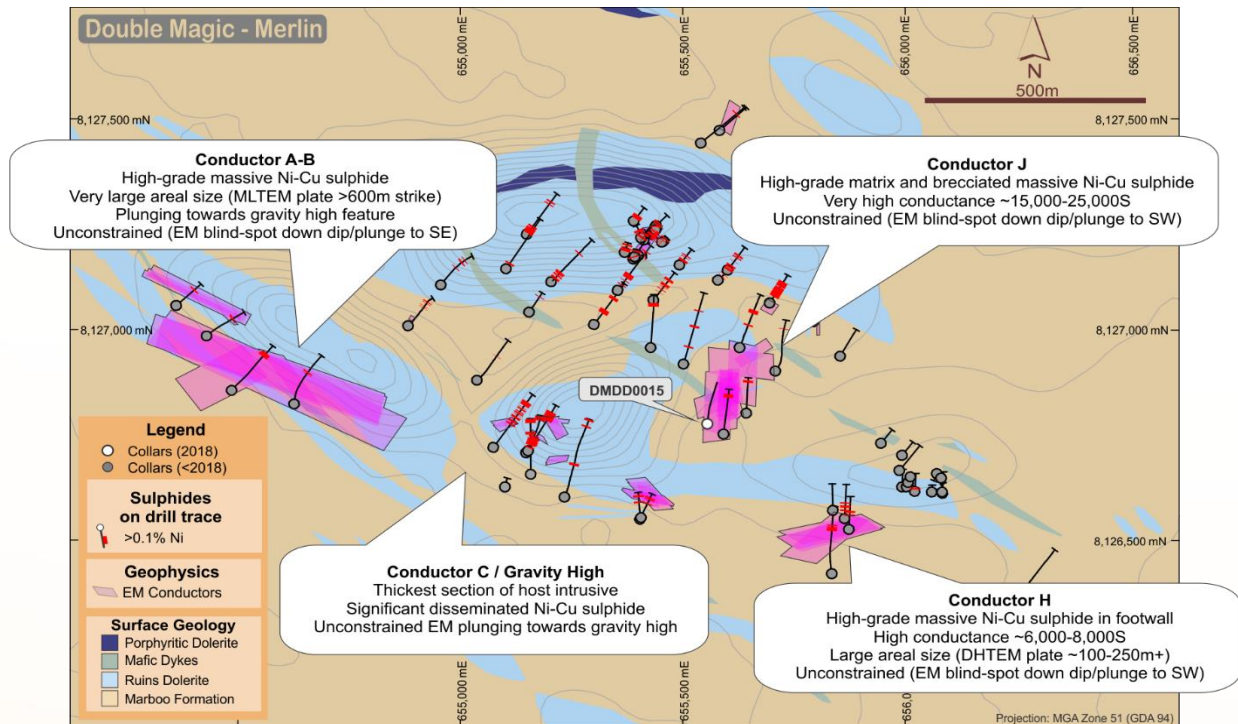


Figure 5. Plan of the Merlin Prospect, highlighting the location of DMDD0015 and priority drill target areas for the current drill program. Drilling is initially planned below unconstrained known Ni-Cu sulphide conductors, EM blind spots and gravity high feature.

