

ASX Release

6<sup>th</sup> Sep 2023

## 626.88 metres of porphyry Cu-Mo sulphide observed in second drill hole at Copper Wolf, Arizona.

- Visual observations from Buxton's second drillhole CPW0002DD at Copper Wolf indicate the presence of a globally significant copper-molybdenum mineral system.
- Drilling is 100% funded by JV partner IGO Limited.

Buxton Resources (ASX:BUX) is pleased to report highly encouraging results from the second diamond drillhole at its 100% owned Copper Wolf Project. CPW0002D penetrated the cover sequence at 527.61 metres and immediately intersected visual copper and molybdenum mineralisation. This hole was terminated in mineralised rocks at 1,174.40 metres for a total of 646.79 metres of basement diamond drilling.

**Buxton's geological logs indicate that the basement interval in CPW0002DD consists of 626.88 metres of porphyry-style chalcopyrite-molybdenite mineralisation (Figure 2, Table B).**

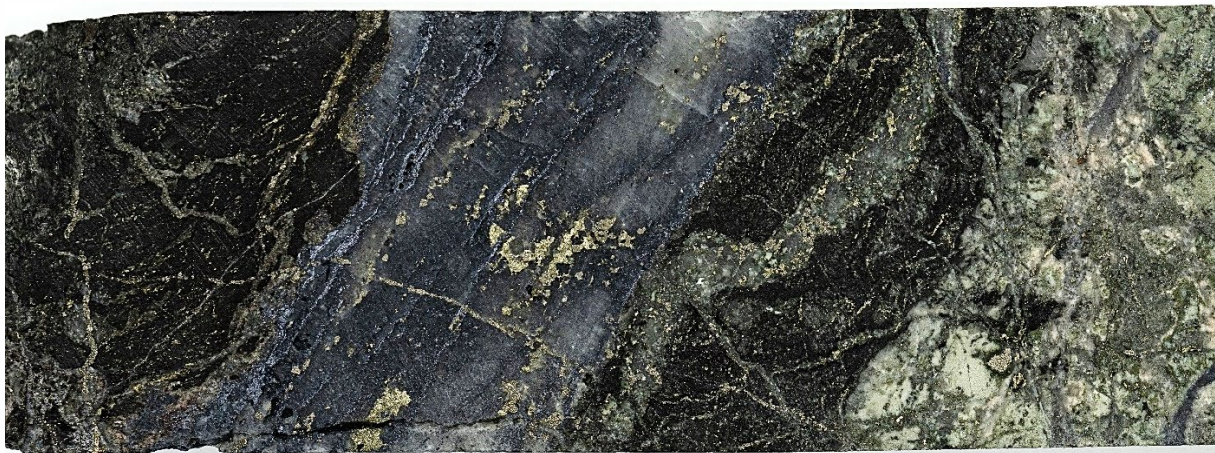


Figure 1: HQ3 core from CPW0002D at 619.70 m depth. The mafic schist on the left hosts a banded quartz-molybdenum vein which is cut by later veins of blebby sulphides. Disseminated sulphide is stronger in this mafic host compared with the chlorite altered felsic gneiss on the right of photo. Visually estimated sulphide abundances: 1.5% pyrite, 1.0% chalcopyrite and 0.15% molybdenite. HQ3 core is 63.5 mm width.

### Cautionary Statement

Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations. Assays are expected to be reported by the end of October.



**Figure 2:** HQ3 core from CPW0002D at 530.65 m depth. Cross-cutting quartz-sulphide veins carry chalcopyrite, pyrite and molybdenite sulphides. The granitic host rock has been altered by an early clay alteration which has been overprinted by K-feldspar (as vein selvage) and later sericite. Visually estimated sulphide abundances: 2.25% pyrite, 0.8% chalcopyrite and 0.15% molybdenite. HQ3 core is 63.5 mm width.

CPW0002DD lies immediately adjacent to (and extends) assay-confirmed mineralisation in CPW0001DD which returned **83.76 metres at 0.40% Cu and 0.065% Mo for 0.86% CuEq<sup>1</sup>** from 527.91 metres ([see ASX Announcement 28th August](#)).

