

ASX Release 27 April 2021

#### Quarterly Activities Report for period ending 31 March 2021

Buxton Resources Limited (ASX: BUX or "Buxton") is pleased to release the quarterly activities report and Appendix 5B for the period ended 31 March 2021 (the Quarter).

#### West Kimberley JV (BUX/IGO)

- Preparations for the 2021 field season continued
- All activities 100% funded by IGO

### Goldmember Projects (100% BUX)

 RAB drilling program to test for bedrock gold source at the Jeffrey soil anomaly

#### New Projects (100% BUX)

Two applications for Exploration licenses were lodged during the quarter

#### Corporate

• Cash balance (31 March 2021) of approximately \$3.02 million

## West Kimberley Project (BUX/IGO JV)

The West Kimberley is targeting Nova-style magmatic Ni-Cu sulphide mineralisation in Proterozoic belts of the West and East Kimberley. IGO's cumulative expenditure moved them to 80% interest in the West Kimberley Regional portfolio during the Quarter.

IGO's work program during the Quarter included:

- Final assays received for diamond drilling undertaken at Quick Shears in Q2, no significant results were received as confirmed visually by logging
- Interpretation of newly received regional aeromagnetic-radiometric survey data
- Target generation

IGO's work program for the next Quarter includes:

- Planning of heritage surveys
- Geological reconnaissance over EM targets delineated from the SPECTREM airborne EM survey completed in 2019
- Planning of ground EM surveys over high priority targets delineated from target generation



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

The Narryer Project is targeting magmatic Ni-Cu-PGE sulphide mineralisation in a tectonic similar setting to the recent Julimar discovery along the Yilgarn Craton margin. During the Quarter Buxton continued the technical assessment of historical data and review of data collected during reconnaissance visits to the project area in 2020.

#### Lateron Project (BUX 100%)

The Lateron Project consists of a single application for Exploration License E80/5545 approximately 10 km East of Billiluna and 150 km South of Halls Creek in Western Australia. This application covers magnetic anomalies related to sulphide bearing mafic / ultramafic intrusions intersected during historic exploration in the early 1980s.

During the current quarter, Buxton undertook desktop compilation and local stakeholder engagement with a view to conducting a field reconnaissance in the following Quarter.

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

On 23 February 2021, Buxton advised the market that a RAB drilling program has commenced to follow up gold anomalism defined by Buxton's soil sampling programs at the 100% owned Goldmember Project, WA. Geological and geochemical results from the RAB program indicate that enhanced regolith development localised by north-northwest trending fault zones is the most likely cause of the elevated gold levels in soils at the Jeffery Prospect.

# New Projects Centurion Project (BUX 100%)

During the Quarter Buxton lodged an application for Exploration License E80/5545 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 magnetic anomaly exceeding 1500 nanoteslas in amplitude and 3500 m by 5000 m in extent. The GSWA have recently released data from a 2017 Falcon airborne gravity gradiometer survey which reveals a similarly dipolar gravity high in a slightly offset position to the magnetic feature. A similar relationship between magnetic and gravity anomalies is characteristic of several Iron Oxide Copper Gold deposits including Olympic Dam and Prominent Hill.

There is a substantial amount of 2D seismic surveying in the area, however these data are likely to be of poor quality. The only substantive previous mineral exploration data over the Centurion anomaly was collected by CRA in 1991-1992 as part of a wider exploration program targeting diamondiferous kimberlites. CRA drilled a single historic percussion / diamond drill hole (VE001) to test the magnetic anomaly. VE001 failed to penetrate the Canning Basin cover sequence and was abandoned in Grant Formation sandstones at 432.30 m when the hole was found to



have collapsed overnight during single shift operations. The diamond core from VE001 is not preserved in the GSWA core library.

As such, there is very little information about the basement rocks in this area. The drill logs do note that conglomeratic clasts and lithic fragments intersected toward the end of this hole include chloritic metasediments, mafic and felsic intrusive igneous lithologies, and felsic boulder conglomerate clasts between 357.4 – 360 m were observed to exhibit propylitic chlorite alteration. Some clasts were noted as being strongly pyritic. However, CRA only undertook assaying on 2-meter composites which strongly diluted the geochemical signature from these clasts.

Buxton intends to undertake analysis of magnetic, gravity and seismic datasets to support a cofunded drilling grant proposal.

