

ASX Release

12 December 2024

## Graphite Bull delivers more shallow high-grade intersections

- Assays received for remaining RC holes from the 2024 drilling program
- Standout, shallow, high-grade results include:
  - GB011RC: 50 m @ 24.9% TGC from 38 m
  - GB009RC: 10 m @ 37.3% TGC from 12 m, including 6 m @ 47.3% TGC
- Geological modelling being finalised, new Resource Estimate expected end-Jan / early Feb 2025
- Results from BTR qualification testwork expected early Feb

Buxton Resources Ltd ('Buxton'; ASX:BUX) is pleased update shareholders that laboratory assaying has been completed for all recent RC drilling at Graphite Bull. New, stand-out intersections include **GB011RC: 50 m @ 24.9% TGC from 38 m** (estimated true thickness 46.2 m – **Figure 3**) and **GB009RC: 10 m @ 37.3% TGC from 12 m** (true thickness ~ 10.0 m), **including 6 m @ 47.3% TGC from 14 m (Figure 5).**

Buxton is now completing 3D geological interpretation along a ~1,500 metre strike length where mineralisation starts at surface and remains open at depth (see cross sections and maps below). Several zones appear to have good potential to support Resource classification with reasonable prospects for economic extraction by open-pit methods. These zones include the existing Resource and a ~440 metre zone in the east (Figure 7). The updated Resource Estimate will be undertaken by ERM and is expected to be delivered in late January – early February 2025.

Buxton has provided BTR with a 750 kg bulk sample of ore at ~13.75% TGC derived from four RC holes within the existing Resource (**4Mt @ 16.2% TGC**). BTR have previously tested Graphite Bull flake concentrate with positive results and are now undertaking qualification testwork on ore with results expected early February 2025.

CEO, Marty Moloney, comments, *"Incredibly high grades and an investment-friendly location are two of Graphite Bull's defining qualities. We're now finalising inputs to the resource upgrade, which is a key short-term priority. These results, along with qualification feedback from BTR will then guide Buxton's strategy at Graphite Bull."*

[This announcement is supported by a video overview from CEO Marty Moloney on the Buxton Resources Investor Hub](#)



## About BTR

BTR New Material Group Co., Ltd. ("BTR") is a fully vertically integrated Chinese anode manufacturer, from upstream natural graphite mining to downstream lithium-ion battery materials including anode, cathode and new materials for lithium-ion batteries. BTR has held the top global market share for sale of anode materials for 14 years, and currently has >25% of global anode market share. The company serves major lithium-ion battery manufacturers such as Panasonic, Samsung SDI, LGES, SK on, CATL, and BYD.

BTR's new 80 ktpa anode production plant in Kendal, Centra Java, represents a US\$750M investment and started production on August 7<sup>th</sup> 2024, becoming the first anode production plant operated by Chinese company outside China. Stage 2 (also 80 ktpa) is in construction, with production scheduled for 2026. When completed this single plant will consume ~320 ktpa of fine flake (-100um) graphite feedstock. As of the end of August 2024, BTR has operating anode production capacity of 575,000 tpa.



**Figure 1:** Graphite Bull is ideally located to supply new anode facilities in Asia

This announcement is authorised by the Board of Buxton Resources Ltd. For further information, please contact:

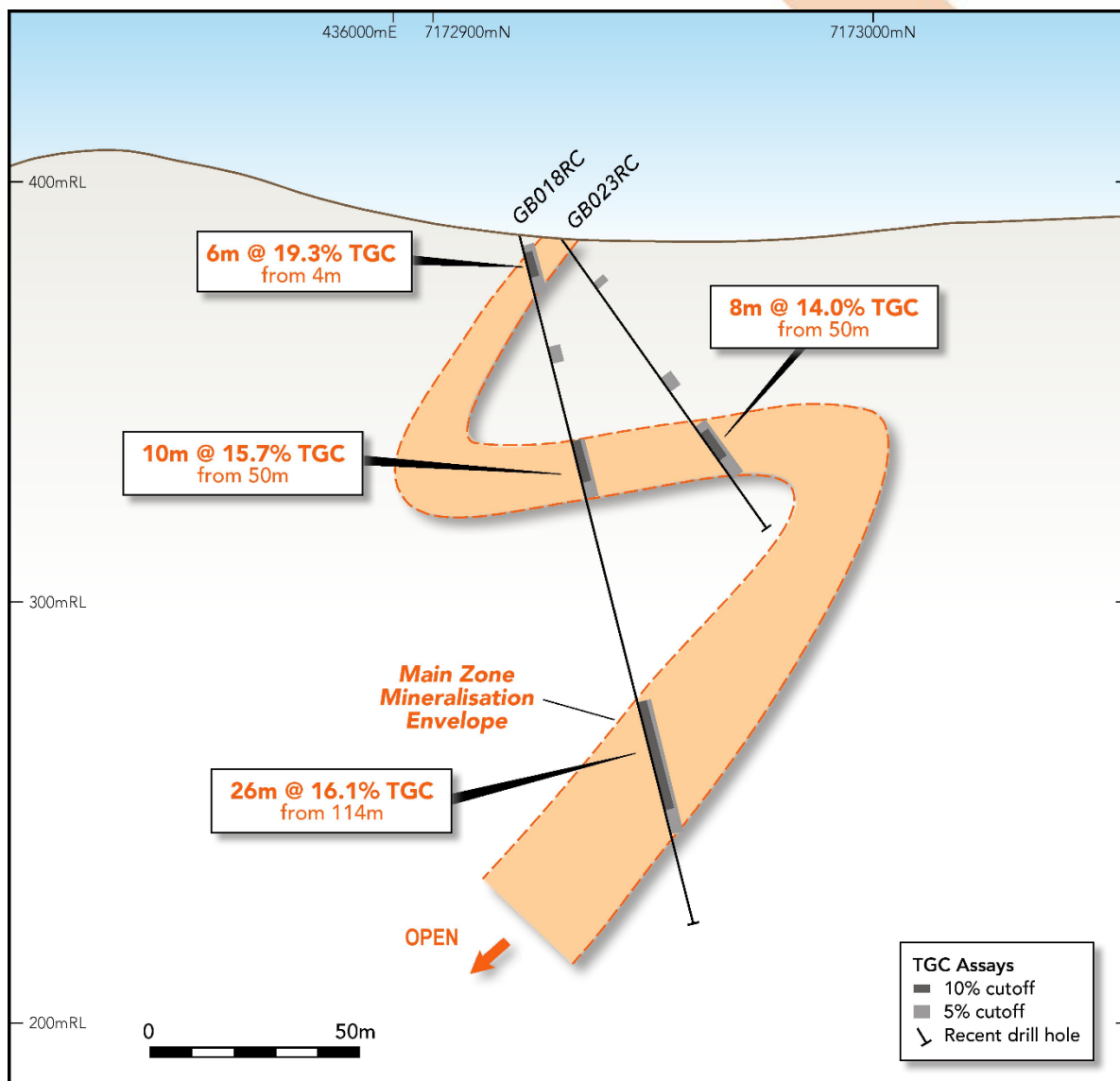
Martin Moloney  
Chief Executive Officer

[marty@buxtonresources.com.au](mailto:marty@buxtonresources.com.au)