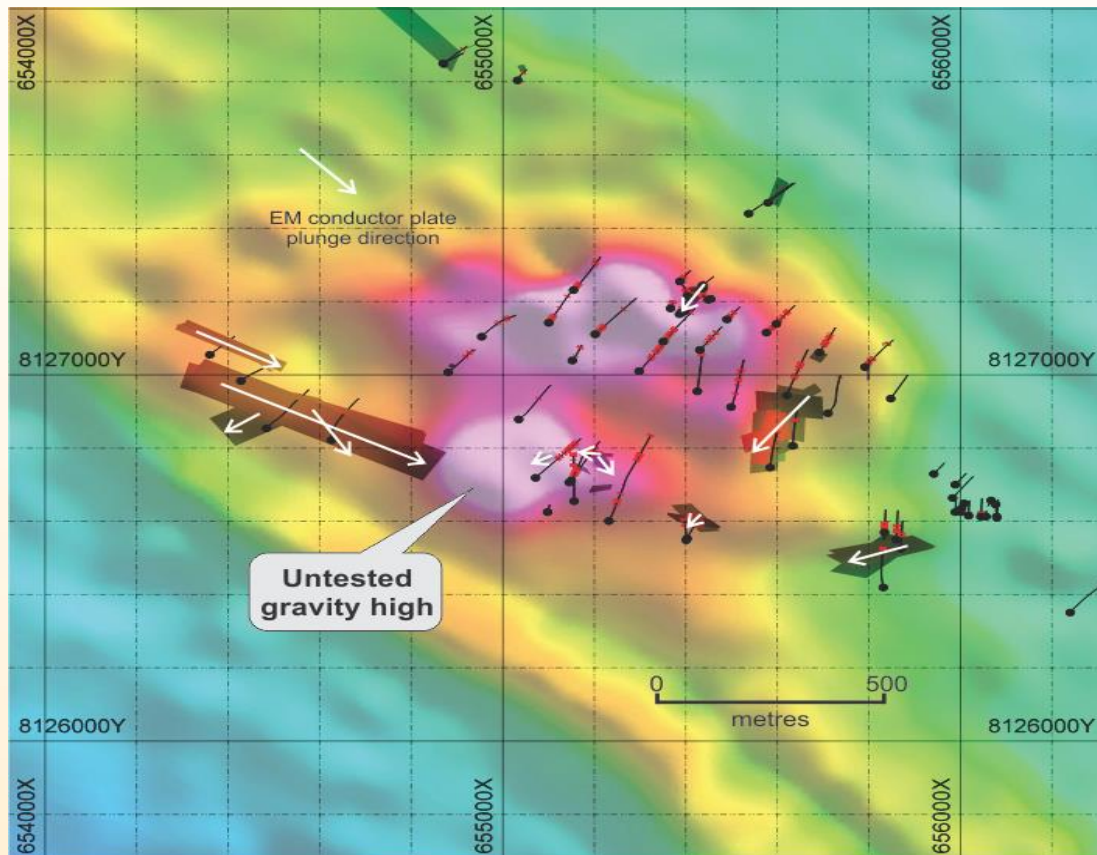


Figure 6. Plan of the Merlin Prospect showing recent ground gravity (Bouguer Anomaly) background image, highlighting the majority of modelled EM plates plunging towards an untested gravity high feature in the core of the Merlin Prospect.

