

## **QUARTERLY ACTIVITIES REPORT for the period ending 30 September 2023**

### **Graphite Bull Project (100% BUX)**

- Dual-stream electrochemical testwork to test multiple process options continued with ProGraphite and Dorfner Anzaplan GmbH

### **Copper Wolf Project; Arizona USA (100% BUX, IGO option to earn 70%)**

- Drilling program completed, assay results reported from CPW0001DD and visual results from CPW0002DD

### **Narryer Project (100% BUX)**

- Field activities included a soil sampling program.

### **Corporate**

- Cash balance (30 September 2023) of approximately \$2.35 million

Buxton Resources Limited (ASX: BUX or “Buxton”) is pleased to release the Quarterly activities report and Appendix 5B for the period ended 30 September 2023 (the Quarter).

### **Graphite Bull Project (BUX 100%)**

The Graphite Bull Project (Exploration License E09/1985) is located 280 km East of Carnarvon in the Murchison Region of Western Australia. In 2014, Buxton released an updated, JORC 2012 compliant, Mineral Resource Estimate for the main zone of graphite mineralisation. The Inferred Mineral Resource is 4.0Mt @ 16.2% TGC, using a 4% TGC cut-off (see [ASX announcement 24th October 2014](#)).

During the Quarter, continued the dual-stream electrochemical testwork aimed at evaluating multiple process options for the Graphite Bull concentrate material.

Initial results from ProGraphite on the first bulk concentrate sample directed toward the assessment of Li-ion battery quality benchmarks were exceeded by simple caustic bake purification achieving 99.97% TGC. Spheronising gave excellent shape and size

distribution, yield also above average. Concentrate micronised well with relatively little energy input – see [ASX Announcement 7<sup>th</sup> August 2023](#) for further details.

During the Quarter a Loupe ground EM survey was completed. The survey [identified numerous shallow conductivity targets that confirm substantial potential upside to this high-grade graphite resource](#).

## **Copper Wolf Project (BUX 100% / IGO option to earn 70%)**

Buxton's Copper Wolf project consists of Lode Mining Claims and Mineral Exploration Permits in Yavapai County, Arizona. The Copper Wolf Project has multiple historical resource estimates available that confirm the presence of a large Laramide porphyry Cu-Mo system ([see ASX Announcement 25 October 2021](#)).

Porphyry Cu-Mo mineralisation at Copper Wolf 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, 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. Buxton is targeting high grade, underground bulk mineable copper-molybdenum mineralisation.

On the 4<sup>th</sup> October August 2022, Buxton received shareholder approval for Buxton and IGO to enter into an earn-in and joint venture agreement for the Copper Wolf Project (Arizona, USA).

During the Quarter Buxton completed the first drilling campaign in the Project in over 30 years and reported [assay results from CPW0001DD](#) and [visual results from CPW0002DD](#).

## **Narryer Project (BUX 100%)**

The Narryer Project is targeting magmatic Ni-Cu-PGE sulphide mineralisation along the Yilgarn Craton margin within the Murchison Region of WA. The Narryer Project consists of four ELs covering > 1800 km<sup>2</sup>.

During the Quarter Buxton [completed a soil sampling program](#).

## West Kimberley Project (BUX / IGO JV)

The West Kimberley Project is targeting Nova-style magmatic Ni-Cu sulphide mineralisation in Proterozoic belts of the West Kimberley Region of Western Australia. Buxton have Farm-In and JV agreements over three separate Project areas (Merlin Project, Quickshears Project and West Kimberley Regional Project) which fall within the overall West Kimberly Project.

During the Quarter, [IGO commenced a drilling program at the Merlin and Dogleg prospects](#). The drilling program at Dogleg [intersected massive nickel copper bearing magmatic sulphides](#). A second hole, drilled to follow-up this virgin discovery, intersected [semi-massive nickel copper bearing magmatic sulphides](#).

## Fraser Range Project (BUX 10% / IGO 90%)

Exploration The Fraser Range Project is targeting magmatic Ni-Cu sulphide mineralisation along strike from IGO's operating Nova mining operation. During the Quarter IGO have continued their thorough exploration of these licenses. Buxton remain free carried until completion of a feasibility study with Buxton retaining an exclusive right to explore and develop iron ore on the Tenements.

