ASX Release

11th Jan 2024

Copper Wolf Project: Extension to Cu-Mo Porphyry System Discovered at Surface on 100% BUX Tenure at Wolverine Prospect

- An extensive Cu-Mo porphyry system has been identified extending onto 100% BUX tenure at surface, with mapped features including;
  - Elevated Cu & Mo confirmed in surface rock chips, with laboratory assays up to 14.1% Cu & 1,160 ppm Mo
  - Coincident stockwork veining & potassic / sericitic alteration
  - Multi-stage porphyritic dykes like those in BUX DDH 2.5 km to the SW
- No previous drilling or other exploration is known within the area
- Permitting for drilling underway for new prospect named "Wolverine"

Buxton Resources Ltd (ASX:BUX) is pleased to report that geological mapping at the newly-defined Wolverine Prospect has identified an extension of the deeper Copper Wolf porphyry Cu-Mo system at surface on 100% BUX tenure (Figure 1).

CEO Marty Moloney commented "*The discovery of an outcropping porphyry Cu-Mo system at Wolverine is a game-changer for Buxton with mineralisation present at surface, and tenure which is not subject to any JV Agreement.*

This discovery also highlights the incredible exploration potential at Copper Wolf where previous work 1960s-1990s has barely scratched the surface of what is shaping up to be a very large porphyry Cu-Mo system. I'm looking forward to the next steps, including confirmatory scout drilling once permits are in place."

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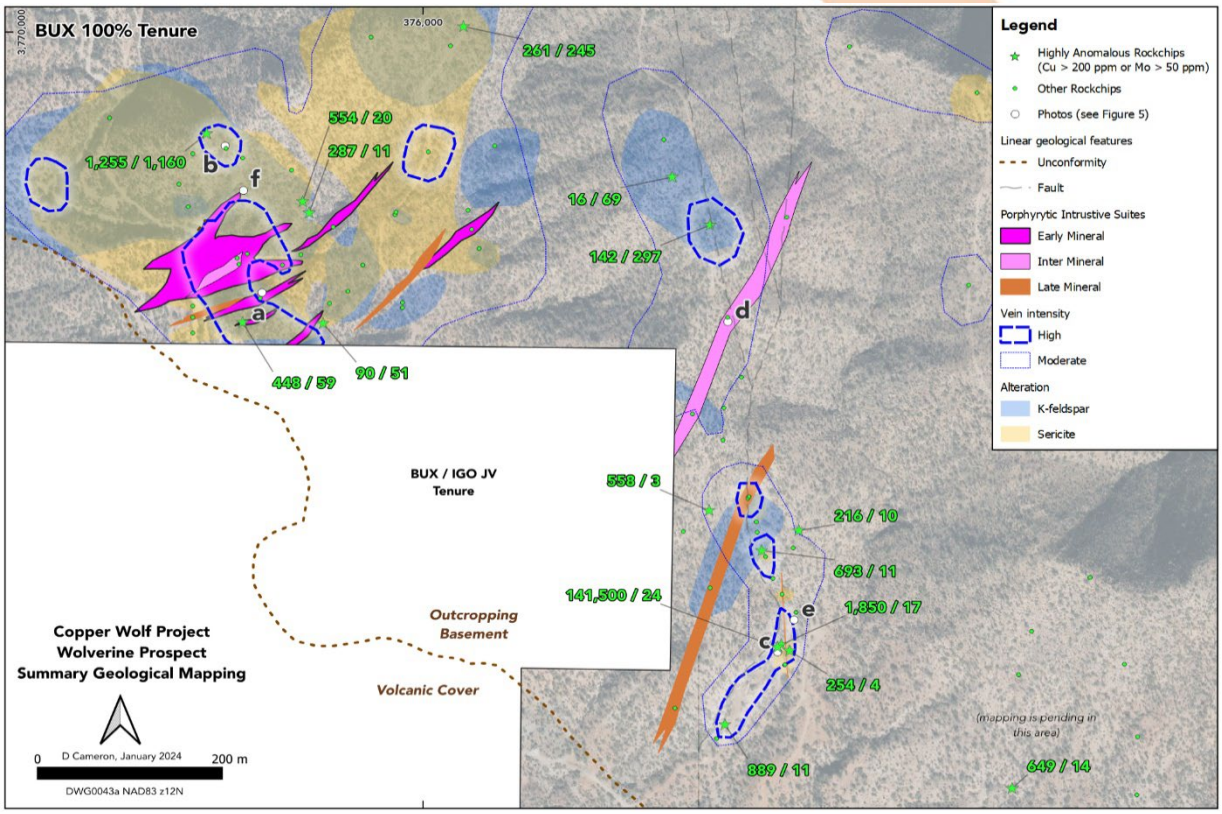

