

ASX Release

28th May 2019

Ni-Cu Sulphide Discovered in Outcrop

- **Outcropping Ni-Cu sulphide discovered 5km along strike from Buxton's flagship Merlin Project on recently acquired New World Cobalt Project tenure (contiguous with Merlin Project)**

Buxton Resources Limited (ASX:BUX) updates the market on geological mapping and rock chip sampling recently commenced in the West Kimberley region of Western Australia.

Of great excitement is the identification of fresh Nickel-Copper sulphide mineralisation (Figure 1 & 2) on the recently acquired New World Cobalt (NWCL or New World) ground (BUX to earn 80%) contiguous with Buxton's Merlin tenure where a continuation of the Ruins dolerite, host-rock to the Nickel-Copper-Cobalt mineralisation, exists.

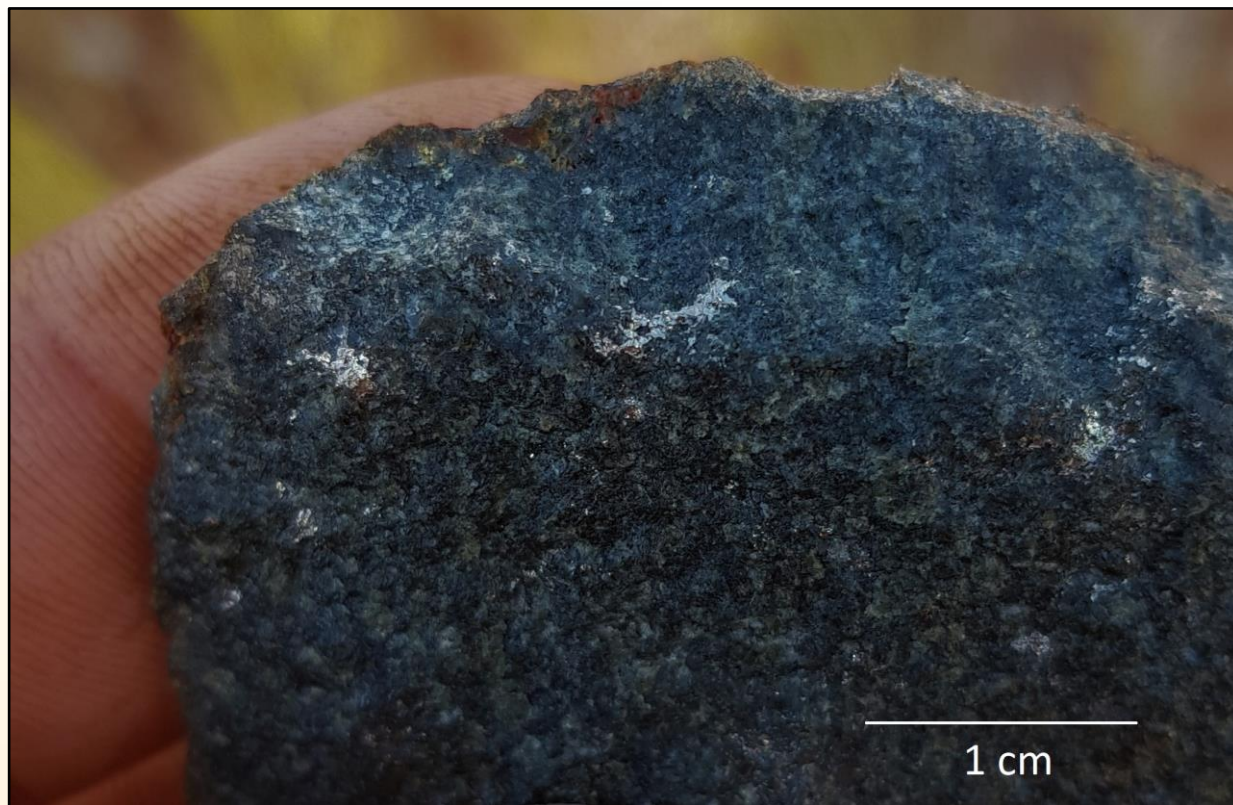


Figure 1. Ni-Cu sulphides in Ruins Dolerite surface rock chip (650,738mE, 8,130,841mN, MGA Z51 GDA94) located on E04/1972

Sulphides were observed at several locations (Figure 2) within E04/1972 over a strike of approximately 1 km, located 5 km from the centre of the Merlin Project. These observations make the NWCL tenure, contiguous and along strike from Merlin, highly prospective for additional Ni-Cu sulphide mineralisation and/or continuations of the Merlin mineralised system. Buxton looks forward to continued exploration on this highly prospective ground.