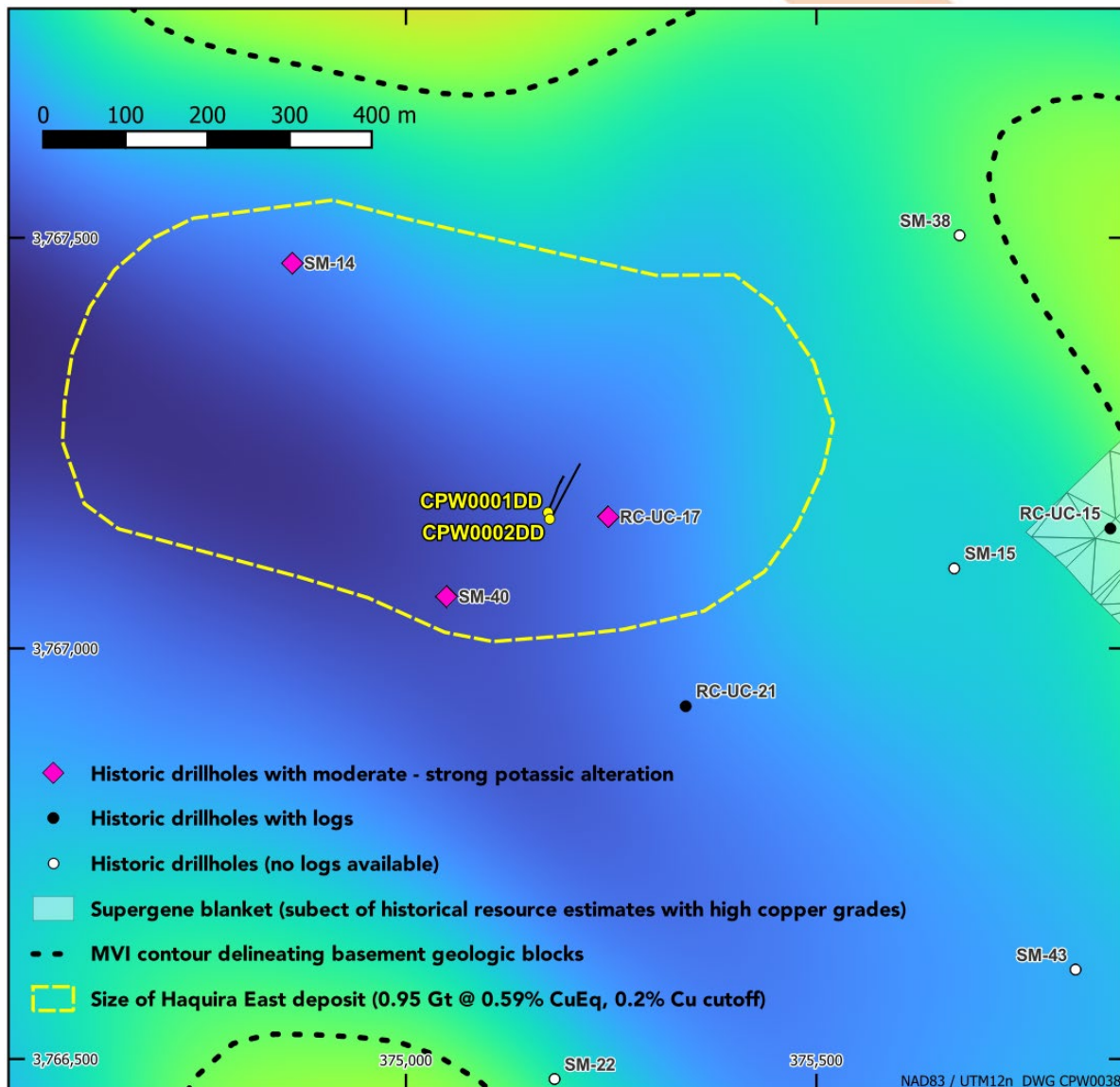
The scale and continuity of mineralisation intersected in CPW0002DD provides strong evidence of a large porphyry copper – molybdenum mineral system within the Project area. A key implication of Buxton’s observations is that high-grade zones are potentially preserved at depth and along strike - see Technical Discussion below. Encouragingly, the available geological logs indicate that previous drilling is both wide-spaced and averages just ~200 metres of basement coring per hole (Figure 3).

The drilling program has greatly improved Buxton’s confidence the Copper Wolf Project has potential to host economic mineralisation with sufficient grades and thicknesses for modern underground bulk mining methods to be feasible.

Buxton and IGO are continuing to generate high quality data and interpretations from this first drilling program in 30 years to optimise our follow-up geophysical and drilling programs.

CEO Marty Moloney commented *“The intersection of significant thicknesses of continuous alteration, veining and mineralisation in CPW0002DD establishes Copper Wolf as a porphyry copper-molybdenum project of global relevance. Our second drillhole shows that historical drilling has barely scratched the surface. It’s time to wake the giant which has been lying low at Copper Wolf for the last 74 million years.”*

<sup>1</sup> Assumptions used in USD for the copper equivalent calculation were metal prices of \$8331/t Cu and \$58750/t Mo. The following equation was used to calculate copper equivalence: Copper Equivalent (%) = Cu (%) + (Mo (%) x 7.052). No allowance has been made for metal recovery or payability. A cutoff grade of 0.2% CuEq has been used for composites.



**Figure 3:** Copper Wolf Project map with location of Buxton CPW drillholes and nearby historical holes illustrating the wide-spacing and limited depth of historical drilling compared with a world class porphyry orebody such as First Quantum’s Haqira East deposit in Peru. Diamond symbols indicate potassic style alteration, and numbers in brackets are the depth of basement intersection drilled below the volcanic cover sequence.

Shown in yellow is the projected-to-surface extent of the Haqira East deposit, which is a steeply dipping pipe body containing 949 Mt at 0.59% CuEq<sup>2</sup> over ~1,000 m vertical extent. The image is from Buxton’s 2022 airborne magnetic survey (inversion at the -250m RL - about 50m below the end of CPW0002DD). Known high-grade supergene mineralisation at Copper Wolf, subject of [previous historical resource estimates](#), is located approximately 1 km east of Buxton’s current drill program.

<sup>2</sup> Rozelle, J.W. and Lips, E.C., 2010 - Haqira Copper Project, Apurimac, Peru, Preliminary Economic Evaluation Update; an NI 43-101 Report, prepared by Tetra Tech MM, Inc. for Antares Minerals Inc., 266p. Assumptions used in USD for the copper equivalent calculation were metal prices of \$8331/t Cu, \$58750/t Mo and \$1966.45 / oz gold. The following equation was used to calculate copper equivalence from the reported Haqira East Inferred, Indicated and Measured (Enriched + Primary) resource zones: Copper Equivalent (%) = Cu (%) + (Mo (%) x 7.052) + (Au (g/t) \* 0.75).

This release is authorised by the Board.

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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.

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### 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.

## TECHNICAL DISCUSSION AND JORC COMPLIANCE DATA

Visual observations of Buxton's drill core have greatly improved geological confidence at Copper Wolf, where no sample material is otherwise available to the JV.

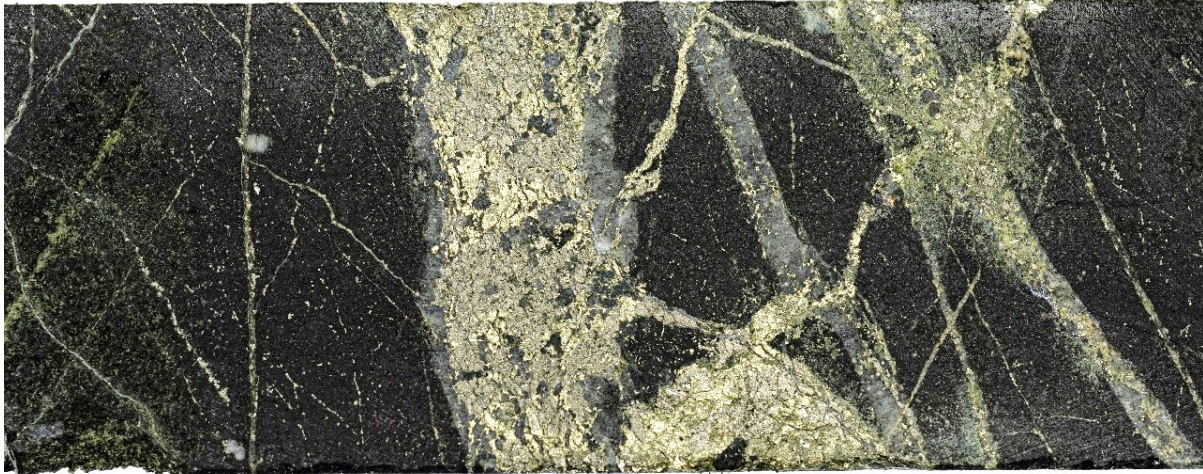
A selection of key learnings include:

- Variations in sulphide mineralisation intensity, alteration and veining styles are strongly influenced by the host lithology. For example the potassic alteration event is evident as shreddy biotite selvages & flooding in mafic host rocks (Figure 4), whereas this same event appears more commonly as a K-feldspar seldvege & flooding in felsic host rocks (Figure 5).
- The vein styles and timing relationships observed are typical of porphyry deposits. Strong molybdenite is typically associated with banded massive &/or milky quartz. Copper bearing veins often display with K-feldspar and biotite halos.

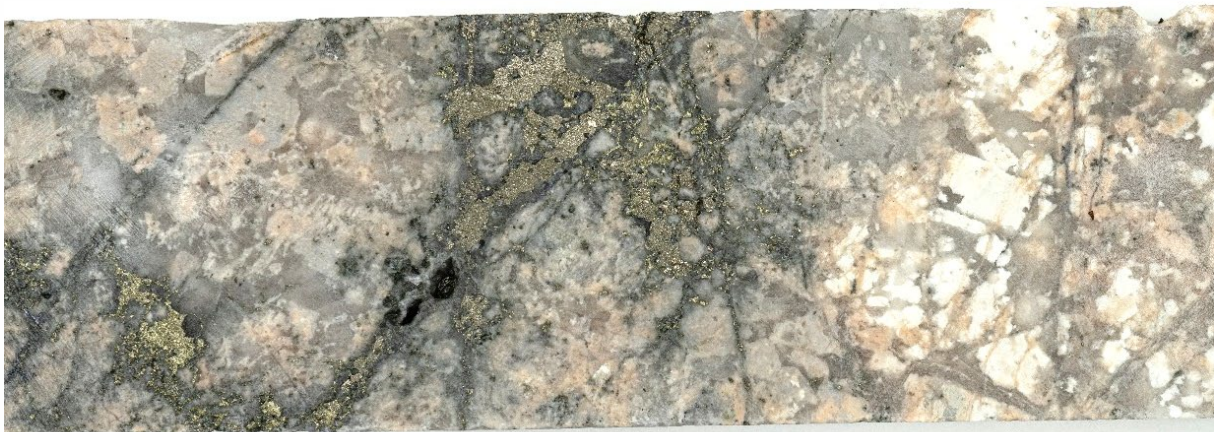
- A late overprinting quartz-pyrite-sericite (“phyllic”) assemblage overprints earlier chalcopyrite and molybdenite bearing stages and contributes to a lack of correlation between vein density and Cu/Mo grades (Figure 8).
- Mineralisation is dominated by the “hypogene” sulphides pyrite, chalcopyrite and molybdenite occurring within multi-phase stockworks of quartz-sulphide veins (Figure 6) & / or sulphide-only veins (Figure 7) and as disseminations. Minor secondary mineralisation is associated with hematite bearing fractures.
- The lithologies of the basement interval drilled (728.62 metres across the two holes) can be classified as follows:
  - o 83% mineralised pre-Laramide rocks (gneiss, schist & granitoids).
  - o 8% mineralised lithologies not presently classified due to intense alteration / structural overprint.
  - o 6% mineralised Laramide intrusive lithologies.
  - o 3% unmineralised late dykes (19.90 metres of core in CPW0002DD)
- The intersection in CPW0002DD remains open in most directions for at least several hundred meters (see Figure 3, and Figure 9).
- Between 650 metres – 975 metres down hole in CPW0002DD there is a zone of relatively strong visual molybdenite mineralisation.
- Starting at around 900 metres depth down hole in CPW0002DD, the ratio chalcopyrite / pyrite becomes higher (Figure 7). This zone appears abruptly juxtaposed against less well-mineralised rocks by a fault evident as severely fractured drill core at ~1,100 metres depth.

Buxton interprets the limited volume of pre- or syn-Laramide intrusives, and the widespread phyllic overprint to indicate a relatively high position in the original mineral system.

A key implication of these observations is that high-grade zones are likely preserved at depth and/or along strike.



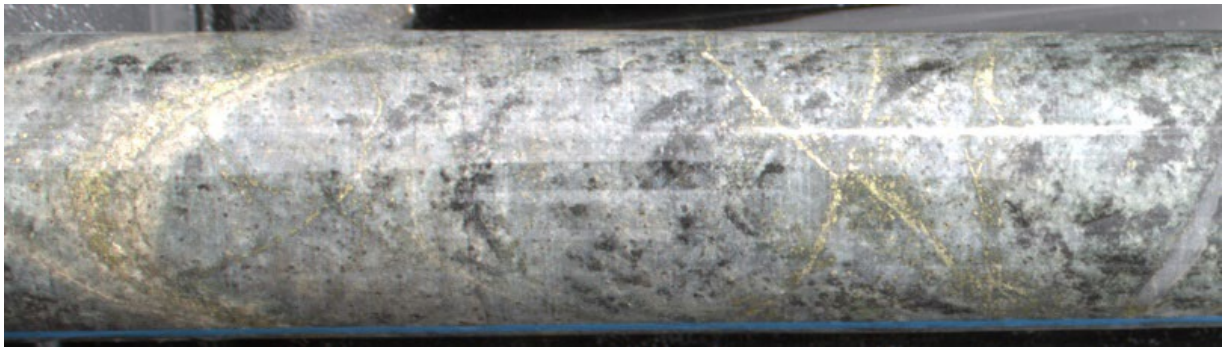
**Figure 4:** Cut HQ3 ½ core from 622.2 m in CPW0002DD. Metapelite rock cut by multi-stage (stockwork) quartz-sulphide and sulphide-only veining. Secondary biotite forms as sledge to the veining but is so intense that it appears to completely flood the non-vein component of the sample. Visually estimated sulphide abundances: 6% pyrite, 2.5% chalcopyrite and 0.1% molybdenite. HQ core is 63.5 mm width.