Figure 1: Buxton's geological mapping at the 100% owned Wolverine Prospect with Cu & Mo results from recon rock chips & samples currently at the lab. Outcropping veining & alteration is related to porphyritic dykes that intrude Proterozoic granitoids. Labels "a" - "f" refer to photos in Figure 5.

The Wolverine prospect is located approximately ~2.5 kilometres northeast of drillhole CPW0002DD (Figure 2) which intersected high grade porphyry Cu-Mo mineralisation under ~528 m of post mineralisation cover (see ASX Announcement 14/12/2023).

Rock chip sampling at Wolverine has returned laboratory assay results up to 14.1% Cu and 1,160 ppm Mo (separate samples - see Figure 1).

Buxton's geological mapping at Wolverine confirms that anomalous geochemistry is related to several zones of intense stockwork veining and alteration (k-feldspar, quartz-sericite-pyrite and iron-oxides) which coincide with a system of porphyritic dacitic dykes, classified & mapped as follows:

- Early-mineral: containing abundant veining and alteration
- Inter-mineral: having lesser veining and alteration
- Late: little to no veining / alteration

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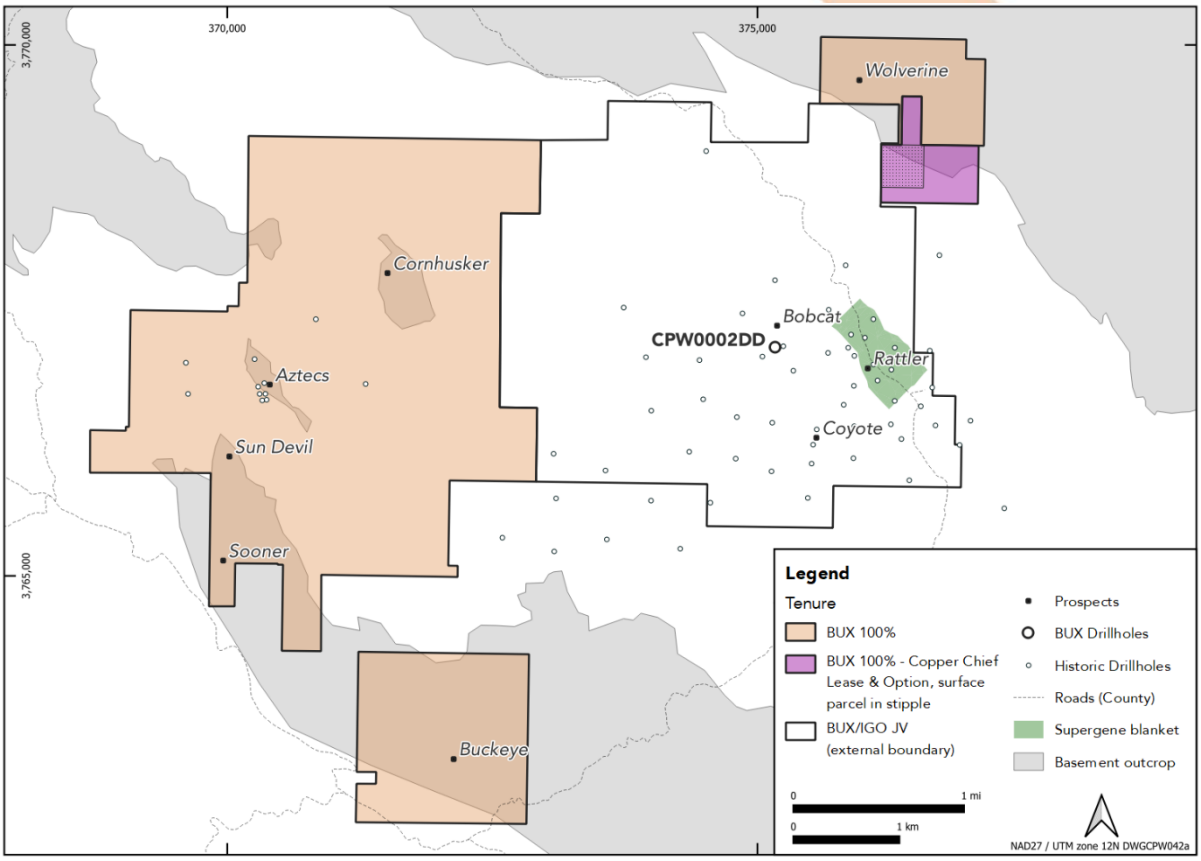