Sam Wright  
Company Secretary

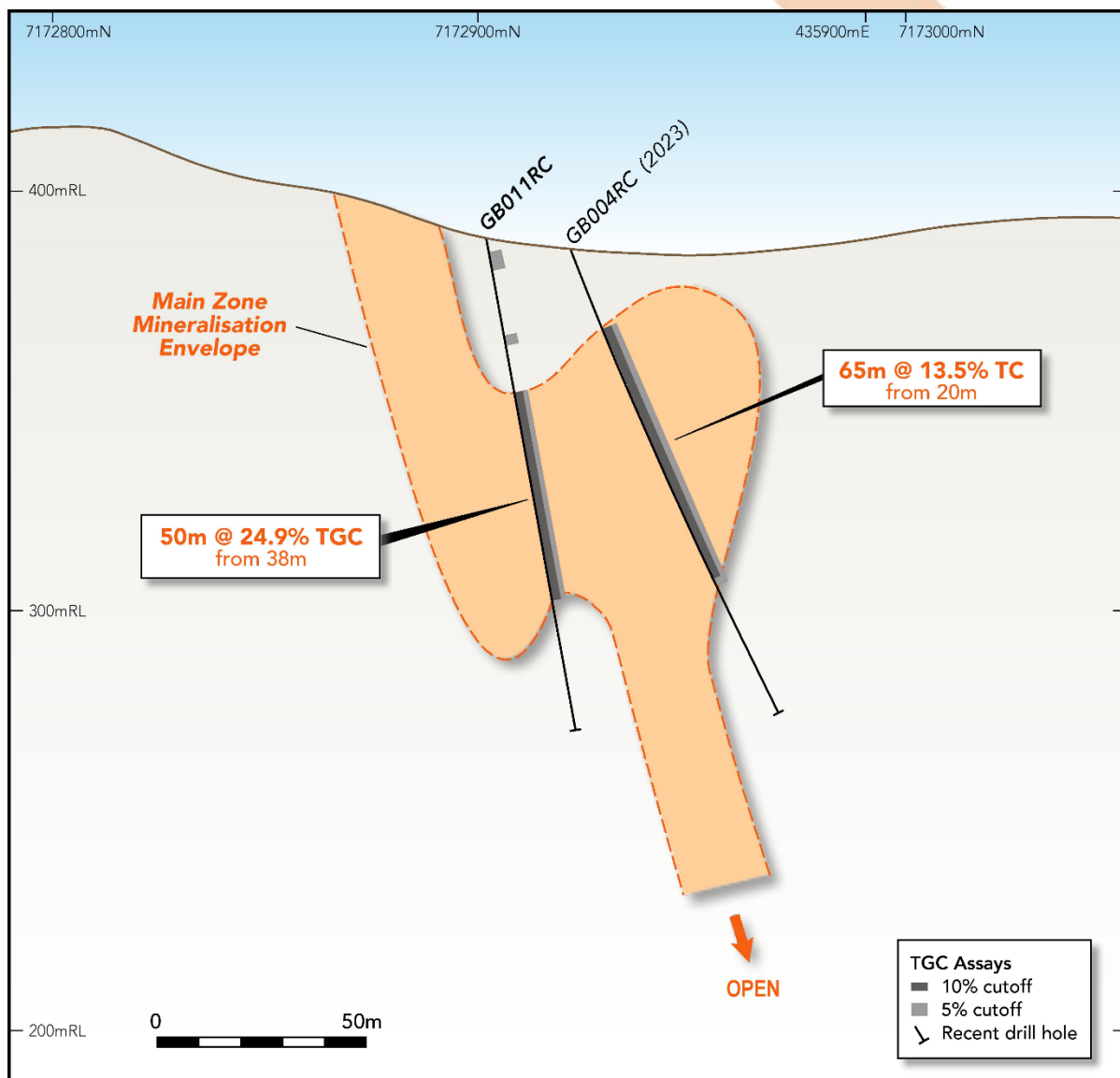
[sam@buxtonresources.com.au](mailto:sam@buxtonresources.com.au)





**Figure 2:** Graphite Bull Project cross section for GB018RC and GB023RC with new assay results (composited at 10% TGC cutoff are labelled) and current interpretation of mineralisation continuity.

