

## Quarterly Activities Report for period ending 30 September 2020

Buxton Resources Limited (ASX: BUX or “Buxton”) is pleased to release the quarterly activities report and Appendix 5B for the period ended 30 September 2020 (the Quarter).

### Goldmember Project (100% BUX)

- Large new Gold-In-Soils Anomaly Defined at Buxton’s 100% owned Goldmember Project
- First pass soils program by BUX has defined a large robust new gold anomaly over 5 km<sup>2</sup> within a ~ 11km trend of regionally anomalous gold results within the Eastern Goldfields, WA
- New anomaly has never seen any previous drilling
- Substantial additional ground secured – total Project package amounts to 1,414 km<sup>2</sup>
- Buxton is actively assessing proposals to commercialise this opportunity

### West Kimberly JV (BUX/IGO)

- Diamond drilling at Merlin is complete
- Diamond drilling at Quick Shears is complete
- Total of 5 holes for 3762.6 metres of diamond drilling
- Regional datasets completed, currently being interpreted for target delineation for the 2021 field season
- 2020 field season completed
- All activities 100% funded by IGO

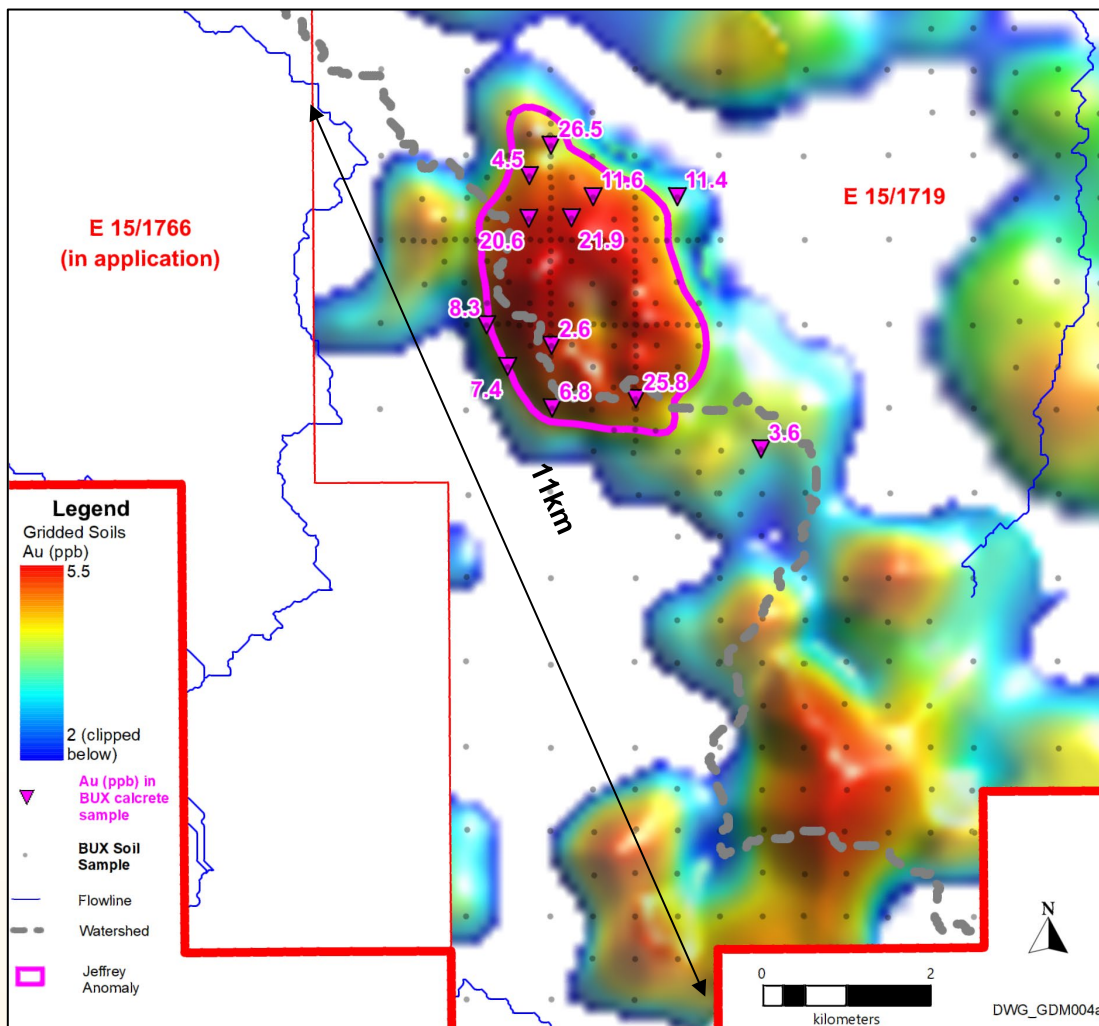
### New Projects

- Buxton has acquired three new applications in the Narryer Terrain, Western Australia covering in excess of 1800 km<sup>2</sup>
- Buxton continues to actively pursue copper opportunities in the USA