Figure 2: Copper Wolf Project tenure situation showing ~16.7 km^2 area (coloured polygons) for which Buxton has 100% unencumbered interest in the subsurface estate. These areas include substantial basement exposures indicating potential for copper porphyry mineralisation at shallower depths in comparison to the Bobcat, Rattler and Coyote prospects. The BUX / IGO JV covers ~11.0 km^2 and includes the supergene blanket which has been the focus of previous exploration including historical resource estimates by Liontown and others.

The altered and veined rocks exposed at surface are typically highly leached and are not expected to retain their primary copper values (Figure 3).

Nearby water wells indicate that the water table depth varies but is generally less than 30 metres deep.

Apart from weathering, these porphyritic rocks, alteration & veining relationships appear directly analogous to the CPW0002DD core (see Figure 5 & Figure 6).

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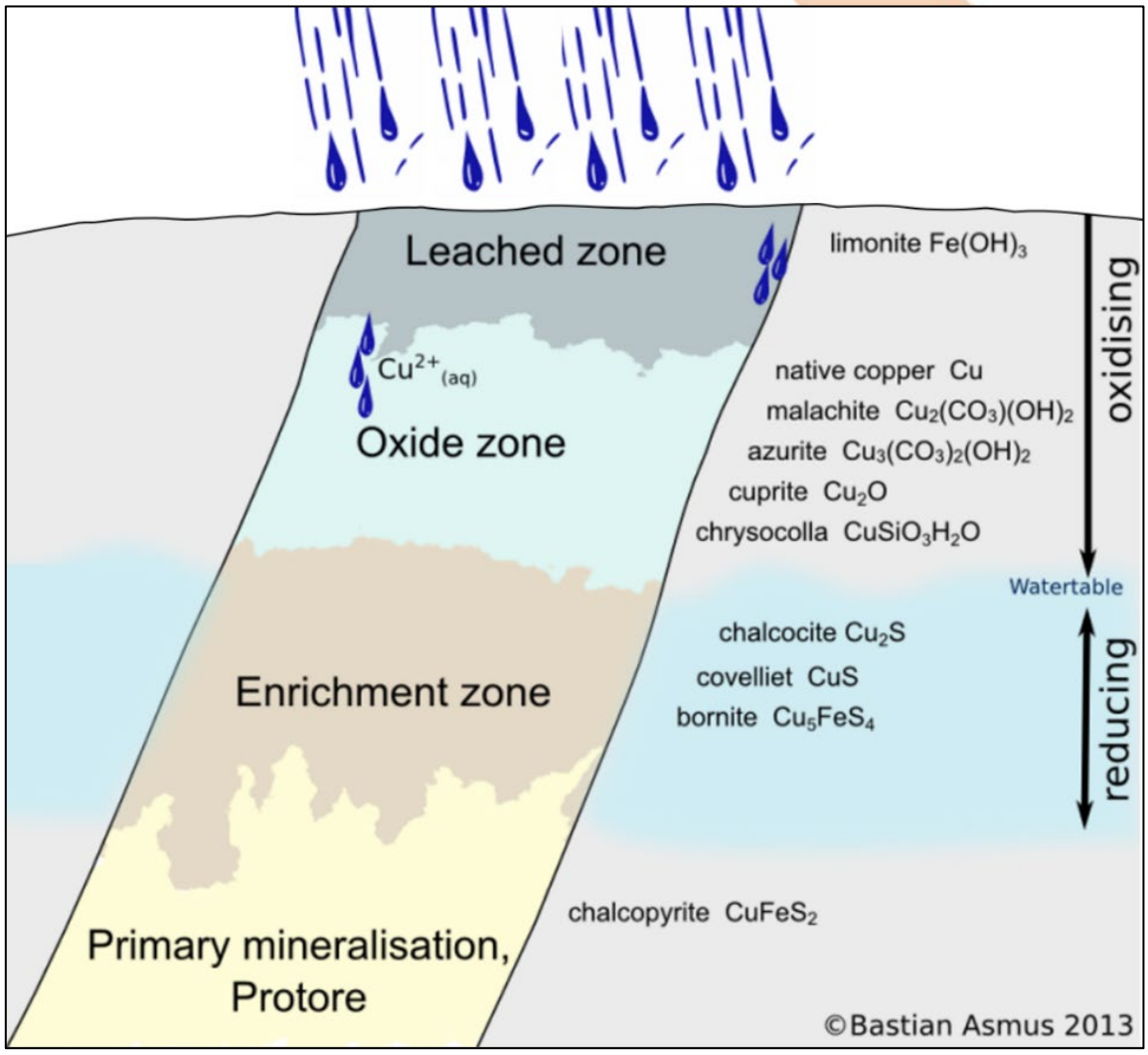

Figure 3: Schematic model showing the effect of oxidising environments on copper minerals where metals are redistributed downward to the water table causing leached zones to form at surface. Modified from Asmus (2013).

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Average laboratory assay values for selected pathfinder elements from the 96 rock chips at Wolverine are presented below:

Li:	20.3 ppm	Tl:	0.9 ppm	Sb:	5.0 ppm
As:	21.9 ppm	Bi:	1.1 ppm	Te:	0.25 ppm
Sn:	1.5 ppm	W:	7.9 ppm	Mo:	32.2 ppm

This geochemical data suggests that highest Cu-Mo grades are likely to be preserved below the current level of surface exposure (see Figure 4).