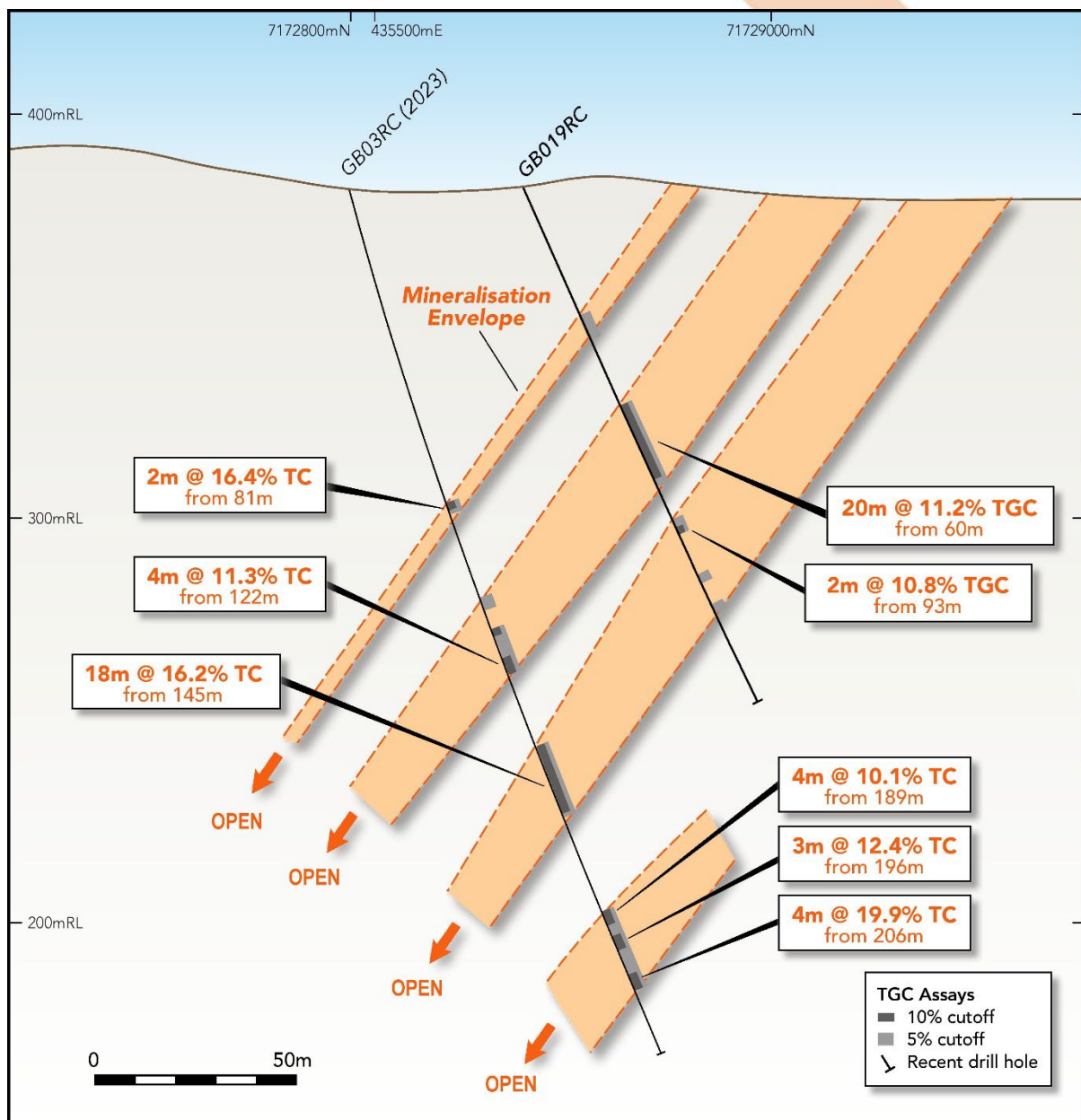




**Figure 3:** Graphite Bull Project cross section showing holes GB004RC (from 2023) and GB011RC with new assay results for GB011RC. The assays have been (composited at 10% TGC / Total Carbon (TC) cutoff are labelled) and current interpretation of mineralisation continuity. See JORC Table 1 for a discussion on TC vs TGC, which are considered essentially equivalent for fresh-moderately oxidised Graphite Bull material.