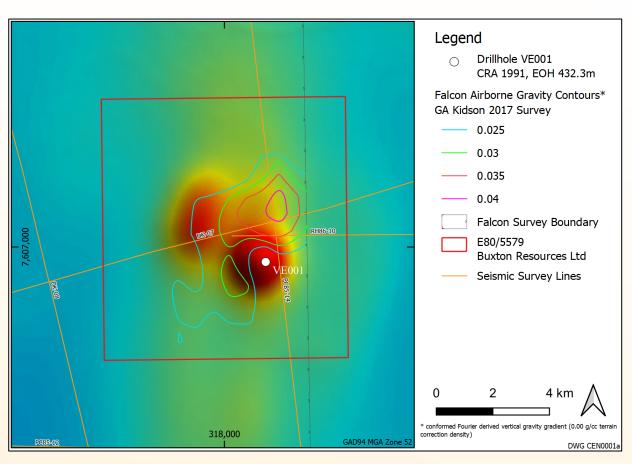


Figure 1: Centurion Project summary geophysical target map showing CRA drillhole VE001, contoured 1VD airborne gravity gradiometer data from the recently released Kidson 2017 survey on GSWA's open-file magnetic imagery. Note that the airborne gravity survey only partially covers the Exploration License.

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

During the Quarter Buxton lodged an application for Exploration License E45/5892 located approximately 170 km southeast of Telfer in Western Australia on unclaimed crown land adjacent to the Canning Stock Route.

The Shogun Project is location within the Tabletop Terrane of the Rudall Province and the Paterson Orogen. The Rudall Province forms a northwest trending belt of deformed and



metamorphosed Proterozoic sedimentary and igneous rocks which are located along the West Australian Craton margin. Unconsolidated sediments blanket virtually the entire Tabletop Terrane, however regional airborne magnetic and electromagnetic data indicate that this cover sequence is relatively thin and the area is therefore accessible for modern mineral exploration.

Previous exploration in this area has reported indications of prospectivity for diamondiferous kimberlites, and the nearby shear-hosted Cu–Ag–Au–Pt–Pd mineralization at the Copper Hills prospects has experienced the most exploration activity.

Buxton will undertake initial desktop compilation of this area during the coming quarter with a view to assessing prospectivity for economic mineralisation related to the Paterson Orogen (e.g. Cu-Au deposits similar to Telfer and Havieron) and Paleoproterozoic to Mesoproterozoic plate margin mineral systems.

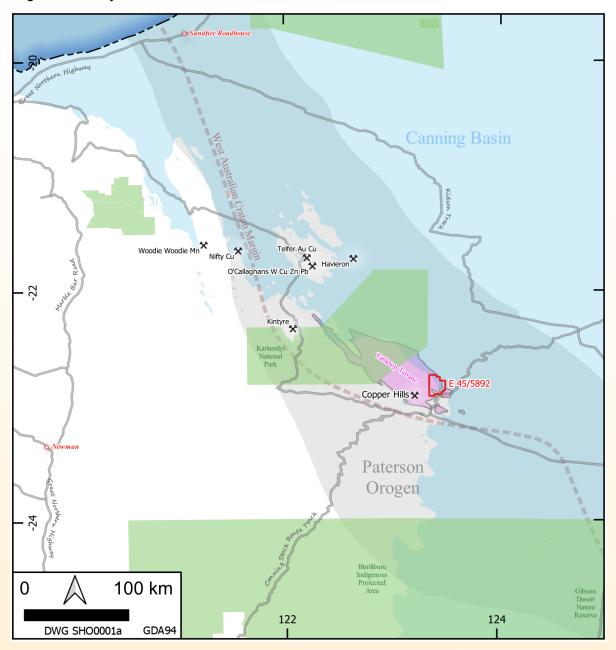


Figure 2: Shogun Project location map showing relationship with other major mineral deposits and the extent of the Paterson Orogen (GSWA, 2017), and the inferred location of the West Australian Craton margin (GA, 2018).



#### Corporate

The Company's Quarterly Cashflow Report (Appendix 5B) follows this activities report. The Company had \$3.02 million in cash as 31 March 2021.

Exploration Expenditure for the quarter was \$89k with most of this expenditure being associated with drilling at Goldmember, project generation and desktop assessment activities in support of the Narryer and Lateron Projects, along with the tenement applications at the Centurion and Shogun Projects, and other ongoing project assessment.

The aggregate amount of payments to related parties and their associates included in the current quarter cash flows from operating activities were approximately \$74k comprising directors fees, salaries and superannuation.

Corporate and other administration expenditure was \$71k 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 restraint.

This announcement is authorised by the Board.

#### For further information please contact:

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#### **Competent Persons**

The information in this report that relates to Exploration Results is based on information compiled by Mr. Eamon Hannon Fellow of the Australian Institute of Geoscientists. Mr. Hannon is a full-time employees of Buxton. Mr. Hannon has sufficient experience which is relevant to the activity being undertaken to qualify as a "Competent Person", as defined in the 2012 edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Hannon consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.