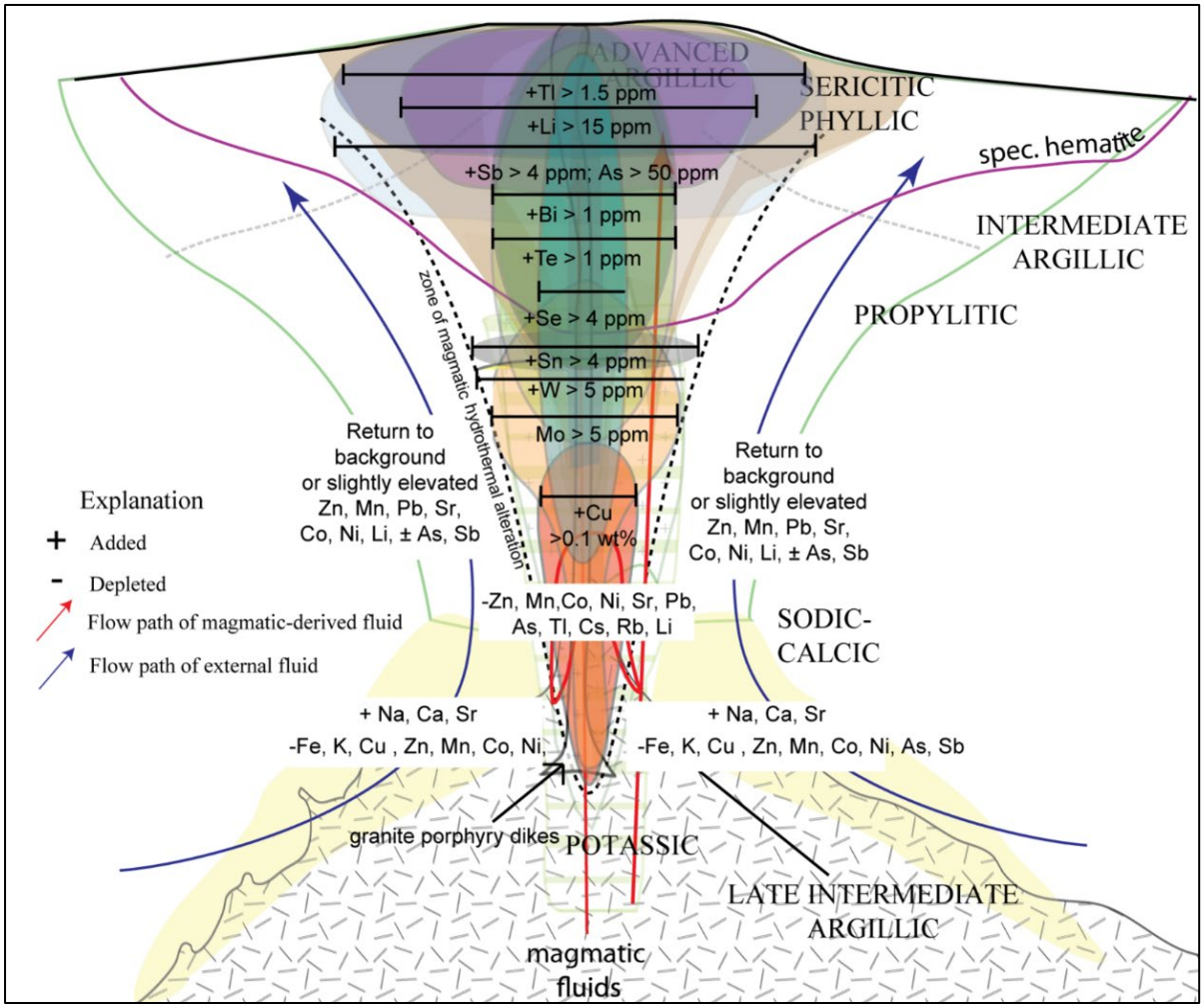

Figure 4: Schematic diagram showing the pathfinder geochemical and alteration patterns and abundances related to a typical porphyry mineral system (Halley et.al, 2015).

These results provide major encouragement and focus for a scout drilling program to confirm the potential for enriched and primary sulphide zones at depth, and to also assist with planning & interpretation of new geophysical surveys. Permitting for this next round of drilling is currently in progress.