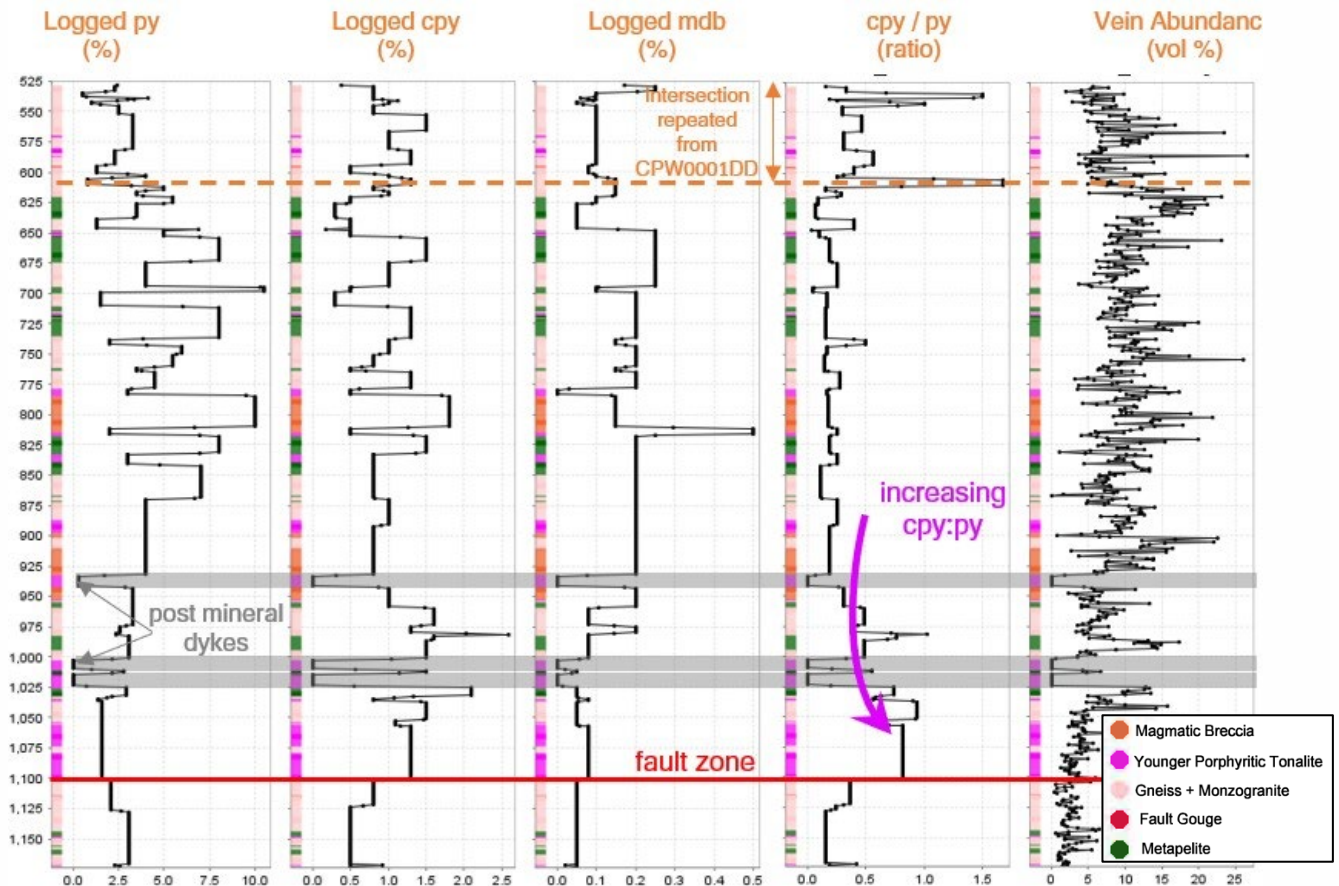
**Figure 5:** Cut HQ3 ½ core from 968.05 m in CPW0002DD. Coarse grained monzogranitic host rock at. Monzogranite is altered via early clay replacement of plagioclase with later patchy K-feldspar and sericite overprint. Numerous quartz-sulphide veins cut through geology. Visually estimated sulphide abundances: 3% pyrite, 2% chalcopyrite, 0.1% molybdenite. HQ core is 63.5 mm width.



**Figure 6:** Whole HQ3 core from 710.00 m in CPW0002DD. Medium grained intrusive rock cut by multi-stage (stockwork) quartz-sulphide veins. This sample illustrates strong fine grained molybdenite mineralisation in banded quartz veins and distinct K-feldspar selvages. Visually estimated sulphide abundances: 4% pyrite, 1.25% chalcopyrite, 0.5% molybdenite. HQ core is 63.5 mm width.