The observed sulphide mineralisation occurs as disseminations and is interpreted to comprise pyrrhotite, chalcopyrite and pentlandite within mafic-ultramafic intrusive rocks. On site portable XRF readings support visual observations by Buxton geological staff, confirming the presence of nickel and copper bearing sulphides within a host-rock that exhibits the lithogeochemical characteristics of the mineralised Ruins Dolerite at Merlin.

A selection of the rock chip samples will immediately be sent for laboratory analysis.

This discovery underpins the regional prospectivity of the Ruins Dolerite for magmatic nickel copper sulphide mineralisation and emphasises the value of Buxton's significant land position in the belt.

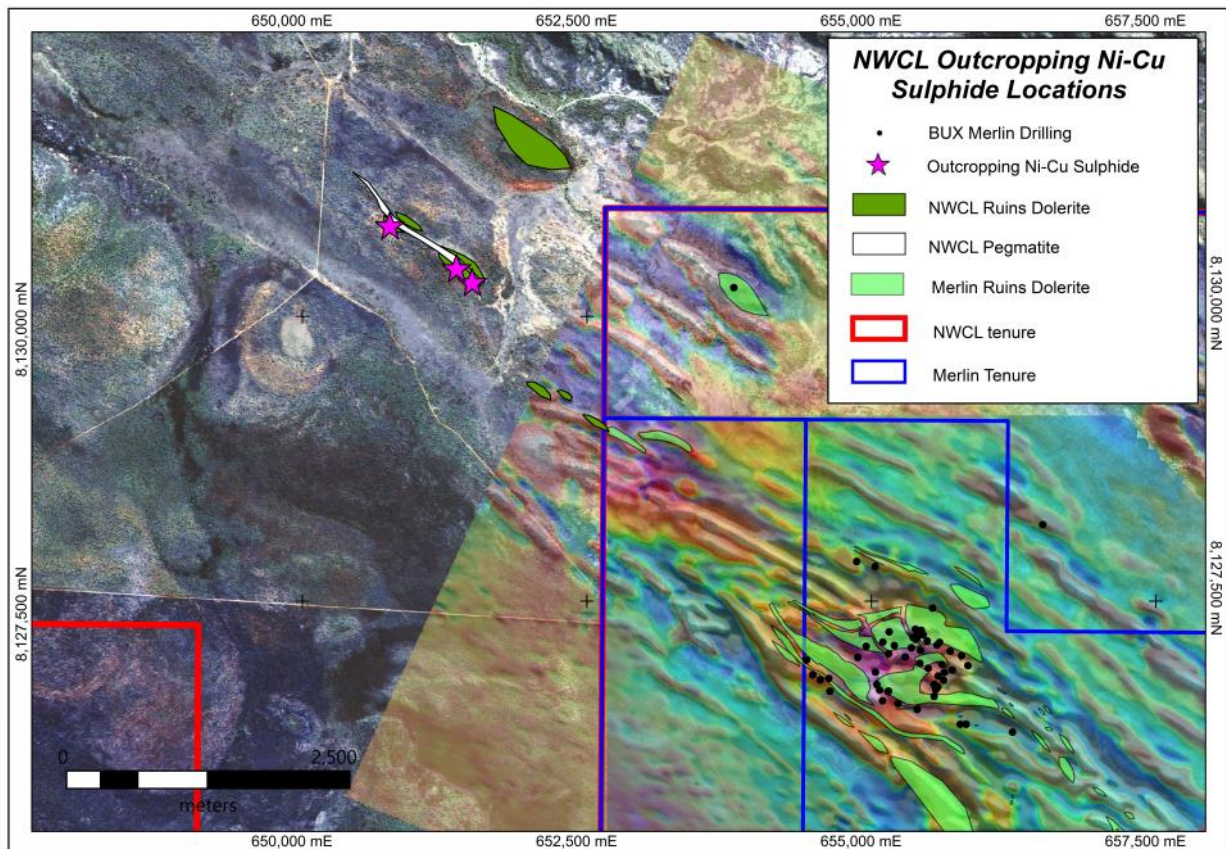


Figure 2. Observed Ni-Cu sulphides outcrop locations (pink stars) located on E04/1972, approximately 5 km along strike to the NW from Merlin. Merlin drill collars (black dots), mapped Ruins Dolerite (green), Merlin tenure (blue), NWCL tenure (red) over ALOS satellite imagery and magnetic imagery within the Merlin tenure

Buxton entered into an agreement with New World to acquire it's West Kimberley Project which comprises New World's interest in three tenements (E04/1972, E04/2314 & E04/2423, Figure 3) adjacent and contiguous to Buxton's flagship Merlin Project (refer to ASX: BUX announcement 6 November 2018 for key terms and additional information).

