

ASX Release 28th July 2023

QUARTERLY ACTIVITIES REPORT for the period ending 30 June 2023

Graphite Bull Project (100% BUX)

- Assays from the February 2023 scout RC drilling program returned thick, high-grade and shallow graphite intersections including
 - o GB001RC 33m @ 18.7% TGC
 - o GB003RC 18m @ 16.2% TGC
 - o GB004RC 32m @ 17.7% TGC and 5m @ 24.8% TGC
 - o GB005RC 5m @ 24.5% TGC
- Dual-stream electrochemical testwork to test multiple process options commenced with ProGraphite and Dorfner Anzaplan GmbH
- Flotation testwork returned 92.1% recovery into 96.7% TGC concentrate

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

 Ongoing drilling activities intersect alteration and mineralisation consistent with a Laramide Porphyry Cu-Mo system

Narryer Project (100% BUX)

- PoW approval for drilling activities to follow-up MLEM targets
- Heritage Protection Agreement executed with the Wajarri Yamaji Aboriginal Corporation
- IGO's Option to earn a 51% interest in the Narryer Project expired 17th June.

Corporate

- Cash balance (30 June 2023) of approximately \$4.145 million
- Oversubscribed SPP raises \$2.5 million

Buxton Resources Limited (ASX: BUX or "Buxton") is pleased to release the Quarterly activities report and Appendix 5B for the period ended 30 June 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, assay results from the February 2023 up scout RC drilling program were reported. The assays confirmed that numerous zones of thick and high-grade mineralisation have been discovered, including a newly identified zone.

High-grade graphite intersections over considerable widths include:

- GB001RC 33m @ 18.7% TGC from 11m
- GB003RC 18m @ 16.2% TGC from 145m
- GB004RC 5m @ 24.8% TGC from 20m
- GB004RC 32m @ 17.7% TGC from 49m
- GB005RC 5m @ 24.5% TGC from 123m

See <u>ASX announcement 19 April 2023</u> for further details.

Buxton has a dual-stream approach to electrochemical testwork aimed at evaluating multiple process options for the Graphite Bull concentrate material.

Preparation of Bulk Sample #1, managed locally by Battery Limits Pty Ltd, begun in March (see <u>ASX Announcement 13 March 2023</u>) and the concentrate was dispatched to ProGraphite in Germany In April. Micronising, spheronising and purification results are currently expected in August, with electrochemical testwork complete by early September.

Testwork on Bulk Sample #2 begun in April 2023 by Independent Metallurgical Operations (IMO), also in Perth. The drillcore tested was similar to Bulk Sample #1 in head grade and depth down-hole, but is mostly from different drillholes approximately 100 metres west along strike from Bulk #1.

Rock types and grain sizes differ from Bulk #1; this second bulk sample has de-risked the impacts of some variability within the deposit and is providing more concentrate



for additional downstream testwork. Comminution testwork is also being conducted by IMO. Flotation results were outstanding with Bulk #2 with an overall TGC recovery of 92.09% achieved into a concentrate grading 96.72% TGC.

Buxton has been fortunate to secure the services of Dorfner Anzaplan GmbH in Germany to conduct further detailed downstream testwork on the Bulk #2 concentrate, including coating of PSG, from August. Dorfner is a leading European specialty minerals producer with more than a century of experience in industrial minerals processing. Anzaplan provides the group's analytical and engineering services to customers globally for PFS, DFS, FEED, EPCM and operational requirements.

Buxton is delighted to have access to both ProGraphite and AnzaPlan's global graphite expertise in this time of very high demand and relatively limited capacity outside China.

See ASX announcement 1 May 2023 and 17 May 2023 for further details.

A flora and fauna field survey was completed by Ecologica Environment over Buxton's entire tenure holding at Graphite Bull during late April 2023. Ecologia's final report indicates none of the plant communities within the survey area are considered to be significant. Similarly for vertebrate fauna, no species of significance were recorded, and all habitat types identified are considered common on a local and regional scale.

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

Buxton's Copper Wolf project consists of Lode Mining Claims and Mineral Exploration Permits covering approximately 12.5 km² 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 4th 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 undertook the first drilling campaign in the Project in over 30 years. Buxton terminated CPW0001DD at 611.67m above the target depth of 1,100m due to technical reasons (see <u>ASX Announcement 5th June 2023</u>). Drilling a second hole CPW0002DD was deemed prudent given time and costs estimated to re-enter and wedge from hole CPW0001DD. This second hole was collared adjacent to the first, and drilling is ongoing as of the date of this Report (<u>see ASX Announcement 24th July 2023</u>).

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 three Narryer Project ELs covering > 1800 km2 were granted early in the Quarter.

On the 22nd August 2022, Buxton announced that, pursuant to shareholder approval, Buxton and IGO will enter into a Subscription Agreement and Option over the Narryer Project. By the Earn-In and Joint Venture Agreement (upon exercise of an initial option), IGO may earn a 51% interest in the Narryer tenements by spending \$3,000,000 within a 3-year period. Upon IGO incurring the \$3,000,000 of earn-in expenditure and electing to exercise the earn-in, Buxton and IGO will form an unincorporated Joint Venture with the interests being IGO 51% and Buxton 49%. This transaction was approved by shareholder vote at a General Meeting held on 4th October 2022. After completing IGO's Initial Survey Program on 17th March 2023, the Option subsequently expired 17th June 2023 after which date the licenses were no longer encumbered by the Subscription Agreement.