### Corporate

- Cash balance (30 September 2020) of approximately \$3.6 million

## Goldmember Project (100% BUX)

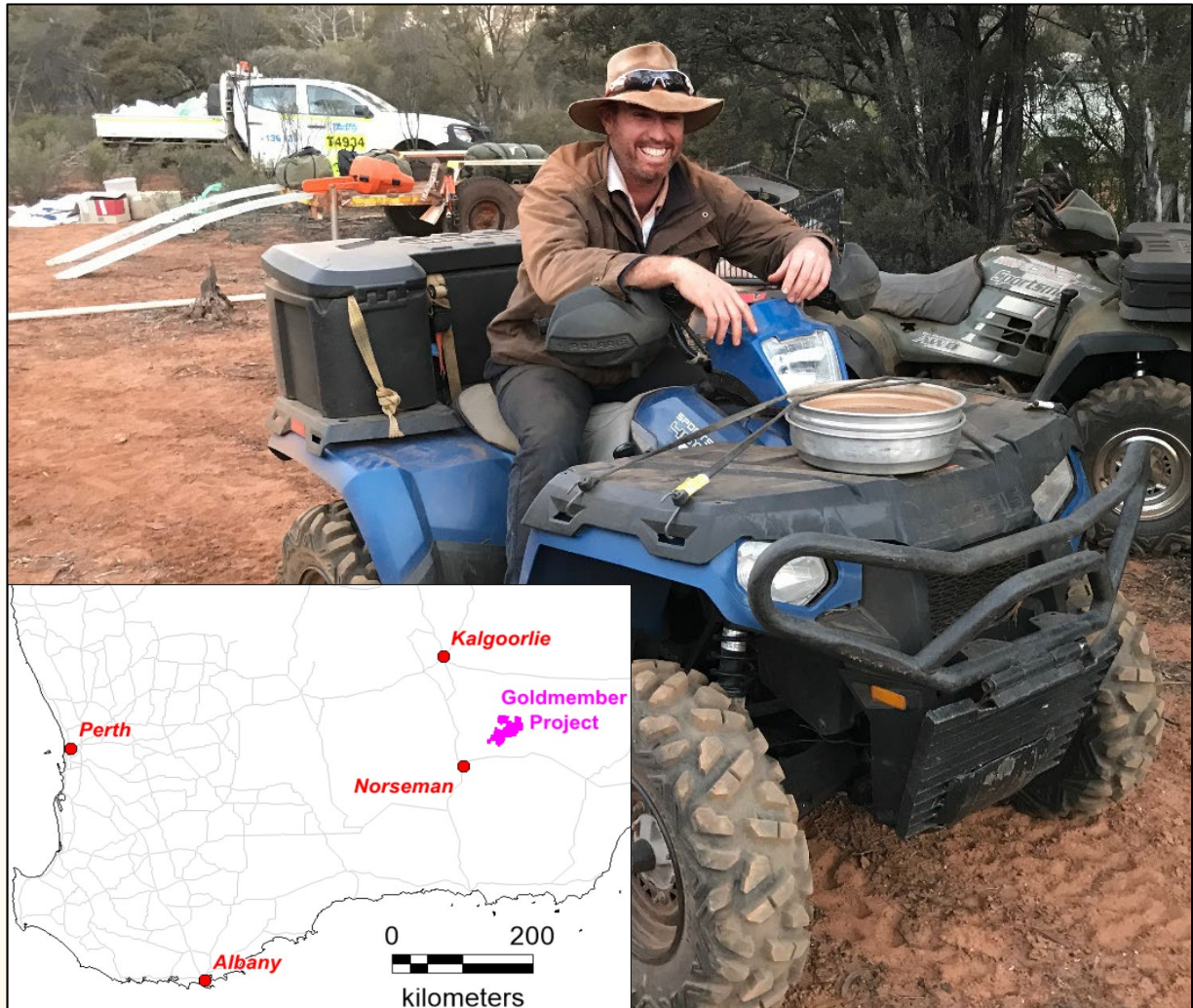


**Figure 1: Jeffrey gold anomaly (outline shown) with gridded gold in infill soils and calcrete sampling results**

Previously, Buxton updated the market that a newly discovered and undrill-tested 5km<sup>2</sup> gold in soil anomaly has been defined by soil sampling. The 100% BUX owned Goldmember Project is a 1,414 km<sup>2</sup> package of tenure located in the Eastern Goldfields district of Western Australia. The tenure package consists of two Exploration Licenses granted in January 2020 and six surrounding applications.