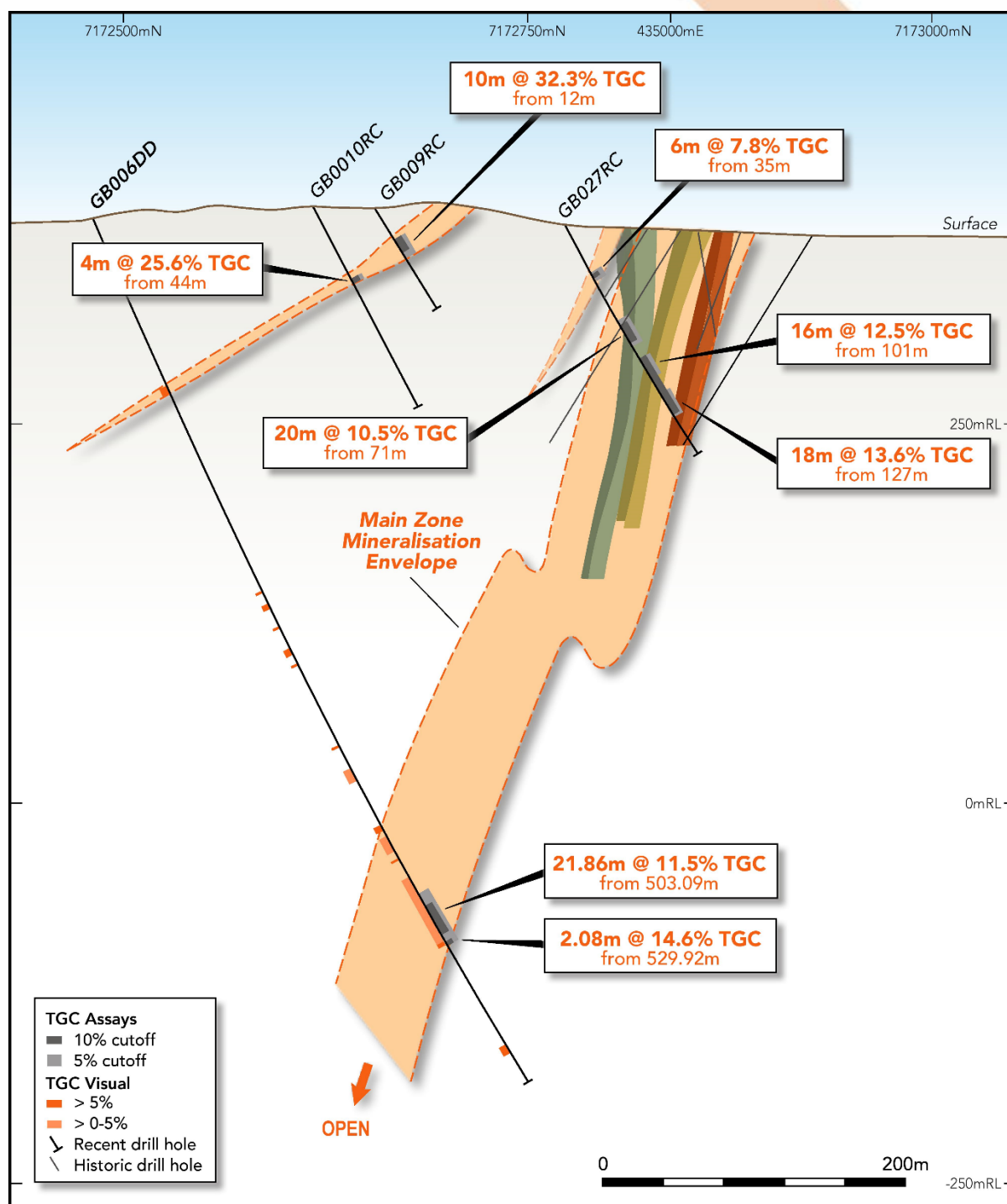






**Figure 4:** Graphite Bull Project cross section showing holes GB003RC (from 2023) and GB019RC with new assay results for GB019RC. The assays have been (composited at 10% TGC / Total Carbon (TC) cutoff are labelled) and current interpretation of mineralisation continuity. See JORC Table 1 for a discussion on TC vs TGC, which are considered essentially equivalent for fresh-moderately oxidised Graphite Bull material