# Appendix 1: Changes in interests in mining tenements - Buxton Resources Ltd 01/01/21 - 31/03/21

	Tenement	Location	% at beginning of quarter	% at end of quarter
	ELA28/2980	Goldmember Project	100	0
	ELA28/2979	Goldmember Project	100	0
Interests in mining	ELA15/1767	Goldmember Project	100	0
tenements	ELA15/1766	Goldmember Project	100	0
relinquished, reduced	ELA28/3095	Goldmember Project	0	0
or lapsed	ELA28/3094	Goldmember Project	0	0
	ELA28/2992	Goldmember Project	100	0
	ELA28/2983	Goldmember Project	100	0
	ELA15/1810	Goldmember Project	0	0
	ELA15/1811	Goldmember Project	0	0
	ELA45/5892	Shogun Project	0	100
	ELA80/5579	Centurion Project	0	100
Interest in mining				
tenements acquired or increased				
or increased				
	E04/1533	Merlin - IGO JV	49	49
	E04/2026	Merlin - IGO JV	49	49
	E04/2142	Merlin - IGO JV	49	49
	E04/2451	West Kimberley - Baracus / IGO JV	0	0 (earning 16%)
	E04/2462	West Kimberley - Baracus / IGO JV	0	0 (earning 16%)
	E04/2060	West Kimberley Regional - IGO JV	100	20
	E04/2407	West Kimberley Regional - IGO JV	100	20
	E04/2408	West Kimberley Regional - IGO JV	100	20
	E04/2411	West Kimberley Regional - IGO JV	100	20
	,	West Killiberies Regional 1003V		
	E04/2466	West Kimberley Regional - IGO JV	100	20
	•	<u> </u>		
	E04/2466	West Kimberley Regional - IGO JV	100	20
	E04/2466 E04/2467	West Kimberley Regional - IGO JV West Kimberley Regional - IGO JV	100 100	20 20
	E04/2466 E04/2467 E04/2468	West Kimberley Regional - IGO JV West Kimberley Regional - IGO JV West Kimberley Regional - IGO JV	100 100 100	20 20 20
	E04/2466 E04/2467 E04/2468 E04/2469	West Kimberley Regional - IGO JV	100 100 100 100	20 20 20 20
	E04/2466 E04/2467 E04/2468 E04/2469 E04/2480	West Kimberley Regional - IGO JV	100 100 100 100 100	20 20 20 20 20 20
	E04/2466 E04/2467 E04/2468 E04/2469 E04/2480 E04/2527	West Kimberley Regional - IGO JV	100 100 100 100 100 100	20 20 20 20 20 20 20
	E04/2466 E04/2467 E04/2468 E04/2469 E04/2480 E04/2527 E04/2530	West Kimberley Regional - IGO JV	100 100 100 100 100 100 100	20 20 20 20 20 20 20 20
	E04/2466 E04/2467 E04/2468 E04/2469 E04/2480 E04/2527 E04/2530 E04/2536	West Kimberley Regional - IGO JV	100 100 100 100 100 100 100	20 20 20 20 20 20 20 20 20
	E04/2466 E04/2467 E04/2468 E04/2469 E04/2480 E04/2527 E04/2530 E04/2536 E04/2549	West Kimberley Regional - IGO JV	100 100 100 100 100 100 100 100	20 20 20 20 20 20 20 20 20



		μ	
E04/2580	West Kimberley Regional - IGO JV	100	20
E04/2581	West Kimberley Regional - IGO JV	100	20
E04/2583	West Kimberley Regional - IGO JV	100	20
E04/2584	West Kimberley Regional - IGO JV	100	20
E04/2585	West Kimberley Regional - IGO JV	100	20
E04/2609	West Kimberley Regional - IGO JV	100	20
E04/2610	West Kimberley Regional - IGO JV	100	20
E04/2611	West Kimberley Regional - IGO JV	100	20
E04/2612	West Kimberley Regional - IGO JV	100	20
E04/2613	West Kimberley Regional - IGO JV	100	20
E04/2614	West Kimberley Regional - IGO JV	100	20
E04/2615	West Kimberley Regional - IGO JV	100	20
E04/2617	West Kimberley Regional - IGO JV	100	20
E04/2629	West Kimberley Regional - IGO JV	100	20
E04/2630	West Kimberley Regional - IGO JV	100	20
E04/2631	West Kimberley Regional - IGO JV	100	20
E04/2636	West Kimberley Regional - IGO JV	100	20
E04/2648	West Kimberley Regional - IGO JV	100	20
E04/2649	West Kimberley Regional - IGO JV	100	20
E04/2650	West Kimberley Regional - IGO JV	100	20
E04/2651	West Kimberley Regional - IGO JV	100	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
E15/1719	Goldmember Project	100	100
E28/2922	Goldmember Project	100	100
E09/2427	Narryer Project	100	100
E09/2428	Narryer Project	100	100
E09/2429	Narryer Project	100	100
E28/2620	Woodline Project	100	100
E09/1985	Yalbra Project	100	100
SM-01 through SM-054 inclusive	Yavapai Co, Arizona (Federal Lode Mining Claims)	0	100

Abbreviations and Definitions used in Tenement Schedule:

E Exploration Licence ELA Exploration Licence Application F P Prospecting Licence