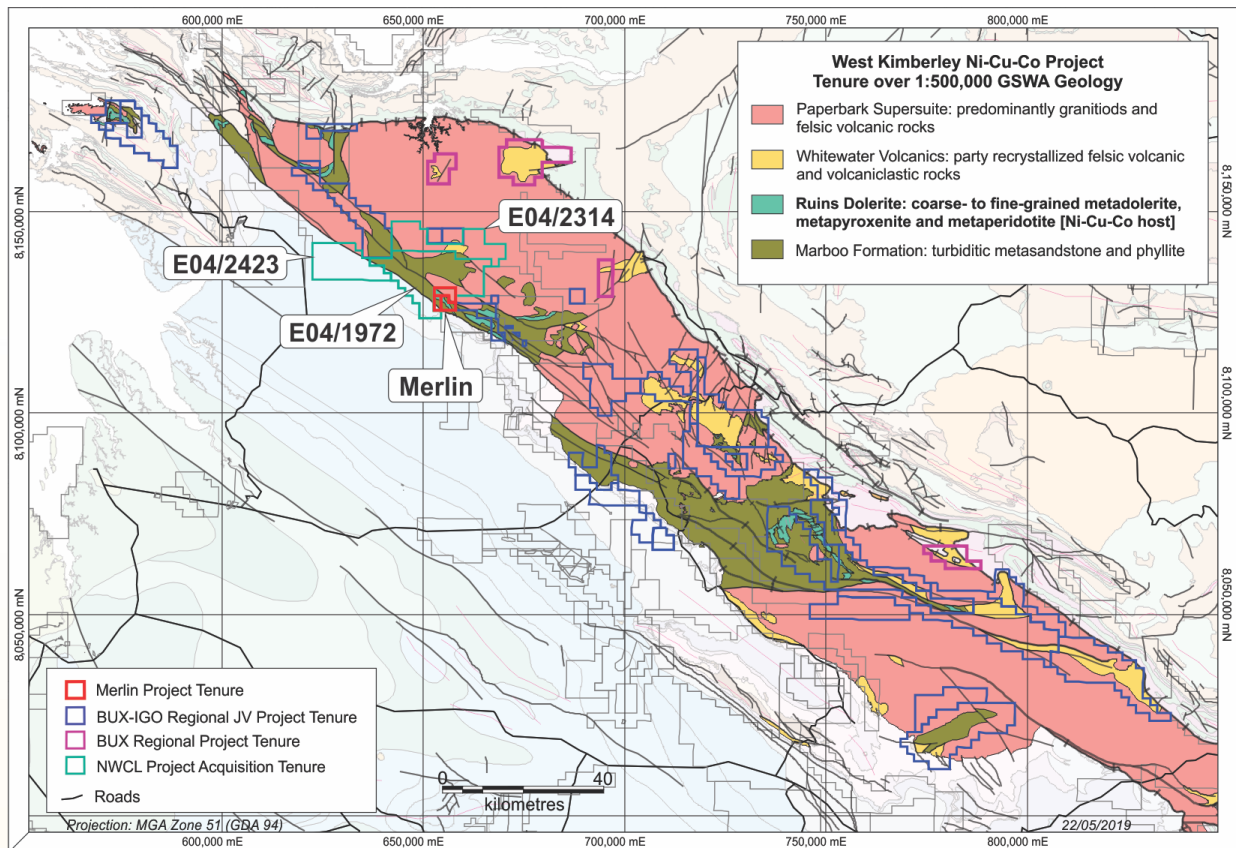


Figure 3. Buxton's West Kimberley Ni-Cu-Co tenure, highlighting the location of Merlin and New World Cobalt Limited (NWCL; E04/1972, E04/2314 & E04/2423) Project acquisition tenure over interpreted bedrock geology (GSWA 1:500,000)

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 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

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>	<p>Initial exploration at the New World Cobalt (NWCL) acquisition tenure comprised mapping and rock chip sampling.</p> <p>Outcrop and rock chip samples have been analysed on site by portable XRF to assist with sample selection and mapping. All rock chips collected will be submitted for geochemical analysis at Intertek Genalysis.</p>
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	
	<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>	
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>	Not applicable.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Not applicable.
	<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>	Not applicable.
	<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>	Not applicable.
	<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>	Not applicable.
	<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>	Not applicable.
	<i>The use of twinned holes.</i>	Not applicable.
	<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>	Not applicable.
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.
	<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>	The programs are reconnaissance and spacing is deemed appropriate for this stage of exploration.
	<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>	The programs are reconnaissance and orientation is deemed appropriate for this stage of exploration.
	<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>	
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.
Audits or reviews	<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
Mineral tenement and land tenure status	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.	<p>The Merlin and New World Cobalt West Kimberley Projects referred to below are all located in the Kimberley region of Western Australia.