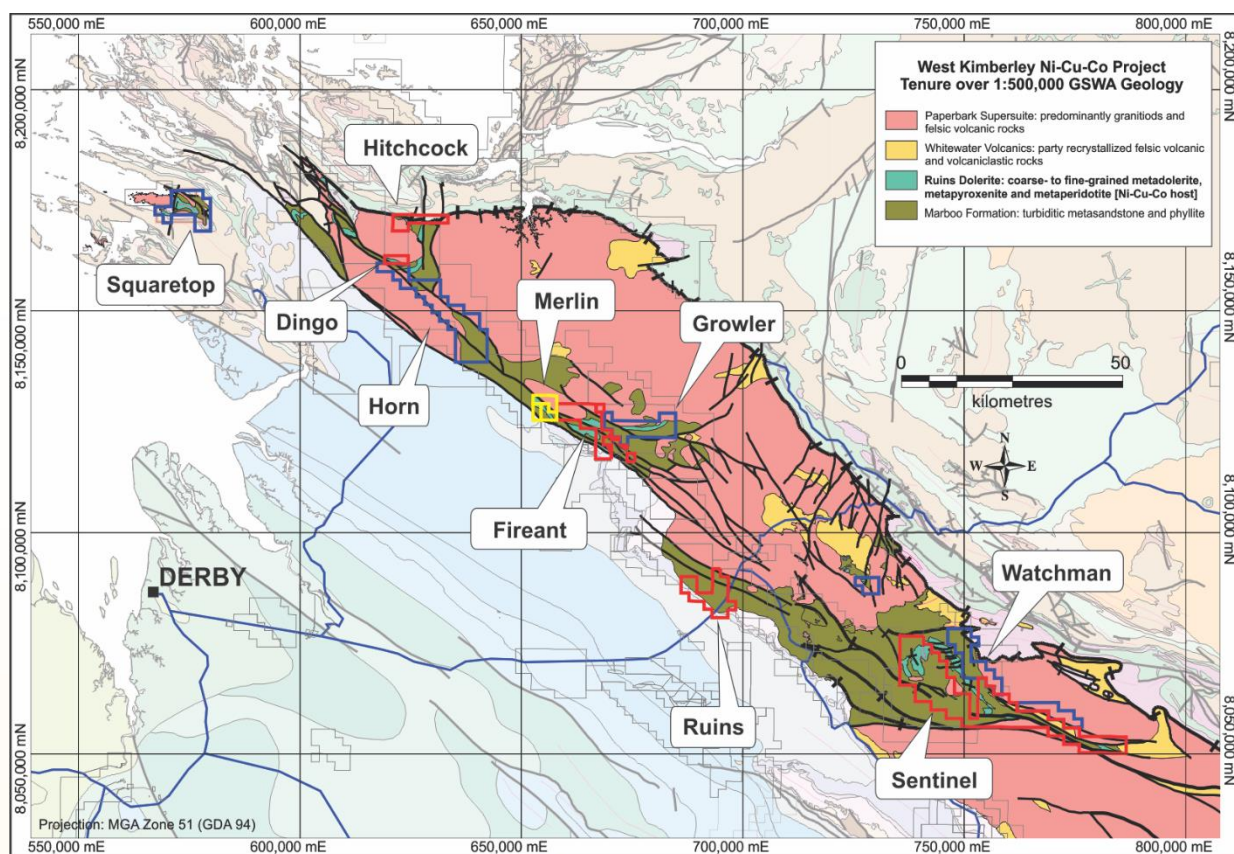


Figure 7. Buxton's West Kimberley Ni-Cu-Co Project granted and pending tenements over interpreted bedrock geology (GSWA 1:500,000). Granted tenure in red, pending in blue, Merlin group (granted) in yellow.

Table 1: 2018 Drillhole Location Details

Hole Type	Hole ID	Easting	Northing	RL	Azimuth	Inclination	EOH Depth
Diamond	DMDD0015	655,552	8,126,771	103	10	-75	TBC

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Competent Persons

The information in this report that relates to Exploration Results is based on information compiled by Mr Eamon Hannon, Member of the Australasian Institute of Mining and Metallurgy, and Mr Derek Marshall, Member of the Australian Institute of Geoscientists. Mr Hannon and Mr Marshall are full-time employees of Buxton Resources. Mr Hannon 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 Hannon 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: Estimated Sulphide Content Table