During the Quarter, IGO reported having continued planning and preparation for drilling of a diamond drillhole targeting a magnetic high at the Solar Target area on E28/2201 which may represent an accumulation of Ni-Cu mineralisation. The hole was originally planned for Q1 FY24, but priorities were shifted due to expenditure commitments, and this will now be completed during Q3 FY24. IGO also undertook rehabilitation of tracks and diamond drill hole collars.

## Centurion Project (BUX 100%)

The Centurion Project consists of Exploration License E80/5579 located approximately 180 km south-southwest of Balgo Western Australia on unclaimed crown land and accessible via shire roads and several 1960s-1980s seismic lines. This license covers a prominent dipolar and offset magnetic and gravity gradiometer anomalies characteristic of Iron Oxide Copper Gold deposits including Olympic Dam and Prominent Hill. Magnetic data indicate that the target is located approximately 700 metres beneath ground level under post mineral cover sequences of the Canning Basin.

During the Quarter, Buxton continued to undertake negotiations with Native Title groups with a view to executing a Heritage Agreement.

### **Shogun & Royale Projects (BUX 100%)**

The Shogun and Royale Projects form a contiguous package covering 2617 km<sup>2</sup> located in the Paterson Region of Western Australia. Exploration on the two (2) Shogun Project ELA 45/6533 and 45/6534 is targeting magmatic Ni-Cu-Co-PGE sulphide deposits. The five (5) Royale Project ELAs (E45/6228 through E45/6232) cover exploration targets for hydrothermal Cu +/- Au – Mo deposits.

During the Quarter, Buxton continued to undertake negotiations with the Native Title group with a view to executing a Heritage Agreement.

### **Lateron Project (BUX 100%)**

The Lateron Project consists of Exploration License E80/5545 located on unclaimed crown land close to the Tanami Road, approximately 10 km East of Billiluna and 150 km South of Halls Creek in Western Australia. During the Quarter Buxton received the results of petrological analysis on fragments of diamond drill core recovered from the site of AFMECO's 1982 diamond drillhole S19. The report indicates the core fragments consist of "biotite hornblende quartz diorite, with coarse titanite and sericite / muscovite pyrite-magnetite-chalcopyrite overprint" – such rocks are typically associated with magmatic-hydrothermal Cu-Au mineralisation. Airborne mag indicates these intrusive rocks cover > 7 km<sup>2</sup>.

During the Quarter Buxton undertook desktop studies and planning for an IP survey.

### **Corporate**

The Company's Quarterly Cashflow Report (Appendix 5B) follows this activities report. The Company had \$2.35 million in cash as 30 September 2023. Exploration Expenditure for the Quarter was \$1.78 million with most of this expenditure being associated with field work in support of the Copper Wolf Project, metallurgical studies in support of the Graphite Bull Project, along with other ongoing project assessment. Buxton is also continuing to actively pursue copper and other commodity opportunities in the USA.

The aggregate amount of payments to related parties and their associates included in the current Quarter cash flows from operating activities were approximately \$103k comprising directors fees, salaries and superannuation. Corporate and other administration expenditure was \$201k for the Quarter which represents general costs associated with running the Company, including ASX fees, legal fees, rent, etc. Cash outflows for the Quarter were in line with management expectations. The company is adequately funded to continue its current activities and will continue to demonstrate appropriate fiscal management.

This announcement is authorised by the Board.

For further information, please contact:

Martin Moloney  
Interim CEO  
[marty@buxtonresources.com.au](mailto:marty@buxtonresources.com.au)

Sam Wright  
Company Secretary  
[sam@buxtonresources.com.au](mailto:sam@buxtonresources.com.au)

### **No New Information**

Except where explicitly stated, this announcement contains references to prior exploration results, all of which have been cross-referenced to previous market announcements made by the Company. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements.