BUX has completed soil sampling on a 1km grid basis over the entirety of E15/1919 and E28/2922. This work identified several areas which were subsequently followed-up by infill soil sampling at 500m and 125m spacing. This work has resulted in the definition of a distinct soil gold anomaly named Jeffrey which is about 4km x 2km elongated to the north-northwest (Figure 1). Thirteen calcrete samples within and around the Jeffrey soil anomaly area were collected

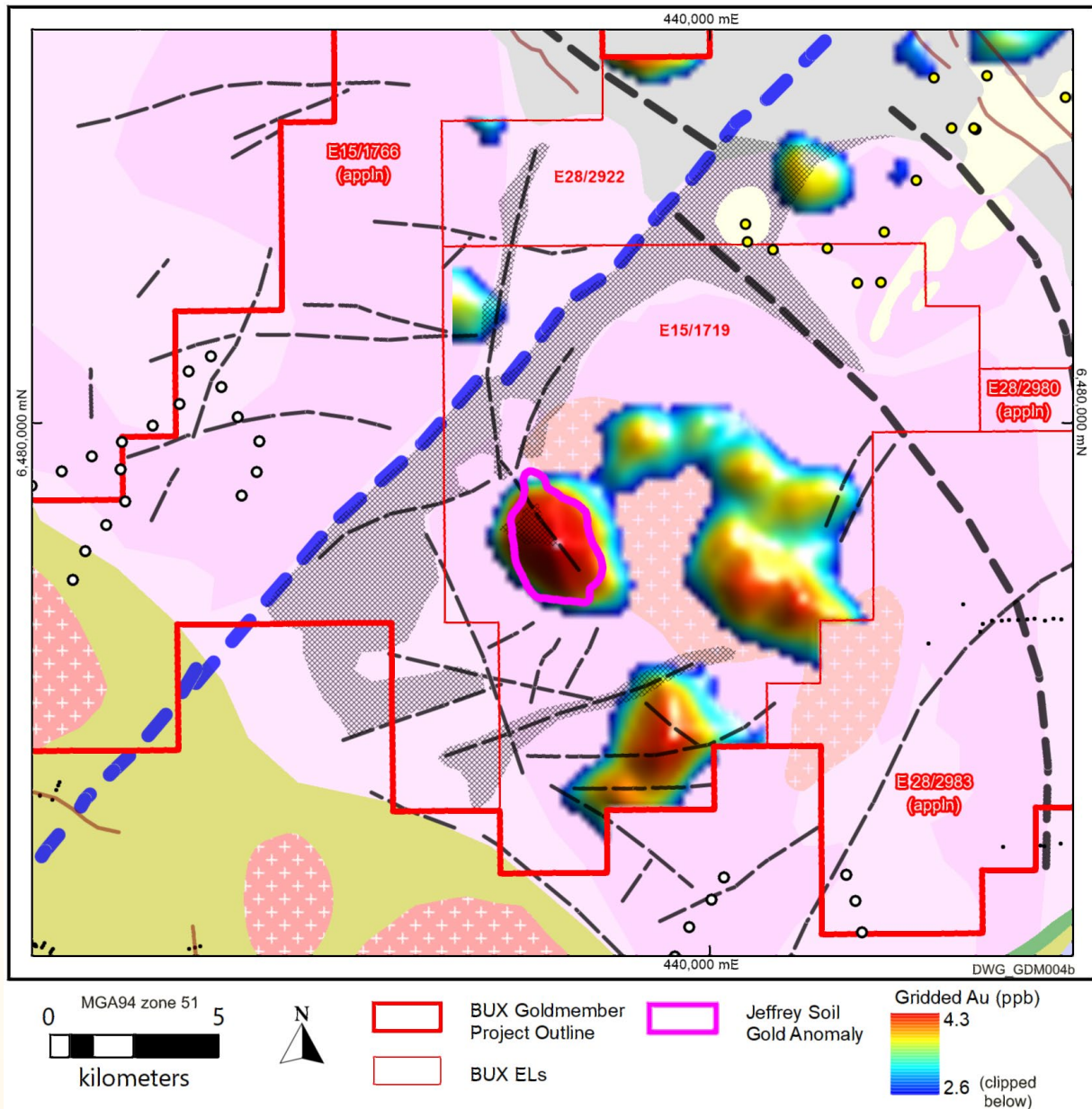
and selected for assaying as part of the infill program. Three calcrete samples within the Jeffrey soil anomaly area returned over 20 ppb Au with a maximum of 26.5 ppb Au. This result is highly encouraging as it provides evidence of a proximal bedrock source of the gold.