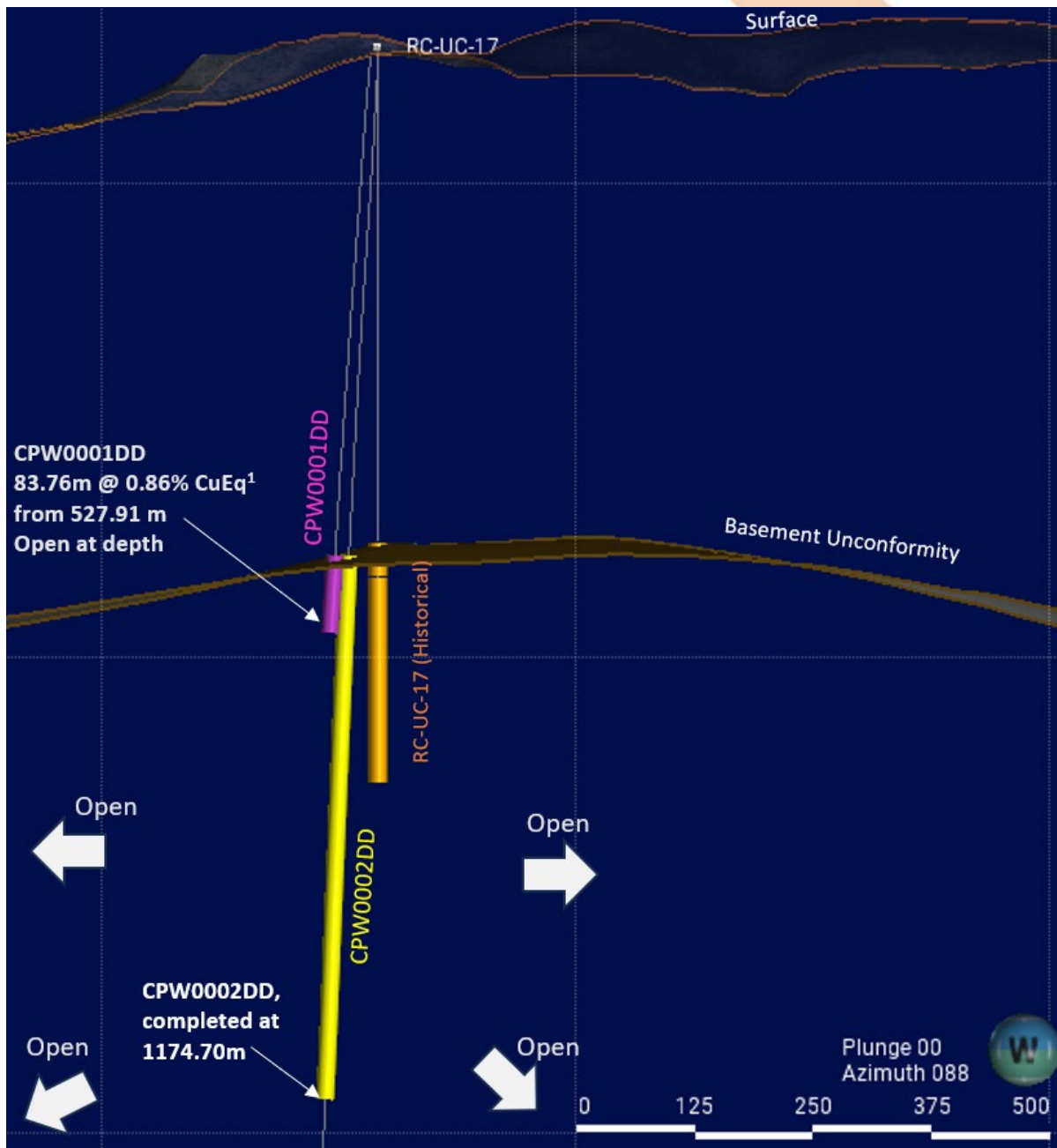
**Figure 7:** Whole NQ3 core from 977.8 m in CPW0002DD. Gneissic host rock with more abundant sulphide-only veins that contain a higher ratio of chalcopyrite to pyrite. Visually estimated sulphide abundances: 2.5% pyrite, 2.5% chalcopyrite, 0.1% molybdenite. NQ3 core is 45 mm width.



**Figure 8:** Downhole graphic log showing variation in logged sulphide species in CPW0002DD, which intersected a significantly greater interval of porphyry style alteration, veining and sulphide mineralisation than CPW0001DD (indicated). Relative variations in sulphide abundances and mineralisation styles are observed which can be used to assist with planning for future drilling.

Coring activities on CPW0002DD were completed on 24<sup>th</sup> August 2023. Follow up work on CPW0002DD is presently underway and includes;

- Multi-parameter wireline logging followed by abandonment
- Multi-element analytical assaying
- Hyperspectral & petrological analysis
- Rock strength testwork



**Figure 9:** Cross section looking East displaying BUX holes, CPW0001DD and CPW0002DD relative to historical exploration hole RC-UC-17.

### CPW0001DD (abandoned at 611.76 metres depth)

Drill hole CPW0001DD was collared just south of the historical hole RC-UC-17 (Figure 9). The aim of the hole was to test and confirm mineralisation previously reported in historical drilling dating back to 1974. CPW0001DD intersected 529.8 metres of post-mineralisation volcanic and volcanoclastic units before reaching the “basement” unconformity. Below this unconformity the basement geology consists of a series of metamorphosed sediments (biotite-garnet gneiss and metapelitic schists) which

have been intruded by coarse to pegmatoidal granitoids and later intruded by porphyritic dykes. The late dykes are mineralised and potentially represent “early” Laramide aged intrusives. These rocks have been altered and mineralised by multi-stage overprinting events including early kaolinite and chlorite dominated assemblages. Later K-feldspar, biotite and latest sericite-pyrite assemblages appear closely related to the mineralisation events. Drilling of CPW0001DD was terminated in mineralisation at 611.67 m in late May 2023 due to drill rig mechanical issues.

#### CPW0002DD (completed at 1,174.70 metres)

CPW0002DD was collared in late June 2023 adjacent to CPW0001DD (Table A) and drilling was originally planned to 1,100 m depth. CPW0002DD was planned to drill underneath were CPW0001DD terminated and aimed to test depth extents of the mineralisation. Coring activities on CPW0002DD were completed on 24<sup>th</sup> August 2023 at 1,174.7 metres depth, and Buxton is presently undertaking a range of wireline logging activities on this drillhole. Core cutting has been completed with all initial half-core samples from CPW0002DD dispatched to the laboratory by late August. Assays are expected to be reported by the end of October.