During the Quarter, DMIRS approved a Programme of Work which will allow the drill testing of the MLEM anomalies detected in IGO's ground moving loop survey. A Heritage Protection Agreement (HPA) has been executed with the Wajarri Yamaji Aboriginal Corporation (WYAC).



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 continued their review of results from the 2022 field season and planning for the 2023 field season.

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 completed petrological analysis, assaying for Rare Earth Elements (REE) drilling conducted on E28/2201, and rehabilitation of drill access pads and tracks on E28/2201.

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 km2 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 km². No work was conducted during the Quarter.

Corporate

The Company's Quarterly Cashflow Report (Appendix 5B) follows this activities report. The Company had \$4.145 million in cash as 30 June 2023. Exploration Expenditure for the Quarter was \$1,563k with most of this expenditure being associated with field work in support of the Copper Wolf, and Graphite Bull Projects, 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 \$87k comprising directors fees, salaries and superannuation. Corporate and other administration expenditure was \$180k 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.

Share Purchase Plan

Buxton made an offer to eligible shareholders to participate in a Share Purchase Plan (SPP). The SPP offered eligible shareholders the opportunity to purchase up to \$30,000 of BUX ordinary shares (New Shares) at \$0.16 (16 cents). The SPP closed on 2 May 2023 and the Company received total SPP application funds of \$2,791,000 exceeding the targeted amount of \$2,500,000. The Company issued and allotted 15,625,000 new SPP shares on 9 May 2023.

This announcement is authorised by the Board.

For further information, please contact:

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Appendix 1: Changes in interests in mining tenements - Buxton Resources Ltd 1/04/23 – 30/06/23

	Tenement	Location / Project	% at beginning of Quarter	% at end of Quarter
Interests in mining enements relinquished, reduced or lapsed				
Interest in mining tenements acquired or increased				
* cha		between end of the Quarter and issuing	· ·	
!	E04/2451	West Kimberley - Baracus / IGO JV	16	16
!	E04/2462	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
!	E04/2480	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
!	E04/2610	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
	1	, 3		

E04/2617

E04/2629

West Kimberley Regional - IGO JV

West Kimberley Regional - IGO JV

20

20

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
EL09/2427	Narryer Project	100	100
EL09/2428	Narryer Project	100	100
EL09/2429	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-	Copper Wolf Project	100	100
121028	(Section 16 T8NR1W G&SR Meridian)	100	
MEP 008- 123390	Copper Wolf Project (Section 9 T8NR1W G&SR Meridian)	100	100
SM-01	Copper Wolf Project, Yavapai Co,	100	100
through	Arizona (Federal Lode Mining		
SM-54	Claims)		
CW-01	Copper Wolf Project, Yavapai Co,	100	100
through CW-44	Arizona (Federal Lode Mining Claims)		
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
	Tanamant Cahadulas		

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 Quarter ended ("current quarter")	
86 125 049 550	30 June 2023

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	93	1,722
1.2	Payments for		
	(a) exploration & evaluation	(1,563)	(3,213)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(271)	(818)
	(e) administration and corporate costs	(180)	(500)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	14	21
1.5	Interest and other costs of finance paid	(1)	(2)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other - GST	(4)	12
1.9	Net cash provided by/(used in) operating activities	(1,912)	(2,778)

	Cash flows from investing activities	
2.1	Payments to acquire or for:	
	(a) entities	-
	(b) tenements	-
	(c) property, plant and equipment	-
	(d) exploration & evaluation	-
	(e) investments	-
	(f) other non-current assets	-

ASX Listing Rules Appendix 5B (17/07/20)

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements interests	-	1,350
	(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)	-	-
2.6	Net cash provided by/(used in) investing activities	-	1,261

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	2,500	3,585
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	(24)	(29)
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	-	-
3.10	Net cash from financing activities	2,476	3,556

4.	Net increase/(decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	3,575	2,100
4.2	Net cash provided by/(used in) operating activities (item 1.9 above)	(1,912)	(2,778)
4.3	Net cash provided by/(used in) investing activities (item 2.6 above)	-	1,261
4.4	Net cash from financing activities (item 3.10 above)	2,476	3,556

Cons	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	6	6
444. 6	Cash and cash equivalents at end of period	4,145	4,145

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	4,008	3,457
5.2	Call deposits	-	-
5.3	Term deposits	128	128
5.4	Credit card	9	(10)
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	4,145	3,575

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	87
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
Note: i	f any amounts are shown in items 6.1 or 6.2, your quarterly activity report must inclu	ide a description of, and an

explanation for, such payments.

7.	Financing facilities 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.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	-	-
7.5	Unused financing facilities available at qu	uarter end	-
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.		itional financing

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from operating activities (item 1.9)	(1,912)
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)	(1,912)
8.4	Cash and cash equivalents at quarter end (item 4.6)	4,145
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	4,145
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	2.17

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.

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: n/a

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: n/a

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: n/a

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

- 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.

	28 July 2023
Date:	
	The board
Authorised by:	(Name of body or officer authorising release – see note 4)
	(Name of body of officer additionally release See field 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.
- 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.