**Figure 2: BUX Soil Sampling at Goldmember**

Interpretation of magnetics (Figure 3) indicates that this soil anomaly lies within a demagnetized zone adjacent to a large circular feature (a relatively late Archean intrusion) and adjacent to several major structures, including the suture between the Kalgoorlie and Kurnalpi terranes, both of which host world class gold deposits. The Jeffrey anomaly also lies along a drainage divide / hinterland and away from the valley floor – a landscape setting where soil sampling is more likely to reflect proximal bedrock gold enrichment.

Buxton is presently assessing proposals to commercialise this new and exciting gold occurrence which is presently 100% owned by Buxton.



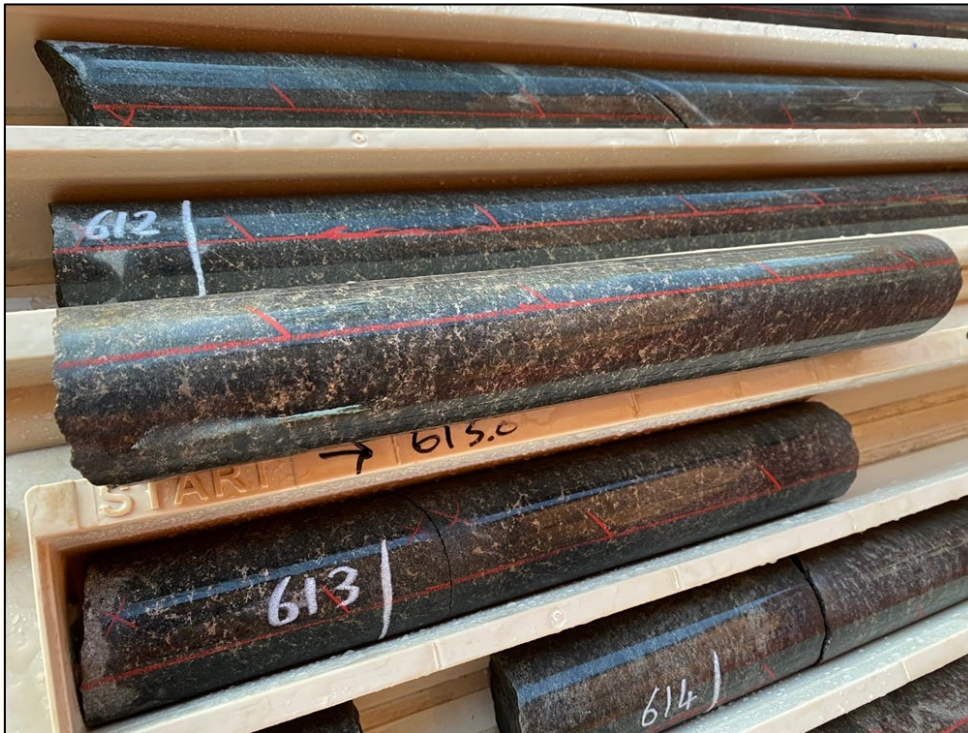
**Figure 3: BUX's geological interpretation of the Goldmember Project area with historical drilling and gridded anomalous soil sampling results. Refer to ASX Announcement 30<sup>th</sup> April 2020 for further information on the geological interpretation and BUX's soil sampling programs.**

## West Kimberly Project (BUX/IGO JV)

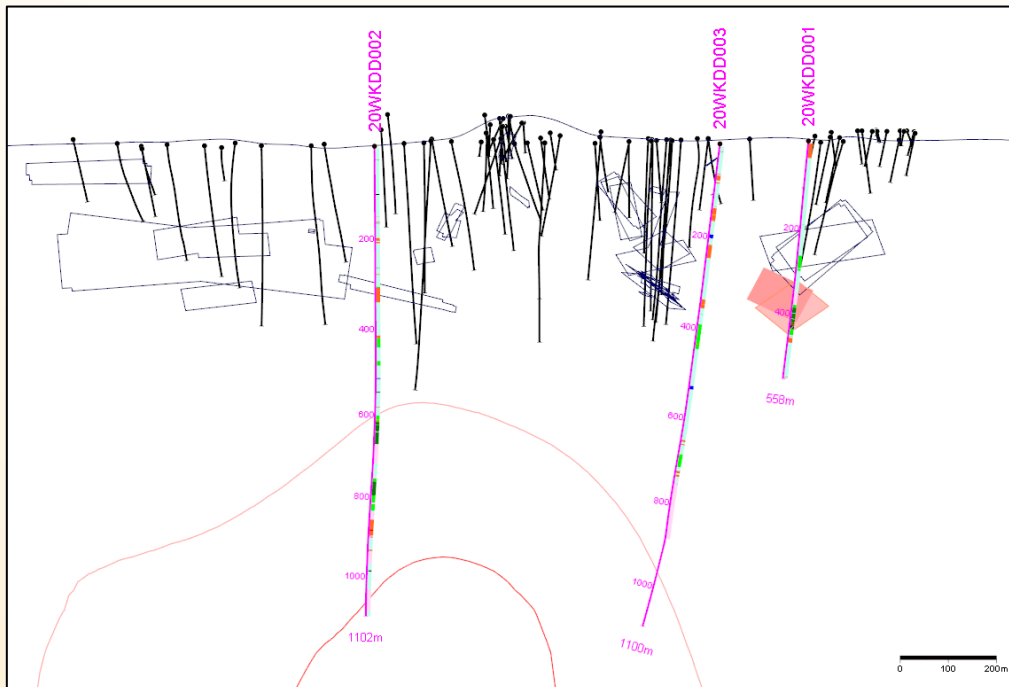
A total of 2,675 metres of diamond drilling across three holes has been completed to the 29<sup>th</sup> September 2020 (Figure 1, Figure 2). The program is managed and funded by IGO Ltd (IGO).