## Appendix 1: Changes in interests in mining tenements - Buxton Resources Ltd 1/07/23 – 30/09/23

	Tenement	Location / Project	% at beginning of Quarter	% at end of Quarter
Interests in mining tenements relinquished, reduced or lapsed	E04/2610	West Kimberley Regional - IGO JV	20	0
	E04/2462	West Kimberley - Baracus / IGO JV	16	0
	E04/2480	West Kimberley Regional - IGO JV	20	0

Interest in mining tenements acquired or increased	CW-46 through CW-215	Copper Wolf Project, Yavapai Co, Arizona (Federal Lode Mining Claims)	0	100
	MEP 008-124215	Copper Wolf Project (Section 29 T8NR1W G&SR Meridian)	0	100

*\* changes occurred between end of the Quarter and issuing this report*

	E04/2451	West Kimberley - Baracus / IGO JV	16	16
	E04/2060	West Kimberley Regional - IGO JV	20	20
	E04/2407	West Kimberley Regional - IGO JV	20	20
	E04/2408	West Kimberley Regional - IGO JV	20	20
	E04/2411	West Kimberley Regional - IGO JV	20	20
	E04/2527	West Kimberley Regional - IGO JV	20	20
	E04/2530	West Kimberley Regional - IGO JV	20	20
	E04/2536	West Kimberley Regional - IGO JV	20	20
	E04/2549	West Kimberley Regional - IGO JV	20	20
	E04/2550	West Kimberley Regional - IGO JV	20	20
	E04/2578	West Kimberley Regional - IGO JV	20	20
	E04/2579	West Kimberley Regional - IGO JV	20	20
	E04/2580	West Kimberley Regional - IGO JV	20	20
	E04/2581	West Kimberley Regional - IGO JV	20	20
	E04/2584	West Kimberley Regional - IGO JV	20	20
	E04/2585	West Kimberley Regional - IGO JV	20	20
	E04/2609	West Kimberley Regional - IGO JV	20	20
	E04/2611	West Kimberley Regional - IGO JV	20	20
	E04/2612	West Kimberley Regional - IGO JV	20	20
	E04/2613	West Kimberley Regional - IGO JV	20	20
	E04/2614	West Kimberley Regional - IGO JV	20	20
	E04/2615	West Kimberley Regional - IGO JV	20	20
	E04/2617	West Kimberley Regional - IGO JV	20	20
	E04/2629	West Kimberley Regional - IGO JV	20	20
	E04/2630	West Kimberley Regional - IGO JV	20	20

	E04/2631	West Kimberley Regional - IGO JV	20	20
	E04/2648	West Kimberley Regional - IGO JV	20	20
	E04/2649	West Kimberley Regional - IGO JV	20	20
	E04/2650	West Kimberley Regional - IGO JV	20	20
	E04/2651	West Kimberley Regional - IGO JV	20	20
	E04/1972	West Kimberley – IGO/NWC/TT JV	16	16
	E04/2314	West Kimberley – IGO/NWC/TT JV	16	16
	E04/2423	West Kimberley – IGO/NWC/TT JV	20	20
	E28/1959	Fraser Range - IGO JV	10	10
	E28/2201	Fraser Range - IGO JV	10	10
	E09/2427	Narryer Project	100	100
	E09/2428	Narryer Project	100	100
	E09/2429	Narryer Project	100	100
	E09/2922	Narryer Project	100	100
	E09/1985	Graphite Bull Project	100	100
	LA09/102	Graphite Bull Project	100	100
	LA09/103	Graphite Bull Project	100	100
	EL80/5545	Lateron	100	100
	EL80/5579	Centurion Project	100	100
	MEP 008-121028	Copper Wolf Project (Section 16 T8NR1W G&SR Meridian)	100	100
	MEP 008-123390	Copper Wolf Project (Section 9 T8NR1W G&SR Meridian)	100	100
	MEP 008-124215	Copper Wolf Project (Section 29 T8NR1W G&SR Meridian)	100	100
	SM-01 through SM-54	Copper Wolf Project, Yavapai Co, Arizona (Federal Lode Mining Claims)	100	100
	CW-01 through CW-215	Copper Wolf Project, Yavapai Co, Arizona (Federal Lode Mining Claims)	100	100
	ELA45/6228	Royale Project	100	100
	ELA45/6229	Royale Project	100	100
	ELA45/6230	Royale Project	100	100
	ELA45/6231	Royale Project	100	100
	ELA45/6232	Royale Project	100	100
	ELA45/6233	Shogun Project	100	100
	ELA45/6234	Shogun Project	100	100