#### Drillhole Collar and Assay Data

**Table A:** Collar information for Buxton holes at the Copper Wolf Project

Hole ID	UTM Easting	UTM Northing	Elevation (m)	Azimuth	Dip	Depth (m)
CPW0001DD	375104	3767349	892	020	-85	611.74
CPW0002DD	375111	3767357	891	020	-85	1174.70

**Table B:** Visual sulphide estimates for CPW0002DD.

From (m)	To (m)	Interval (m)	Pyrite (%)	Chalcopyrite (%)	Molybdenite (%)
527.61	528.52	0.91	2.5	0.0	0.10
528.52	533.7	5.18	2.3	0.8	0.25
533.7	537.94	4.24	0.5	0.8	0.10
537.94	538.73	0.79	4.5	0.8	0.05
538.73	540.75	2.02	3.0	0.8	0.08
540.75	541.42	0.67	4.5	1.3	0.15
541.42	544.68	3.26	1.0	1.0	0.05
544.68	551.99	7.31	2.5	0.8	0.10
551.99	566.01	14.02	3.3	1.5	0.10
566.01	581.56	15.55	3.3	1.0	0.10
581.56	594.51	12.95	2.3	1.3	0.10
594.51	601.37	6.86	1.3	0.5	0.08
601.37	604.42	3.05	4.0	1.0	0.10
604.42	611.43	7.01	0.8	1.3	0.15
611.43	615.33	3.9	5.0	0.8	0.15
615.33	619.81	4.48	3.5	1.0	0.15
619.81	625.75	5.94	5.5	0.5	0.10

From (m)	To (m)	Interval (m)	Pyrite (%)	Chalcopyrite (%)	Molybdenite (%)
625.75	637.95	12.2	3.5	0.3	0.05
637.95	647	9.05	1.3	0.5	0.05
647	647.64	0.64	8.0	0.0	0.10
647.64	653.34	5.7	5.0	0.5	0.25
653.34	673.61	20.27	8.0	1.5	0.25
673.61	694.03	20.42	4.0	1.0	0.25
694.03	698.72	4.69	10.5	0.5	0.10
698.72	710.31	11.59	1.5	0.3	0.20
710.31	737.31	27	8.0	1.3	0.20
737.31	742.49	5.18	2.0	1.0	0.15
742.49	750.42	7.93	6.0	1.0	0.20
750.42	760.48	10.06	5.5	0.8	0.20
760.48	764.74	4.26	3.5	0.5	0.15
764.74	778.15	13.41	4.5	1.3	0.20
778.15	784.07	5.92	3.0	0.5	0.00
784.07	810.59	26.52	10.0	1.8	0.15
810.59	817.17	6.58	2.0	0.5	0.50
817.17	831.8	14.63	8.0	1.5	0.20
831.8	841.55	9.75	3.0	0.8	0.20
841.55	847.04	5.49	7.0	0.8	0.20
847.04	869.9	22.86	7.0	0.8	0.20
869.9	891.54	21.64	4.0	1.0	0.20
891.54	932.38	40.84	4.0	0.8	0.20
932.38	942.14	9.76	0.3	0.0	0.00
942.14	959.21	17.07	3.3	1.0	0.20
959.21	974.45	15.24	3.3	1.6	0.08
974.45	980.54	6.09	2.6	1.3	0.20
980.54	981.76	1.22	2.1	2.9	0.08
981.76	985.72	3.96	3.1	1.6	0.08
985.72	1000.7	14.98	3.1	1.5	0.08
1000.7	1001.69	0.99	3.1	1.5	0.08
1001.69	1010.63	8.94	0.0	0.0	0.00
1010.63	1013.76	3.13	2.8	1.5	0.05
1013.76	1024.74	10.98	0.0	0.0	0.00
1024.74	1032.24	7.5	2.9	2.1	0.05
1032.24	1033.94	1.7	1.9	1.1	0.05
1033.94	1036.11	2.17	1.4	0.8	0.08
1036.11	1051.93	15.82	1.6	1.5	0.05
1051.93	1056.74	4.81	1.6	1.1	0.05
1056.74	1101.24	44.5	1.6	1.3	0.08

From (m)	To (m)	Interval (m)	Pyrite (%)	Chalcopyrite (%)	Molybdenite (%)
1101.24	1122.58	21.34	2.1	0.8	0.05
1122.58	1127.46	4.88	2.1	0.5	0.05
1127.46	1171.04	43.58	3.1	0.5	0.05
1171.04	1171.65	0.61	2.1	1.2	0.00
1171.65	1174.39	2.74	2.6	0.5	0.05

**JORC 2012 Table 1: 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>	PQ, HQ and NQ diamond core samples have been obtained during drilling.  Drill core was geologically logged, and selected intervals were selected for sampling and analysis.  The diamond core was cut in half along the long axis using a diamond blade rock saw. Half-core was sampled. The samples lengths ranged from 0.3m to 2m to within geological boundaries with all samples submitted to SGS Laboratories in Burnaby.
	<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 (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.</i>	
Drilling techniques	<i>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).</i>	Diamond core was drilled from surface to the end of the hole.  CPW0001DD: HQ3 diamond core diameter is 61,1mm and was drilled until the end of hole.  CPW0002DD: HQ3 diamond core diameter is 61,1mm and was drilled until 970.64m NQ3 diamond core diameter is 45 mm and has been drilled from 970.64 until the end of hole.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Drill core recoveries were routinely recorded by the drilling contractors on core blocks at the end of each core run. Intervals are cross-checked by the Company's geologists.  No material core loss is recorded in the intervals being reported.  Insufficient data from the modern drilling program exists to establish a relationship between sample
	<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>	