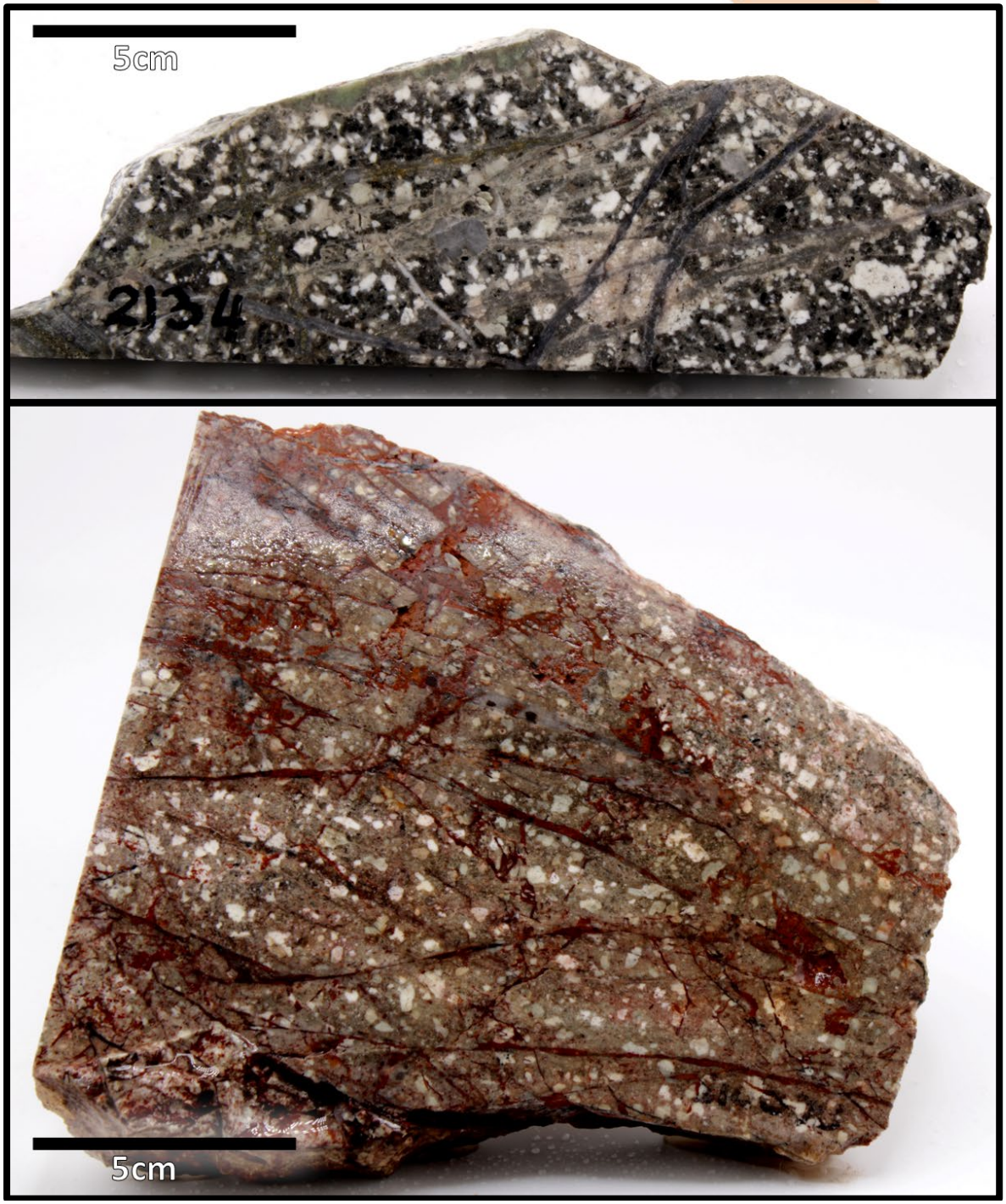

Figure 5: Upper; Syn-mineralising plagioclase-phyric dacite porphyry within CPW0002DD. Lower; similar leached plagioclase-phyric porphyry cut by quartz-iron oxide veins at Wolverine.

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Figure 6: Surface rocks at Wolverine a) Early-mineral plagioclase-phyric porphyry cut by quartz-iron oxide veining. b) Quartz-iron oxide veins cutting Proterozoic host rocks containing weak potassic alteration. c) Iron-oxide-malachite contained in leached outcrop proximal to mapped porphyries. d) Quartz-eye plagioclase-phyric dacite porphyry containing pyrite-sericite alteration. e) & f) Chrysocolla staining inside iron-oxide fractures nearby to porphyritic dacitic dykes.

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This release is authorised by the Board of Buxton Resources Limited.

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Competent Persons

The information in this report that relates to Exploration Results is based on information compiled by Mr Martin Moloney, Member of the Australian Institute of Geoscientists and Society of Economic Geologist. Mr Moloney is a full-time employee of Buxton Resources Ltd. Mr Moloney 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 Moloney consent to the inclusion in this report of the matters based on the information in the form and context in which it appears.