Drillhole 20WKDD002, an EIS co-funded hole, is a large ~450m step out down-dip of previous drilling completed by Buxton. The hole was designed to test a deep-seated gravity high anomaly, a weak Late Time SQUID EM conductor located down-dip of plates drilled previously by Buxton (Conductors A-B) and to test the down-dip extent of the prospective high-Cr/ultramafic Ruins sill and provide a DHEM platform. The upper 400m intersected foliated mafic intrusive unit and progressed through a package of turbidite meta-sediments and dioritic units.

A number of intervals of the prospective Ruins Dolerite unit were intersected between 400m and 830m hosting intermittent weak to moderate mineralisation. The best zone of sulphide mineralisation was between ~611.2m – 618.7m downhole consisting disseminated to moderately net-textured pyrrhotite-pentlandite-chalcopyrite (Figure 4).



**Figure 4: Disseminated and moderately net-textured sulphides hole 20WKDD0002 611.75 – 613.57m**



**Figure 5: Long section at Merlin looking ~N with historic drilling, gravity inversion (red lines) and EM plates, showing the 3 recent diamond drill holes (blue). As at the end of the Quarter, IGO had completed holes 20WKDD0001 (558m) & 20WKDD0002 (1102.1m) and drilling was ongoing in 20WKDD0003**

Drillhole collar locations and surveys are provided in the ASX announcement released on 13 October 2020. The IGO geologists' visual estimates of sulphide mineralogy, abundance and form are also provided in the ASX announcement released on 13 October 2020.



**Figure 6: Diamond drilling at Merlin 29th September 2020**

### **Subsequent Events**

On 29 October, Buxton updated the market that the 2020 field season in the West Kimberley has been completed. IGO has advised Buxton of the following updates:

- Two diamond drillholes have been completed at the Quick Shears prospect with no significant mineralisation intersected.
- In total, 3762.6m of diamond drilling has been undertaken across five locations, being three at Merlin (refer ASX announcement 2<sup>nd</sup> October 2020), and the two reported herein drilled at Quick Shears.

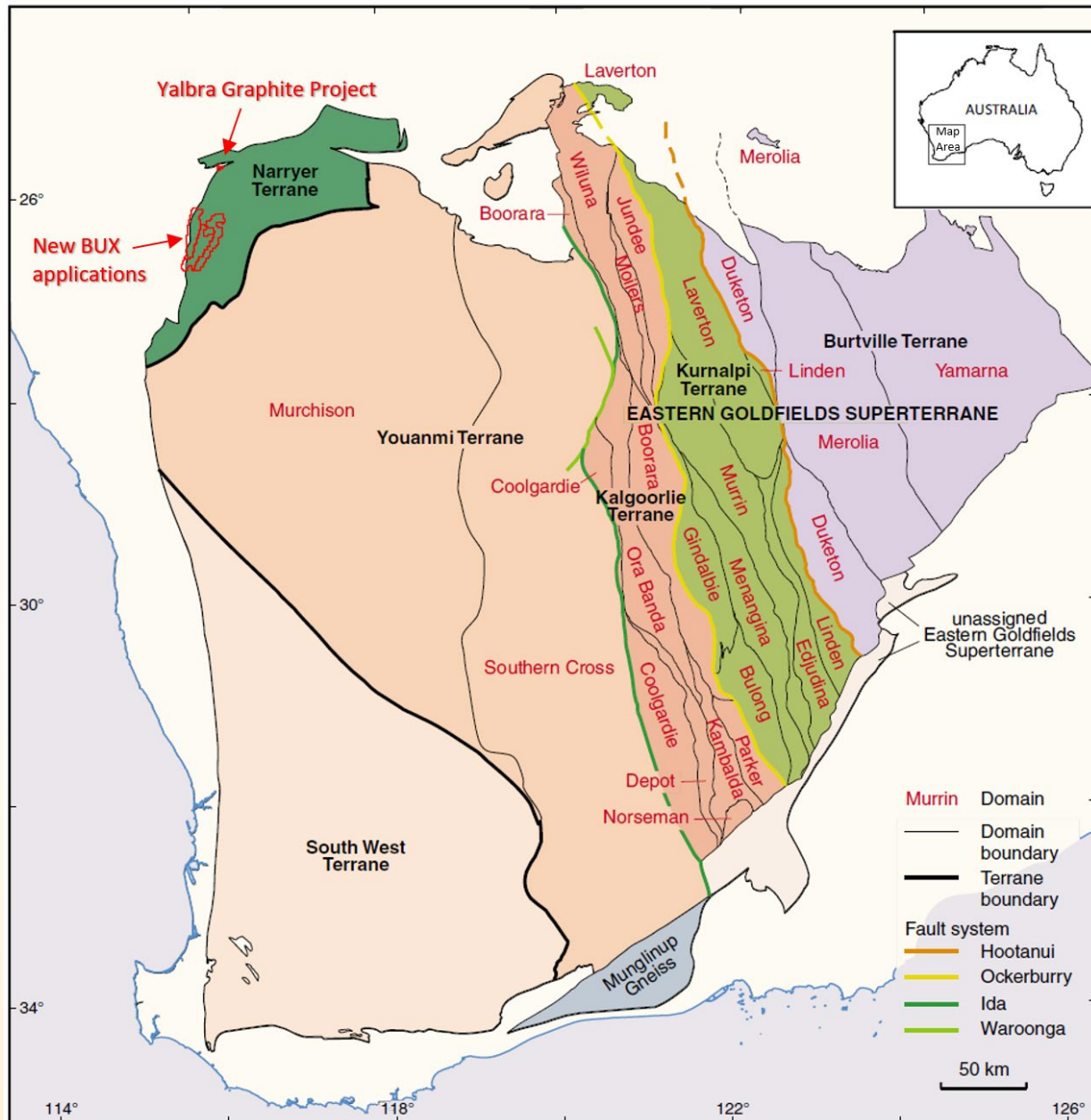
Further work undertaken during the field season by IGO has included:

- Completion of a detailed regional aeromagnetic-radiometric survey
- Approximately 800 surface geochemical samples collected over the Quick Shears and Fireant prospects with assays pending
- 265 Moving Loop EM and 127 Fixed Loop EM stations
- A total of 3,020m of down hole EM with all 5 drillholes surveyed
- Regional historic stream sediment geochemical datasets being collated, digitised and analysed to aid target generation for the 2021 field season

The Sentinel area has been targeted as a priority exploration setting due to the presence of high-MgO ultramafic intrusions and large folded sills of the prospective Ruins Intrusive Suite. This area has been covered by standard AEM, radiometrics, SPECTREM AEM, and preliminary surface geochemical traversing. Numerous anomalies have been targeted for follow-up exploration in 2021.

## New Projects

During the Quarter, Buxton has lodged applications over an area exceeding 1,800 km<sup>2</sup> in the Narryer Terrain of Western Australia. These applications cover gravity anomalies and associated ultramafic rocks of multiple ages which are located on the margin of the Yilgarn Craton. These applications are considered prospective orthomagmatic Ni-Cu-PGE deposits.



**Figure 7: Geological tectonic domain map of the Yilgarn Craton, Western Australia (GSWA, 2016) showing the location of Buxton's new applications in the Narryer Terrain.**

Buxton is continuing to actively pursue copper opportunities in the USA.

## Corporate

The Company's Quarterly Cashflow Report (Appendix 5B) follows this activities report. The Company had \$3.6 million in cash as at 30 September 2020.

Exploration Expenditure for the quarter was \$150k with most of this expenditure being associated with project generation and desktop assessment activities in support of the Narryer Terrain tenement applications, project assessment elsewhere in Australia and the USA, and the commercialisation of Buxton's Goldmember Project.

The aggregate amount of payments to related parties and their associates included in the current quarter Cash flows from operating activities were approximately \$73k comprising Directors fees, salaries and superannuation.