		recovery and grade. Historical data indicates there is no relationship between sample recovery and grade.
Logging	<p><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></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>Drill core is logged by Company geologists with appropriate detail to support mineral resource estimates.</p> <p>Systematic geological and geotechnical logging is being undertaken. Data collected includes:</p> <ul style="list-style-type: none"> <li>- Nature and extent of lithology.</li> <li>- Relationship between lithology and mineralisation</li> <li>- Identification of nature and extent of alteration and mineralisation.</li> <li>- Location, extent and nature of structures such as bedding, cleavage, veins, faults etc.</li> <li>- Structural data (alpha &amp; beta) are recorded for orientated core.</li> <li>- Geotechnical data such as recovery, RQD, fracture frequency, qualitative IRS, microfractures, veinlets and number of defect sets may be collected.</li> <li>- Magnetic susceptibility recorded at 1m intervals</li> </ul> <p>Comments on estimates of the proportion of visible sulphides (e.g. chalcopyrite):</p> <ul style="list-style-type: none"> <li>- Systematic logging of HQ and NQ diamond drill core with an estimate of the proportion of sulphide species present is completed on an interval basis.</li> <li>- Estimates on an interval basis vary from trace (~0.1%) to 10.5%.</li> <li>- This estimate is a guide only as it is difficult to estimate accurately due to the variable nature of the mineralisation.</li> <li>- Actual metal grade will be determined using analytical method at a certified laboratory.</li> <li>- The sulphide species (pyrite, chalcopyrite, chalcocite, bornite and molybdenite) occur as irregular blebs (~10mm diameter) in fine (~0.1mm) to medium (~0.5mm) disseminations, narrow stringers, irregular vein infill, irregular to laminated, narrow (1-10mm but up to 50mm+) pyrite-chalcopyrite-molybdenite veins, as well as narrow (2-15mm) centreline quartz-pyrite-chalcopyrite veins.</li> <li>- Identification of sulphide species is completed by or under supervision of experienced geologists and supported by a handheld portable XRF.</li> </ul> <p>To assist with the selection of intervals for reporting visual sulphides, Buxton records visual intersections of porphyry vein style mineralisation by estimating for each foot of core:</p> <p>1) the average width of the veins (w), and</p>

		<p>2) the number of veins (<math>n</math>).</p> <p>The equation <math>w * n / interval\ length</math> yields the volume percent of the rock that is constituted by veins.</p>
<p><i>Sub-sampling techniques and sample preparation</i></p>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p>	<p>Drill core has been halved with a core saw; with one half of the core sent to a laboratory for assay and the other half retained on site in ordered core storage trays for future reference.</p> <p>If core is broken, then a representative selection of half the core is taken.</p> <p>Core is photographed wet at site prior to transport.</p> <p>Further sample preparation in advance of assay (weighing, crushing, splitting, pulverising) is then undertaken at SGS Burnaby.</p> <p>Buxton retains all residual laboratory pulps in a secure storage facility.</p> <p>This procedure, including the sample sizes, meets industry standards where 50% of the total sample taken from the diamond core is submitted.</p> <p>The sample sizes are appropriate for the style of mineralisation encountered.</p> <p>The retention of the remaining half-core is an important control as it allows assay values to be viewed against the actual geology; and, where required, further samples may be submitted for quality assurance. No resampling of quarter core or duplicated samples have been completed at the project to date.</p>
	<p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p>	
	<p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p>	
	<p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p>	
	<p><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></p>	
	<p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	
<p><i>Quality of assay data and laboratory tests</i></p>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p>	<p>Samples were submitted to SGS Laboratories in Burnaby, British Columbia</p> <p>Sample preparation comprised of drying, crushing to 75% passing 2mm and a 250g split was pulverized to better than 85% passing 75 micron mesh</p> <p>Samples were submitted for multi-element analysis by GE_IMS40Q12 and GE_IMS50Q12-AE which comprise of 4-acid digestion and combined ICP-AES &amp; 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</p> <p>Samples were additionally assayed for Au via GE_FAI50V5 using 50g samples for fire assay and ICP-AES finish</p>
	<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></p>	<p>Not applicable – no assays are reported in this announcement.</p> <p>Magnetic susceptibility was taken for every foot using a Terraplus KT-10 magnetic susceptibility meter. No geophysical tools or other handheld XRF instruments were used to determine grade. Handheld PXRF was</p>

		used only to confirm presence of minerals and not to determine grade.
	<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>	Blanks, duplicates and standards are included in every 10 samples submitted to the laboratory for analysis.  SGS also undertakes internal industry standard laboratory quality control procedures including insertion of blanks and standards and QA/QC review.  Logging of Drillcore was completed by a suitably qualified geologist. Logging was reviewed onsite by the competent person.  Assay intersections were checked against core, photos, and recovery by the supervising geologist.  BUX standards, blanks and crush duplicates, lab standards, blanks and repeats were reviewed for each batch. All results for QAQC fall within acceptable limits.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	The assay results have been reviewed by Buxton's site geologists in Arizona, and by supervising geologists in Perth.
	<i>The use of twinned holes.</i>	Drillholes CPW0001DD and CPW0002DD is located within 100m of historic hole RC-UC-17, drilled to 774.19 m (2540 feet) and for which historical logs and assays are available.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	All drillhole data is entered to spreadsheets by Company personnel and validated by Company geologists. This data is then imported into the Leapfrog software where additional validation is completed. Digital data is securely archived on and off-site.
	<i>Discuss any adjustment to assay data.</i>	No adjustments were made to assay data
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>	Location reported here use NAD83 zone 12, elevations are reported as NAVD 88
	<i>Quality and adequacy of topographic control.</i>	Topographic control is USGS NED 1/3 arc-second n35w113 1 x 1 degree ArcGrid 2019.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	CW0001DD is the first drillhole in several decades at the Copper Wolf project and is designed to establish short range continuity of mineralisation with RC-UC-17.
	<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>	<ul style="list-style-type: none"> <li>- Single shot surveys were taken down hole every 90 feet using a REFLEX EZ-Shot electronic single shot instrument.</li> </ul>

	<i>Whether sample compositing has been applied.</i>	<p>- Hole deviation was monitored by the geologist during drilling</p> <p>No Mineral Resource and Ore Reserve estimation procedures / classifications have been applied in this Announcement.</p> <p>No sample compositing has been applied at this stage.</p>
<i>Orientation of data in relation to geological structure</i>	<p><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></p> <p><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></p>	The assessment of sampling bias in relation to drilling orientation will require additional drilling.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	Drill core is being stored and processed within a secure workshop facility. Samples are regularly dispatched to a laboratory for analysis as they are processed.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	Not undertaken.