Validity of Referenced Results

Buxton confirms that it is not aware of any new information or data that materially affects the information from previous ASX announcements which has been referenced in this announcement.

About the Copper Wolf Project

The Copper Wolf Project has multiple historical resource estimates available that confirm the presence of a large porphyry Cu-Mo system. Porphyry Cu-Mo mineralisation at Copper Wolf has been dated at 70.3 Ma (Laramide age) and is largely concealed by a post-mineral (Tertiary) sequence of volcanic and sedimentary rocks.

The Project is located within one of the most prolifically endowed copper belts in the world (Figure 7), yet it has not seen any drilling since the early 1990s. Buxton's 2022 airborne magnetic survey was the first geophysical work undertaken since the early 1960s. Historic exploration has consisted of relatively wide spaced drilling which focussed on significant supergene copper mineralisation located where the NW trending Cow Creek Fault intersects Laramide hypogene porphyry style mineralisation. Buxton is targeting high grade, underground bulk mineable copper-molybdenum mineralisation. In this context, Buxton's exploration approach can leverage the significant advances and ready availability of modern geophysical targeting tools and mineral systems knowledge that have been developed since exploration in this area ceased many decades ago.

Figure 7: Buxton's Copper Wolf project is located in the prolific porphyry copper belt of SW USA / Northern Mexico - most of the porphyry Cu-Mo deposits marked are current or previously operating mines.

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JORC 2012 Table 1: Section 1 – Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	*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.*	Rock chip samples were collected as representative samples from the above locations. Each individual grab sample weighs between 1 – 2.5kg with all samples submitted to ALS Laboratories in Tucson.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	
	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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.	
Drilling techniques	*Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).*	Not applicable – the announcement does not refer to drilling results.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Not applicable – the announcement does not refer to drilling results.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	
	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.	
Logging	*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.*	All rock chips are geologically logged onsite by qualified and experienced geologists, recording relevant data and photographs to a set template.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	
	The total length and percentage of the relevant intersections logged.	
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Procedures, including the sample sizes, meet industry standards, and sample sizes are appropriate for the style of mineralisation encountered.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	
	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.	

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	Whether sample sizes are appropriate to the grain size of the material being sampled.	
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	Samples were submitted to ALS Laboratories in Tucson, Arizona Sample preparation comprised of drying, crushing to 70% passing 2mm and a 250g split was pulverized to better than 85% passing 75 micron mesh Samples were submitted for multi-element analysis by ME-MS61L and ME-MS61L-REE which comprise of 4-acid digestion and ICP-MS finish for the Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Hf, Ho, In, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, P, Pb, Pr, Rb, Re, S, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn and Zr Samples were additionally assayed for Au via Au-ICP22 using 50g samples for fire assay and ICP-AES finish
	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.	Not applicable – no results from geophysical tools are reported in this announcement.
	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.	ALS undertakes internal industry standard laboratory quality control procedures including insertion of blanks and standards and QA/QC review. All results for QAQC fall within acceptable limits.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	The assay results have been reviewed by Buxton's geologists in Arizona and Perth.
	The use of twinned holes.	Not applicable – the announcement does not refer to drilling results.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All sample data is entered to spreadsheets by Company personnel and validated by Company geologists. This data is then imported into specialised software where additional validation is completed. Digital data is securely archived on and off-site.
	Discuss any adjustment to assay data.	No adjustments were made to assay data
Location of data points	*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.*	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.
	Specification of the grid system used.	Locations reported here use NAD83 zone 12, elevations are reported as NAVD 88
	Quality and adequacy of topographic control.	Topographic control is USGS NED 1/3 arc-second n35w113 1 x 1 degree ArcGrid 2019.

