

ASX Release 12th October 2022

EXPLORATION UPDATE – GRAPHITE BULL PROJECT

- New metallurgical work on Buxton's 100% owned graphite project has produced >99% C concentrate via a simplified and cheaper process
- Metallurgical and other project work is being scaled up, including evaluation of downstream processing to yield >99.95% C feed suitable for Purified Spheronised Graphite production
- Work on Hydrogeological, Environmental, and Heritage surveys has begun
- Applications for two new Miscellaneous Licenses have been submitted, securing access to site and groundwater supplies
- A significant infill and extensional drill program is being finalised, including Resource enhancement, geophysical, geotechnical, hydrological, and metallurgical components

Buxton Resources Limited (ASX: BUX) ("Buxton" or "the Company") is pleased to provide an update for its 100% owned Graphite Bull project (formerly known as Yalbra) located in Western Australia. For location, see Figures at the end of this announcement.

Recently completed metallurgical development work in Perth on diamond core from Graphite Bull has produced graphite concentrates grading from 99.2% to 99.8% C. This equals or exceeds the 99.4% C concentrate grade achieved by previous more complex process testwork in Canada (ASX 9/7/2015). Importantly, every stage of this new, much simplified process is well proven technology using "off the shelf" components.

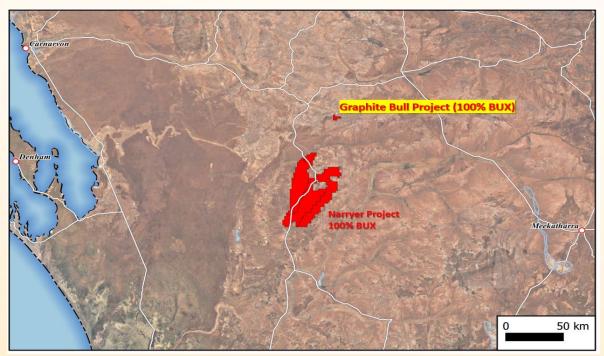


Figure 1 – Location of Buxton's Graphite Bull Project, Upper Gascoyne Region, Western Australia



Following changes in the graphite market, earlier in 2022 Buxton commissioned new metallurgical process development work (ASX 4/5/2022), focused on product purity and process cost, rather than Flake size. Since about 2020, demand for high purity natural graphite product as feedstock for lithiumion battery anode manufacture has risen significantly, as have prices. That production process includes grinding of graphite down to 2 microns (0.002 mm) before shaping into spheres 12-20 microns in diameter, for significant value-add. Flake size in concentrate is not relevant to this growing market.

This major encouragement in Graphite Bull economics has driven a re-start of project work. Hydrological, Heritage and ground Geophysical EM surveys will commence within the month. Scoping studies on possible operations and site hydrogeology have already enabled application for two new Miscellaneous Licenses, for road access (297 Ha) and Water Search (4,313 Ha).

Recent conductivity testing of 2014 core indicates both ground and down-hole EM will work well to derisk drilling. An ambitious infill and extensional RC and diamond drilling program commencing as soon as geophysical and Heritage surveys are concluded will upgrade confidence in, and expand, the existing Inferred Resource of 4.0 Mt @ 16.1% TGC (ASX 24/10/2014). Further metallurgical sample will be obtained, with geotechnical, groundwater and other technical, environmental and permitting investigations also progressed.

Buxton looks forward to providing shareholders with regular progress updates on this exciting initiative over coming months.

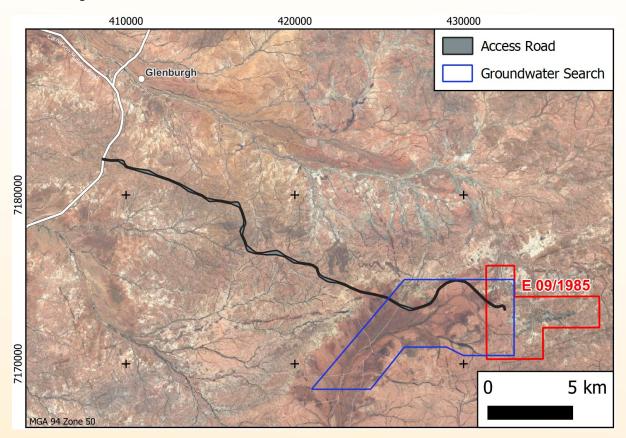


Figure 2 — Detail of Buxton's Graphite Bull Project including recent Miscellaneous License application areas



This announcement is authorised by Eamon Hannon on behalf of the Board.

For further information, please contact: Eamon Hannon Managing Director ehannon@buxtonresources.com.au

Sam Wright
Company Secretary
sam@buxtonresources.com.au

Competent Persons

The information in this report that relates to Exploration Results is based on information compiled by Mr Eamon Hannon, Fellow of the Australasian Institute of Mining and Metallurgy, and Mr Rolf Forster, Member of the Australian Institute of Mining and Metallurgy. Mr Hannon is a full-time employee of Buxton Resources Limited and Mr Forster is Consultant to Buxton Resources Limited. Mr Hannon and Mr Forster 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 Hannon and Mr Forster consent to the inclusion in this report of the matters based on the information in the form and context in which it appears.

JORC Table 1: Section 2 – Reporting of Exploration Results (Metallurgical)

| Criteria | JORC Code explanation | Commentary |
|---|---|--|
| Other substantive exploration data | 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. | Previous metallurgical test work was performed by SGS Lakefield (Canada) in 2015 on composited Buxton 2014 drill core from intersections in weathered and fresh host rock. 40 kg composite samples were crushed, homogenized and rotary split to generate 2 kg charges for grinding and froth flotation tests. Composited head grades were 17.2% and 18.3% TGC in weathered and fresh rock respectively. This work showed that graphite was readily liberated and collected through grinding and froth flotation. The flowsheet was optimised for preservation of graphite flake size by avoiding overgrinding. A commercially saleable >95% graphite concentrate grade was not achieved by grinding and flotation alone due to the presence of finely intercalated gangue minerals. However, subjecting the flotation concentrate to caustic bake purification followed by an HF leach produced a product of 99.4% C purity. Following changes in the graphite market, early in 2022 Buxton commissioned further work through Auralia Metallurgy in Perth focused on maximising purity rather than flake size. Two samples of halved PQ diamond core were selected from YBDD002, a 2014 Buxton hole across one of the three mineralised zones within the Inferred Resource. The composite samples (26-29m downhole, weathered, 13 kg, 20.2% TGC, and 29-31m, fresh, 7 kg, 22.3% TGC) were crushed, homogenized and rotary split to generate 2 kg charges for grinding and first stage froth flotation tests. Subsamples of the two first stage froth flotation concentrates were then combined for assessment of the proposed new flowsheet which incorporated secondary flotation and more aggressive regrinding to reduce graphite particle size compared to the 2015 work. Subjecting the resulting upgraded concentrate to caustic bake purification produced excellent results, graphite products of 99.2 to 99.8 % C purity. |
| Further work | The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). | See text in body of release. |