### JORC 2012 Table 1: 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>BUX have a 100% interest in 29.5 km<sup>2</sup> of tenure consisting of Federal Lode Mining Claims SM1-SM54 and CW01-CW215 issued by the Bureau of Land Management (BLM) covering 21.9 km<sup>2</sup> and Arizona State Lands Department (ASLD) Mineral Exploration Permits 008-121028 and 1213390 covering 5.1 km<sup>2</sup>.</p> <p>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) 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).</p>

		<p>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.</p> <p>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.</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 the Federal / State government agencies.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>A summary of the history of previous exploration activities is included in this announcement.</p> <p>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.</p>
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	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
<i>Drill hole information</i>	<p><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></p> <ul style="list-style-type: none"> <li><i>o easting and northing of the drill hole collar</i></li> <li><i>o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>o dip and azimuth of the hole</i></li> <li><i>o down hole length and interception depth</i></li> <li><i>o hole length</i></li> </ul> <p><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></p>	Drill hole collar details and significant intersections of mineralisation in drilling are tabulated in this announcement.
<i>Data aggregation methods</i>	<p><i>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.</i></p> <p><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></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<p>Visual estimated intercepts have been selected to have internally consistent grade distributions, and these have not been aggregated.</p> <p>Assumptions used in USD for the copper equivalent calculation were metal prices of \$8331/t Cu and \$58750/t Mo. The following equation was used to calculate copper equivalence: <math>\text{Copper Equivalent (\%)} = \text{Cu (\%)} + (\text{Mo (\%)} \times 7.052)</math>. No allowance has been made for metal recovery or payability. A cutoff of 0.2% Cu or the equivalent for Mo, which is approximately 285 ppm Mo. This captured all the samples reported herein.</p> <p>Mo price was from 23 August 2023</p>

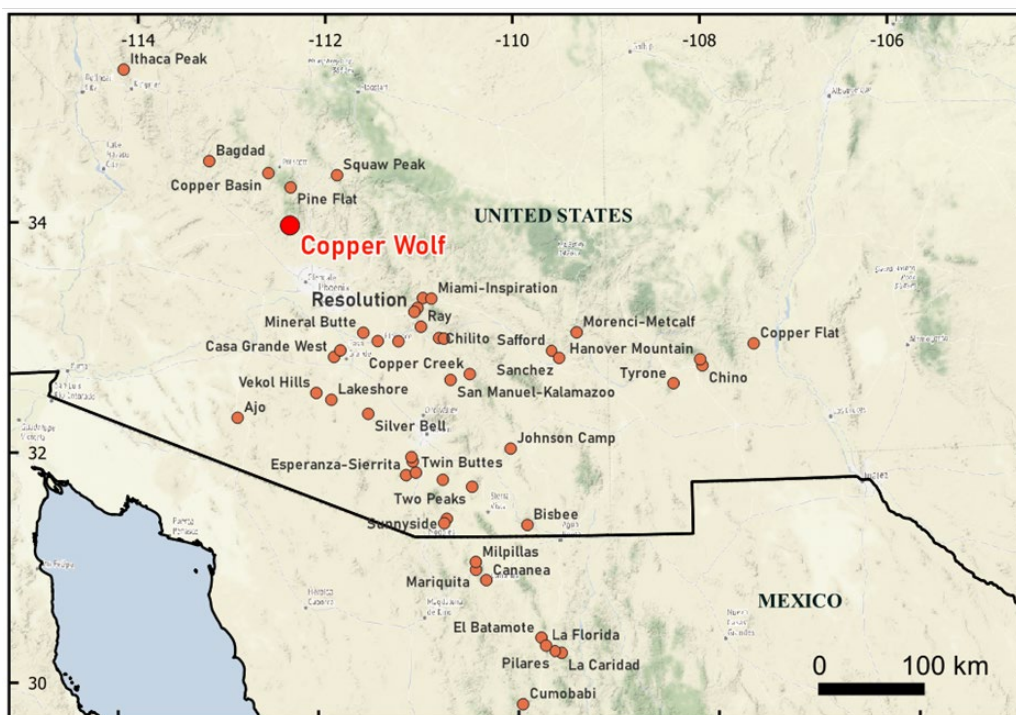
		<p><a href="https://tradingeconomics.com/commodity/molybden">https://tradingeconomics.com/commodity/molybden</a></p> <p>Cu price was from the LME “cash” indicative price as reported in Mining News 23 August 2023.</p>
<p><i>Relationship between mineralisation widths and intercept lengths</i></p>	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p>	<p>All intersections of mineralisation in drill holes reported in this announcement refer to down-hole thicknesses of mineralisation as, to date, Buxton has had insufficient time to evaluate the data to estimate true thicknesses.</p>
	<p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p>	
	<p><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></p>	
<p><i>Diagrams</i></p>	<p><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></p>	<p>Maps and cross sections in the announcement illustrates the proximity of CW0001DD with respect to the closest zones of historical mineralisation intersected in RC-UC-17.</p>
<p><i>Balanced reporting</i></p>	<p><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></p>	<p>Results of all available significant historical work have been summarised and reported in this announcement.</p>
<p><i>Other substantive exploration data</i></p>	<p><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></p>	<p>All relevant, meaningful and material exploration data pertinent to the reported observations has been presented in this announcement.</p>
<p><i>Further work</i></p>	<p><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p>	<p>The nature and scale of further exploration will be determined at the completion of the current drill program.</p>
	<p><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></p>	<p>See diagrams in the body of the text.</p>

## About the Copper Wolf Project

The Copper Wolf Project has [multiple historical resource estimates](#)<sup>3</sup> 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 10), 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.

On the 4th of August 2022 Buxton and IGO Limited ("IGO") entered 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 option to earn a 51% interest in the Copper Wolf Project tenements by incurring and sole funding A\$350,000 of exploration expenditure in a 24-month period from 4/10/2022 (Stage 1 earn-in). Upon Having incurred the A\$350,000 earn-in expenditure, IGO may elect to strike the option and form a 51% IGO/49% BUX unincorporated joint venture. During the option and Stage 1 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). Any IGO-funded exploration expenditure incurred in excess of the initial Stage 1 A\$350,000 expenditure during the 2-year option period is credited towards the Stage 2 earn-in on IGO exercising its option.



**Figure 10:** Buxton's Copper Wolf Project in the prolific porphyry copper belt of SW USA / Northern Mexico.

<sup>3</sup> See [ASX announcement 25 October 2021 - Copper Wolf Copper Project: Arizona USA](#)