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Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	The rock chip sampling programs are reconnaissance in nature and sample spacing is deemed appropriate for this stage of exploration. No Mineral Resource or Ore Reserve calculations have been performed. No sample compositing has been undertaken.
	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.	
	Whether sample compositing has been applied.	
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	The rock chip sampling programs are reconnaissance in nature and sample spacing is deemed appropriate for this stage of exploration.
	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.	
Sample security	*The measures taken to ensure sample security.*	Samples are stored and processed within a secure workshop facility. Samples are regularly dispatched to a laboratory for analysis as they are processed.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No specific external audits or reviews have been undertaken.

JORC 2012 Table 1: 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.*	BUX have a 100% interest in ~27.8 km^2 of tenure consisting of Federal Lode Mining Claims SM1-SM54 and CW01-CW215 issued by the Bureau of Land Management (BLM) covering 19.5 km^2 and Arizona State Lands Department (ASLD) Mineral Exploration Permits 008-121028 and 1213390 covering 5.1 km^2, and 008-124215 covering 2.5 km^2. On the 4th of October August 2022, Buxton satisfied all conditions precedent for Buxton and IGO to enter into an earn-in and joint venture agreement for the Copper Wolf Project (Arizona, USA) then held as 100% by BUX. By that agreement, IGO has an exclusive right to earn a 51% interest in the initial Copper Wolf Project tenements (SM1-SM54, CW01-CW44, 008-121028 and 008-1213390, covering approximately 11.0 km^2) by incurring and sole funding A$350,000 of exploration expenditure in a 24-month period from 4/10/2022. Upon IGO incurring the A$350,000 earn-in expenditure, it may elect to earn-in and form a 51% IGO / 49% BUX unincorporated joint venture. During the earn-in period, BUX will be the project manager. IGO will be the initial manager of the joint venture. Within 6 months of the commencement of the joint venture, IGO has the exclusive right to elect to earn a further 19% joint venture interest (to take its joint venture interest to 70%) by sole funding exploration expenditure of A$5,000,000 over 3 years (stage 2 earn-in). For a 5 year period from the date of the agreement, BUX are committed to present all copper projects it secures or

		generates in Arizona to IGO by way of a right of first refusal. On the 10th November 2023, Buxton entered into a "Copper Chief Lease and Option Agreement" with the private owner of 7 Lode Mining Claims (Copper Chief #1-5 & Copper Chief #18-19) covering approximately 58 hectares and a parcel of private property covering approximately 16 hectares which is wholly contained within the area of the Copper Chief Lode Mining Claims (see Figure 4). This package of surface and subsurface rights is contiguous with existing BUX tenure. The agreement provides BUX the option to acquire 100% of the surface and subsurface rights at any time prior to 10th November 2028. Should BUX chose to exercise the option, BUX will grant the seller a five percent (5%) Net Smelter Returns Royalty, with rights to purchase up to 3.5% of that Royalty. There is a long history of exploration and mining in the project area, so it is considered likely requisite permits will be obtained as and when they are required. The Copper Wolf project does not intersect or lie adjacent to areas with native title interests, historical cultural sites, wilderness or national park and otherwise sensitive environmental settings.
	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 the Federal / State government agencies.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	A summary of the history of previous exploration activities is included in this announcement. The Competent Person has reviewed previous reports on drilling at the Copper Wolf Project and confirmed in the field and from discussions with a PD site geologist that historic drilling has been undertaken. Practices employed appear to have been consistent with those adopted at other projects in North America around the same time.
Geology	*Deposit type, geological setting and style of mineralisation.*	The mineralisation at the Copper Wolf Project comprises porphyry copper-molybdenum type, with both hypogene (primary) and supergene (secondary) variants. This type of mineralisation is widely distributed in the region around the Project
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:* *easting and northing of the drill hole collar* *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* *dip and azimuth of the hole* *down hole length and interception depth* *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.*	Not applicable – the announcement does not refer to drilling results.

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Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	No assay weighting or aggregating of assay results are reported herein.
	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.	
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	Not applicable – the announcement does not refer to drilling 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').	
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.*	Results of all available significant historical work have been previously 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.*	All relevant, meaningful and material exploration data pertinent to the reported observations has been presented in this announcement.
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*	See text and figures in body of release.
	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 figures in body of release.

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