</p> <p>The Merlin (Double Magic) Ni-Cu-Co Project consists of 3 granted exploration licences (E04/1533, E04/2026 & E04/2142) held in the name of Alexander Creek Pty Ltd. Alexander Creek Pty Ltd is a wholly (100%) owned subsidiary of Buxton Resources Limited. The Merlin Project tenements are subject to a 24-month option period where Independence Group NL (IGO) has the exclusive right to strike an earn-in and JV agreement [readers are referred to ASX:BUX announcement on the 29 November 2018 for further information].</p> <p>The New World Cobalt West Kimberley Project consists of 3 granted exploration licences (E04/1972, E04/2314 & E04/2423; “NWCL tenements”) held in the name of Timothy Vincent Tatterson or Fissure Exploration Pty Ltd. Buxton has acquired New World Cobalt Limited’s (formally Ram Resources Limited) rights and interest in the New World Cobalt West Kimberley Project [readers are referred to ASX:BUX announcement on the 6 November 2018 for further information]</p>
	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.	The tenements are in good standing with DMIRS and there are no known impediments for exploration on these tenements.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Historical exploration on the NWCL tenements was limited to a single phase of work conducted by Ram Resources Limited (ASX:RMR) during the period 2015-2016. This comprised a helicopter EM survey (VTEM), ground EM and three diamond drill holes on E04/1972.
Geology	Deposit type, geological setting and style of mineralisation.	<p>Known mineralisation at the Merlin Project is considered to be primary orthomagmatic intrusion related Ni-Cu-Co sulphide. Recently observed mineralisation on the NWCL tenure appears to be of the same nature.</p> <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 re-mobilisation and alteration of the mineralization in places.</p>
Drill hole Information	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:	Not applicable.
	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	

	<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> <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>	Not applicable.
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i> <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>	Not applicable.
<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>	See text and figures 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>	Not applicable.
<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> <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>	Due to the early stage of exploration on NWCL acquisition tenure this is still to be established. 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.