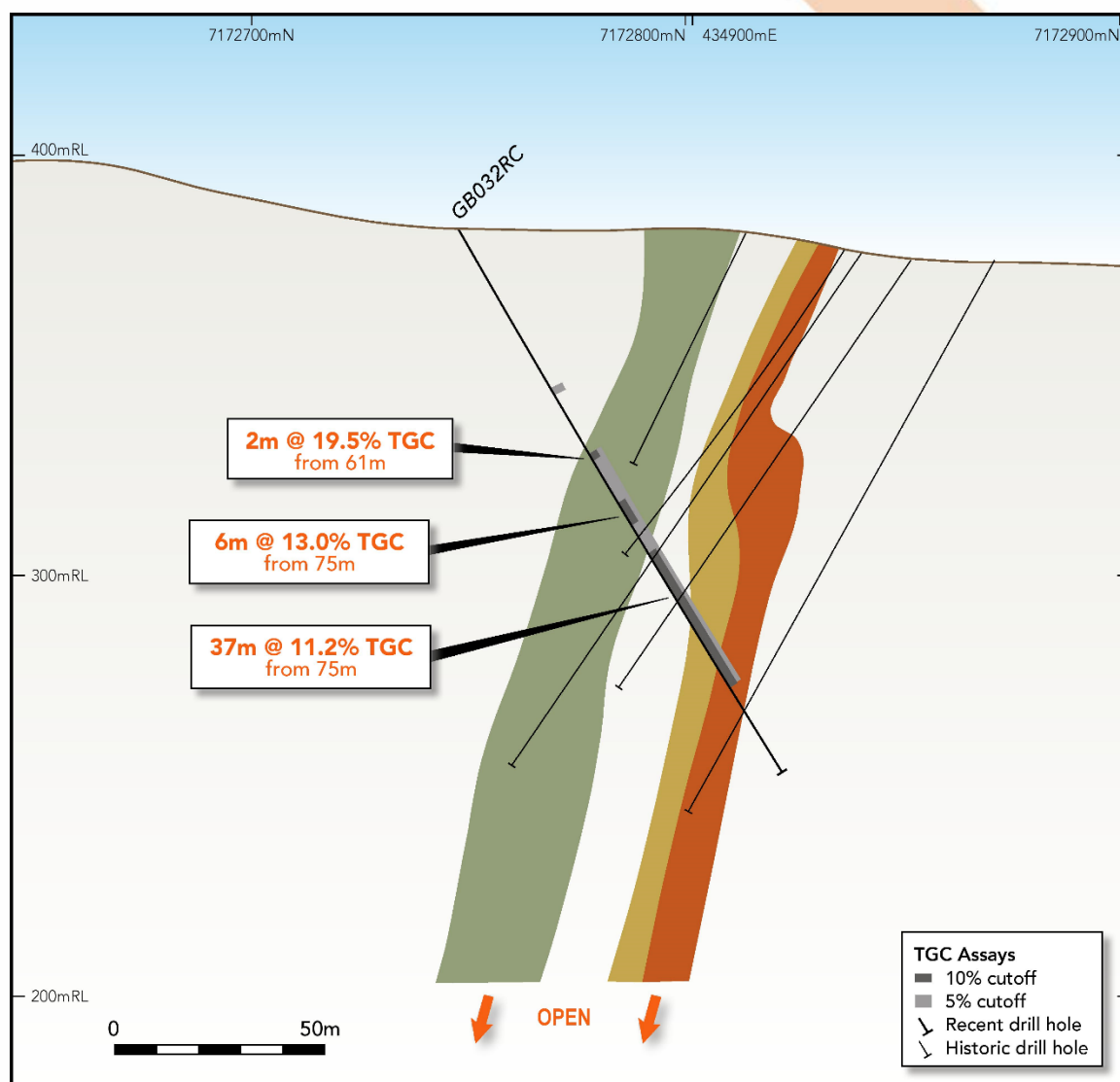




**Figure 5:** Graphite Bull Project cross section through GB009RC, GB010RC and GB027RC with new assay results (composited at 10% TGC cutoff are labelled) plus 2014 Resource zones and the current interpretation of mineralisation continuity. [Previously reported](#) visual estimates of graphitic mineralisation are also plotted on GB006DD as sampling for this diamond hole is in progress.

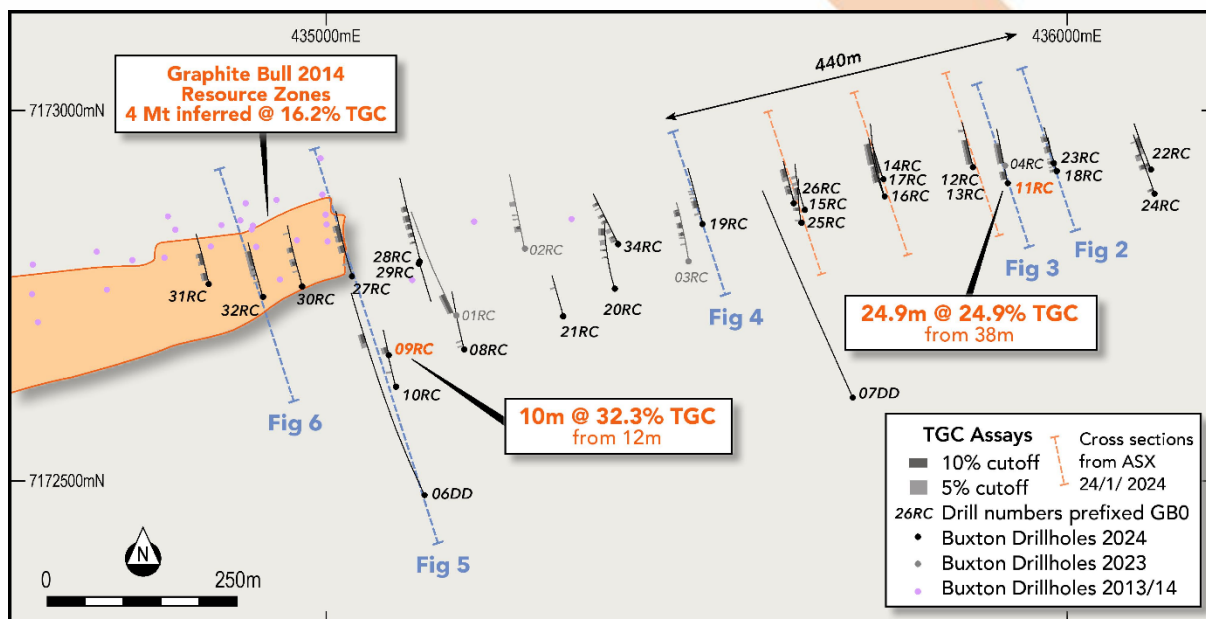
**Cautionary Statement:** Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.