**Abbreviations and Definitions used in Tenement Schedule:**

E = Exploration Licence (WA), ELA = Exploration Licence Application (WA), LA – Miscellaneous License Application (WA),  
 MEP = Mineral Exploration Permit (Arizona)

## Appendix 5B

### Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Buxton Resources Limited

ABN

86 125 049 550

Quarter ended ("current quarter")

30 September 2023

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
<b>1.</b>	<b>Cash flows from operating activities</b>		
1.1	Receipts from customers	398	398
1.2	Payments for		
	(a) exploration & evaluation	(1,779)	(1,779)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(227)	(227)
	(e) administration and corporate costs	(201)	(201)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	12	12
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other - GST	(15)	(15)
<b>1.9</b>	<b>Net cash provided by/(used in) operating activities</b>	<b>(1,812)</b>	<b>(1,812)</b>
<b>2.</b>	<b>Cash flows from investing activities</b>		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	(3)	(3)
	(d) exploration & evaluation	-	-
	(e) investments	-	-
	(f) other non-current assets	-	-



<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (3 months) \$A'000</b>
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements interests	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
<b>2.6</b>	<b>Net cash provided by/(used in) investing activities</b>	<b>(3)</b>	<b>(3)</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other	-	-
<b>3.10</b>	<b>Net cash from financing activities</b>	<b>-</b>	<b>-</b>

<b>4.</b>	<b>Net increase/(decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	4,145	4,145
4.2	Net cash provided by/(used in) operating activities (item 1.9 above)	(1,812)	(1,812)
4.3	Net cash provided by/(used in) investing activities (item 2.6 above)	(3)	(3)
4.4	Net cash from financing activities (item 3.10 above)	-	-

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (3 months) \$A'000</b>
4.5	Effect of movement in exchange rates on cash held	19	19
<b>444.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>2,349</b>	<b>2,349</b>

<b>5.</b>	<b>Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1	Bank balances	2,249	4,008
5.2	Call deposits	-	-
5.3	Term deposits	128	128
5.4	Credit card	(28)	9
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>2,349</b>	<b>4,145</b>

<b>6.</b>	<b>Payments to related parties of the entity and their associates</b>	<b>Current quarter \$A'000</b>
6.1	Aggregate amount of payments to related parties and their associates included in item 1	103
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
<i>Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.</i>		

<b>7.</b>	<b>Financing facilities</b> <i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	<b>Total financing facilities</b>	-	-
7.5	<b>Unused financing facilities available at quarter end</b>		-
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

<b>8.</b>	<b>Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1	Net cash from operating activities (item 1.9)	(1,812)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3	Total relevant net cash inflow (item 8.1 + item 8.2)	(1,812)
8.4	Cash and cash equivalents at quarter end (item 4.6)	2,349
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	2,349
8.7	<b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	1.30
	<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>	
8.8	If item 8.7 is less than 2 quarters, please provide answers to the following questions:	
8.8.1	Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
	Answer: No - Operating cash outflow for the September quarter was unusually high due to the drilling program at Copper Wolf and will be financed by the contributions of its joint venture partner, IGO Limited.	
8.8.2	Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
	Answer: We expect to lodge a cash call to IGO to reimburse Buxton for expenses relating to managing the exploration programs at Copper Wolf. Directors and management continually monitor capital requirements and if required will raise capital through the issue of shares or via sale of project equity interests if warranted, to fund operations. The Company has a strong established record.	

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: Yes. Future operating cashflows will be planned and controlled to ensure adequate minimum cash reserves are maintained at all times. Due to lower forecast Quarterly costs Buxton therefore expects to have more than 2 quarters of cash available and to be able to continue its operations and to meet its business objectives.

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

## Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

31 October 2023

Date: .....

The Board

Authorised by: .....  
(Name of body or officer authorising release – see note 4)

## Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.