Corporate and other administration expenditure was \$93k 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 during these uncertain times 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 employee 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  
01/07/20 – 30/09/20**

<b>Interests in mining tenements relinquished, reduced or lapsed</b>	<b>Tenement</b>	<b>Location</b>	<b>% at beginning of quarter</b>	<b>% at end of quarter</b>	

<b>Interest in mining tenements acquired or increased</b>	E09/2427	Murchison - WA	0	100
	E09/2428	Murchison - WA	0	100
	E09/2429	Murchison - WA	0	100

<b>The mining tenements held at the end of the quarter and their location</b>	E28/1959	Fraser Range-IGO JV	10	10
	E28/2201	Fraser Range-IGO JV	10	10
	E15/1719	Goldmember	100	100
	E15/1766	Goldmember	100	100
	E15/1767	Goldmember	100	100
	E28/2922	Goldmember	100	100
	E28/2979	Goldmember	100	100
	E28/2980	Goldmember	100	100
	E28/2983	Goldmember	100	100
	E04/1533	Merlin-IGO JV	100	49
	E04/2026	Merlin-IGO JV	100	49
	E04/2142	Merlin-IGO JV	100	49
	E04/2451	West Kimberley - Baracus JV	0	0 (earning 16%)
	E04/2462	West Kimberley - Baracus JV	0	0 (earning 16%)
	E04/2060	West Kimberley Regional-IGO JV	100	100
	E04/2407	West Kimberley Regional-IGO JV	100	100
	E04/2408	West Kimberley Regional-IGO JV	100	100
	E04/2411	West Kimberley Regional-IGO JV	100	100
	E04/2466	West Kimberley Regional-IGO JV	100	100
	E04/2467	West Kimberley Regional-IGO JV	100	100
	E04/2468	West Kimberley Regional-IGO JV	100	100
	E04/2469	West Kimberley Regional-IGO JV	100	100
	E04/2480	West Kimberley Regional-IGO JV	100	100

E04/2527	West Kimberley Regional-IGO JV	100	100
E04/2530	West Kimberley Regional-IGO JV	100	100
E04/2536	West Kimberley Regional-IGO JV	100	100
E04/2549	West Kimberley Regional-IGO JV	100	100
E04/2550	West Kimberley Regional-IGO JV	100	100
E04/2578	West Kimberley Regional-IGO JV	100	100
E04/2579	West Kimberley Regional-IGO JV	100	100
E04/2580	West Kimberley Regional-IGO JV	100	100
E04/2581	West Kimberley Regional-IGO JV	100	100
E04/2583	West Kimberley Regional-IGO JV	100	100
E04/2584	West Kimberley Regional-IGO JV	100	100
E04/2585	West Kimberley Regional-IGO JV	100	100
E04/2609	West Kimberley Regional-IGO JV	100	100
E04/2610	West Kimberley Regional-IGO JV	100	100
E04/2611	West Kimberley Regional-IGO JV	100	100
E04/2612	West Kimberley Regional-IGO JV	100	100
E04/2613	West Kimberley Regional-IGO JV	100	100
E04/2614	West Kimberley Regional-IGO JV	100	100
E04/2615	West Kimberley Regional-IGO JV	100	100
E04/2617	West Kimberley Regional-IGO JV	100	100
E04/2629	West Kimberley Regional-IGO JV	100	100
E04/2630	West Kimberley Regional-IGO JV	100	100
E04/2631	West Kimberley Regional-IGO JV	100	100
E04/2636	West Kimberley Regional-IGO JV	100	100
E04/2648	West Kimberley Regional-IGO JV	100	100
E04/2649	West Kimberley Regional-IGO JV	100	100
E04/2650	West Kimberley Regional-IGO JV	100	100
E04/2651	West Kimberley Regional-IGO JV	100	100
E04/1972	West Kimberley-IGO- NWC-TT JV	80	16
E04/2314	West Kimberley-IGO- NWC-TT JV	80	16
E04/2423	West Kimberley-IGO- NWC-TT JV	80	20
E28/2620	Woodline	100	100
E09/1985	Yalbra	100	100
E28/1959	Fraser Range-IGO JV	10	10
E28/2201	Fraser Range-IGO JV	10	10
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      P Prospecting Licence