**Figure 6:** Graphite Bull Project cross section (cross reference Figure # on map below) with composited assay results for 2024 RC holes plus the 2014 Resource zones and 2013/2014 drillholes.





**Figure 7:** Graphite Bull Project plan showing recent drilling with intersections highlighted in the text of this ASX Release along. The vertically projected area of the existing Resource is shown (4 Mt @ 16.2% TGC). The location of cross sections presented above are indicated in blue. Cross sections in orange are from [ASX Release 24th October 2024 – Graphite Bull: Record Setting 124 m @ 16.6% TGC](#). Two zones appear to have good potential to support Resource classification with reasonable prospects for economic extraction by open-pit methods. These areas comprise the existing Resource and a ~440 metre zone extending the cross sections shown in Figures 2 & 4.





**Table 1:** Composited Total Graphitic Carbon (TGC) assay results from Graphite Bull at a 10% TGC cutoff. Intersections in bold have been quoted in the text. GB006DD has partial assays completed 491 m – 541.96 m. The assay results from GB009RC includes a 2m RC sample that ran >50% TGC and has been assigned a nominal 50% TGC grade for length-weighted compositing calculations. All holes are outside the existing Resource apart from GB027RC, 030RC, 031RC and 032RC (yellow shading) – these intersections supplied material for the BTR bulk ore sample. *Previously reported intersections are in italics & blue shading.*

From (m)	To (m)	Interval (m)	Drilled Thickness (m)	Estimated True Thickness (m)	Lab TGC Grade (%)	TGC % x metres	Grade cutoff for composite (TGC %)
<i>GB006DD</i>	<i>503.09</i>	<i>524.95</i>	<i>21.86</i>	<i>15.46</i>	<i>11.5</i>	<i>252</i>	<i>10%</i>
<i>GB006DD</i>	<i>529.92</i>	<i>532</i>	<i>2.08</i>	<i>1.47</i>	<i>14.6</i>	<i>30</i>	<i>10%</i>
<b>GB009RC</b>	<b>12</b>	<b>22</b>	<b>10</b>	<b>10.0</b>	<b>37.3</b>	<b>373</b>	<b>10%</b>
GB010RC	44	48	4	4.0	25.6	102	10%
<b>GB011RC</b>	<b>38</b>	<b>88</b>	<b>50</b>	<b>46.2</b>	<b>24.9</b>	<b>1244</b>	<b>10%</b>
<i>GB012RC</i>	<i>44</i>	<i>168</i>	<i>124</i>	<i>47.7</i>	<i>16.6</i>	<i>2058</i>	<i>10%</i>
<i>GB013RC</i>	<i>8</i>	<i>64</i>	<i>56</i>	<i>35.1</i>	<i>14.4</i>	<i>808</i>	<i>10%</i>
<i>GB014RC</i>	<i>25</i>	<i>74</i>	<i>49</i>	<i>37.0</i>	<i>10.7</i>	<i>525</i>	<i>10%</i>
<i>GB015RC</i>	<i>64</i>	<i>90</i>	<i>26</i>	<i>15.0</i>	<i>12.6</i>	<i>328</i>	<i>10%</i>
<i>GB015RC</i>	<i>124</i>	<i>128</i>	<i>4</i>	<i>2.3</i>	<i>14.3</i>	<i>57</i>	<i>10%</i>
<i>GB016RC</i>	<i>20</i>	<i>22</i>	<i>2</i>	<i>1.5</i>	<i>10.9</i>	<i>22</i>	<i>10%</i>
<i>GB016RC</i>	<i>80</i>	<i>120</i>	<i>40</i>	<i>29.7</i>	<i>12.9</i>	<i>515</i>	<i>10%</i>
<i>GB016RC</i>	<i>162</i>	<i>227</i>	<i>65</i>	<i>48.3</i>	<i>10.1</i>	<i>659</i>	<i>10%</i>
<i>GB016RC</i>	<i>234</i>	<i>236</i>	<i>2</i>	<i>1.5</i>	<i>12.6</i>	<i>25</i>	<i>10%</i>
<i>GB017RC</i>	<i>54</i>	<i>102</i>	<i>48</i>	<i>37.0</i>	<i>10.4</i>	<i>497</i>	<i>10%</i>
GB018RC	4	10	6	2.6	19.3	116	10%
GB018RC	50	60	10	4.4	15.7	157	10%
GB018RC	114	140	26	11.4	16.1	418	10%
GB019RC	60	80	20	13.1	11.2	224	10%
GB019RC	93	95	2	1.3	10.8	22	10%
GB020RC	97	101	4	2.7	14.8	59	10%
GB020RC	118	120	2	1.3	10.5	21	10%
GB020RC	168	185	17	11.4	13.9	236	10%
GB022RC	17	21	4	2.3	15.0	60	10%
GB022RC	69	96	27	15.5	10.9	294	10%
GB023RC	56	64	8	5.9	14.0	112	10%
GB024RC	14	16	2	1.2	17.5	35	10%
GB024RC	80	82	2	1.2	14.4	29	10%
GB024RC	114	116	2	1.2	16.8	34	10%
GB025RC	72	76	4	1.3	12.2	49	10%
GB025RC	78	82	4	1.3	10.5	42	10%
GB025RC	122	166	44	14.3	10.5	461	10%
GB026RC	25	34	9	5.7	12.2	110	10%
GB026RC	39	43	4	2.5	11.7	47	10%
GB026RC	63	82	19	12.0	11.5	219	10%