Hole ID	From (m)	To (m)	Interval (m)	Min 1			Min 2			Min 3			TOTAL Percent
				Code	Style	Percent	Code	Style	Percent	Code	Style	Percent	
DMDD0015	287.00	304.00	17.00	po	ds	0.3	cp	ds	0.1				0.4
DMDD0015	304.00	308.96	4.96	po	ds	3	cp	ds	2	po	vn	2	7
DMDD0015	308.96	309.43	0.47	po	vn	2							2
DMDD0015	309.43	310.10	0.67	po	vn	10	pn	vn	3	cp	vn	2	15
DMDD0015	310.10	311.20	1.10	po	bx	30	cp	bx	20	pn	bx	15	65
DMDD0015	311.20	311.78	0.58	po	bx	2	pn	bx	2	cp	bx	2	6
DMDD0015	311.78	313.03	1.25	po	bx	35	pn	bx	25	cp	bx	15	75
DMDD0015	313.03	314.13	1.10	po	vn	2	pn	vn	1	cp	vn	1	4
DMDD0015	314.13	314.45	0.32	cp	bx	8	as	bx	4	po	bx	4	16
DMDD0015	314.45	315.12	0.67	po	ds	3	cp	ds	2				5
DMDD0015	315.12	315.25	0.13	po	bx	20	pn	bx	10	cp	bx	10	40
DMDD0015	315.25	316.43	1.18	po	bx	3	pn	bx	3	cp	bx	3	9
DMDD0015	316.43	318.18	1.75	po	ds	2	pn	ds	1	cp	ds	1	4
DMDD0015	318.18	326.50	8.32	po	ds	0.1	cp	ds	0.1				0.2
DMDD0015	326.50	327.10	0.60	po	bx	3	pn	bx	3	cp	bx	2	8
DMDD0015	327.10	327.40	0.30	po	bx	40	pn	bx	15	cp	bx	5	60
DMDD0015	327.40	340.50	13.10	po	ds	3	pn	ds	2	cp	ds	1	6
DMDD0015	340.50	342.24	1.74	po	ds	1	pn	ds	1	cp	ds	0.5	2.5
DMDD0015	342.24	342.89	0.65	po	bx	35	pn	bx	25	cp	bx	10	70
DMDD0015	342.89	343.70	0.81	po	bx	7	cp	bx	5	pn	bx	3	15

Sulphide species (Code): po = pyrrhotite, cp = chalcopyrite, pn = pentlandite, as = arsenopyrite. Sulphide texture (Style): bx = brecciated massive sulphide, ds = disseminated, vn = vein/stringer. All percentages were visually estimated in HQ/NQ whole core, by a trained exploration geologist, however the reader is reminded that visual estimates have a high degree of error.

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 Reverse Circulation Percussion (RC), and an HQ/NQ diamond core wireline equipped with core orientation equipment.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	The drillhole locations are picked up by handheld GPS. Surveying by licensed surveyor will take place at the end of the program, previous drill programs holes have been surveyed by licensed surveyors. 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 sampled on 1m intervals. A rig mounted cyclone and cone splitter was used to provide a bulk sample and a representative split sample for assay. Core sample lengths vary up to 1 metre, quarter HQ/NQ core submitted for analysis. Samples have been submitted to Intertek Genalysis in Perth for analysis. A standard dry, crush and pulverize was followed by a four-acid digestion finished with ICP-MS for a suite of 48 elements.
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>	The 2018 drilling drill programs is being drilled DDH1 Drilling. Diamond drilling is using an DE710 track mounted rig, drilling HQ & NQ core. All core is orientated using a Reflex ACT II RD orientation device on each drill run.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	All core was measured on-site, recoveries calculated and reconciled with driller's core blocks and plods.
	<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>	All 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 core is orientated, RQD logged, all structural data measured and recorded. All core is 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 HQ/NQ core was sawn at a constant angle to orientation markings, sampled to geological boundaries, up to a maximum of 1 metre in length. Quarter core submitted for assay. 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>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>	
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	
	<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>	

Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	<p>The exploration samples will be analysed at Intertek Genalysis in Perth, Australia. Sample preparation included drying, crushing, splitting and pulverizing. A four-acid digest followed by a 48 element MS. Selected previous drill sampling used a four-acid digest with an OE finish and a 25g fire assay for Pt, Pd.</p> <p>The laboratories procedures are considered to be appropriate for reporting according to industry best practice.</p>
	<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>	Not applicable.
	<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>	Not applicable.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Significant mineralization has been verified by independent consultants and alternative company personnel.
	<i>The use of twinned holes.</i>	Two RC holes from the 2015 drill program (DMRC0003 and 17) have been twinned by HQ diamond core holes DMDD0001 and 2 respectively, confirming mineralization in both cases. Core has been logged but not sawn for sampling as geological work is ongoing.
	<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 into the company database and extra validation is carried out. 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.
Location of data points	<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>	Handheld GPS (+/-5m) as well as reference to topographical, remote sensing and known reference points (e.g., previously surveyed holes). Previous drill collars were pickup by licensed surveyor.
	<i>Specification of the grid system used.</i>	MGA51 (GDA94).
	<i>Quality and adequacy of topographic control.</i>	A DEM (digital terrain model) was created from the altimeter data from the aerial magnetic survey and is deemed sufficient for this stage of exploration.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	<p>The current drill program is reconnaissance and step out from the 2015 & 2017 drilling programs, spacing is deemed appropriate for this stage of exploration.</p> <p>Not applicable – No Mineral Resource or Ore Reserve calculations have been performed.</p> <p>The 2015 drilling had some RC composite samples taken in non-mineralised material into 2 or 4 metre composites from one metre bags using a spear. No sample compositing has taken place during the 2017 or the 2018 drilling to date. Metallurgical samples were composite samples from drill core.</p>
	<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>	
Orientation of data in relation to geological structure	<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>	Information from orientated core indicates that drillhole orientation is appropriate for disseminated and massive matrix mineralization.
	<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.
Sample security	<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.

JORC Table: 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>	<p>The West Kimberley Ni-Cu-Co Project is located in the Kimberley region of Western Australia and consists of 12 granted exploration licences (EL), 1 granted prospecting licence (PL), 6 pending ELs and held in the names of Alexander Creek Pty Ltd and Buxton Resources Limited. Alexander Creek Pty Ltd is a wholly (100%) owned subsidiary of Buxton Resources Limited. This regional project is subdivided into project areas as follows;</p> <p>The Double Magic Project comprises 8 granted ELs (E04/1533, E04/2026, E04/2142, E04/2060, E04/2466, E04/2467, E04/2468, E04/2469) all held by Alexander Creek Pty Ltd. Additionally, 1 granted PL (P04/269) is held in the name of Buxton Resources.</p> <p>The Growler Project consists of 1 pending EL (E04/2551) held in the name of Buxton Resources.</p> <p>The Sentinel/Watchman Project areas consists of 1 granted EL (E04/2408) and 3 pending ELs (E04/2550, E04/2527 & E04/2549) held in the name of Buxton Resources Limited.</p> <p>The Ruins Project consists of 1 granted EL (E04/2480) held in the name of Buxton Resources.</p> <p>The remaining 2 granted ELs (E04/2407 & E04/2411) and 2 pending ELs (E04/2530 & E04/2536) all held by Buxton Resources, are either wholly or partially within the Yampi Sound (Defence) Training Area. Access agreements are required with relevant government agencies prior to land access.</p>
	<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 DMIRS 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>	<p>The Double Magic Project area (previously referred to 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.</p> <p>There has been limited modern exploration elsewhere in Project areas. Historical work was mainly completed by Pickands Mather and Company International, Western Mining Corporation and government geological agencies.</p>
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	Known mineralisation at the Double Magic Project is considered to be primary orthomagmatic intrusion related Ni-Cu-Co sulphide.

		<p>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 a thick turbiditic meta-sediments and silicic volcanics of the Marboo Formation which are intruded the Ruins Dolerite.</p> <p>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 minor re-mobilisation and alteration of the mineralization in places.</p>
Drill hole Information	<p>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:</p> <ul style="list-style-type: none"> o easting and northing of the drill hole collar 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 <p>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.</p>	See text and figures in body of release.
Data aggregation methods	<p>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.</p> <p>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.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	No weighting, truncations, aggregates or metal equivalents were used.
Relationship between mineralisation widths and intercept lengths	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>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').</p>	Due to the locally complex geometry of high-grade zones observed in orientated drill core (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.	See text and figures in body of release.
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 previously 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	<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>	See text and figures in body of release. Regionally, the extensive land package containing significant exposure of the nickeliferous host Ruins Dolerite are of exploration interest.