From (m)	To (m)	Interval (m)	Drilled Thickness (m)	Estimated True Thickness (m)	Lab TGC Grade (%)	TGC % x metres	Grade cutoff for composite (TGC %)
GB027RC	37	39	2	1.3	12.9	26	10%
GB027RC	75	89	14	9.0	12.0	168	10%
GB027RC	101	143	42	27.0	10.3	434	10%
GB028RC	74	78	4	3.2	21.1	84	10%
GB028RC	94	105	11	8.9	12.1	133	10%
GB028RC	122	124	2	1.6	11.0	22	10%
GB028RC	131	136	5	4.0	11.5	57	10%
GB029RC	116	118	2	0.2	11.9	24	10%
GB030RC	61	72	11	6.5	10.6	117	10%
GB030RC	98	108	10	5.9	14.7	147	10%
GB031RC	15	31	16	11.8	14.4	231	10%
GB031RC	56	85	29	21.4	11.7	340	10%
GB032RC	61	63	2	1.6	19.5	39	10%
GB032RC	75	81	6	4.8	13.0	78	10%
GB032RC	89	126	37	29.5	11.2	415	10%
GB033RC	22	28	6	5.5	12.1	73	10%
GB033RC	40	51	11	10.0	13.6	150	10%
GB034RC	18	20	2	1.3	15.9	32	10%
GB034RC	26	31	5	3.1	12.5	63	10%
GB034RC	73	79	6	3.8	11.7	70	10%
GB034RC	91	95	4	2.5	22.4	90	10%
GB034RC	128	130	2	1.3	15.9	32	10%

### Competent Persons – Graphite Bull

The information in this report that relates to Exploration Results is based on information compiled by Mr Martin Moloney, Member of the Australian Institute of Geoscientists and Society of Economic Geologist. Mr Moloney is a full-time employee of Buxton Resources Ltd. Mr Moloney 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 Moloney consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

### Previously Reported Information – Graphite Bull Project

There is information in this announcement relating to exploration results previously announced on:

1. 25<sup>th</sup> July 2014 – [127 metres @ 13.4% TGC – Yalbra Graphite Drilling](#)
2. 24<sup>th</sup> October 2014 – [Buxton significantly expands Graphite Resource at Yalbra](#)
3. 19<sup>th</sup> April 2023 – [Graphite Bull Drilling Assays](#)



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4. 25<sup>th</sup> July 2024 - [84.6m of mineralisation intersected at Graphite Bull Project](#)
5. 26<sup>th</sup> August 2024 – [Graphite Bull & Narryer Project - Exploration Update](#)
6. 24<sup>th</sup> October 2024 – [Graphite Bull: Record Setting 124 m @ 16.6% TGC](#)

#### Validity of Referenced Results

Buxton confirms that it is not aware of any new information or data that materially affects the information from previous ASX announcements which has been referenced in this announcement.

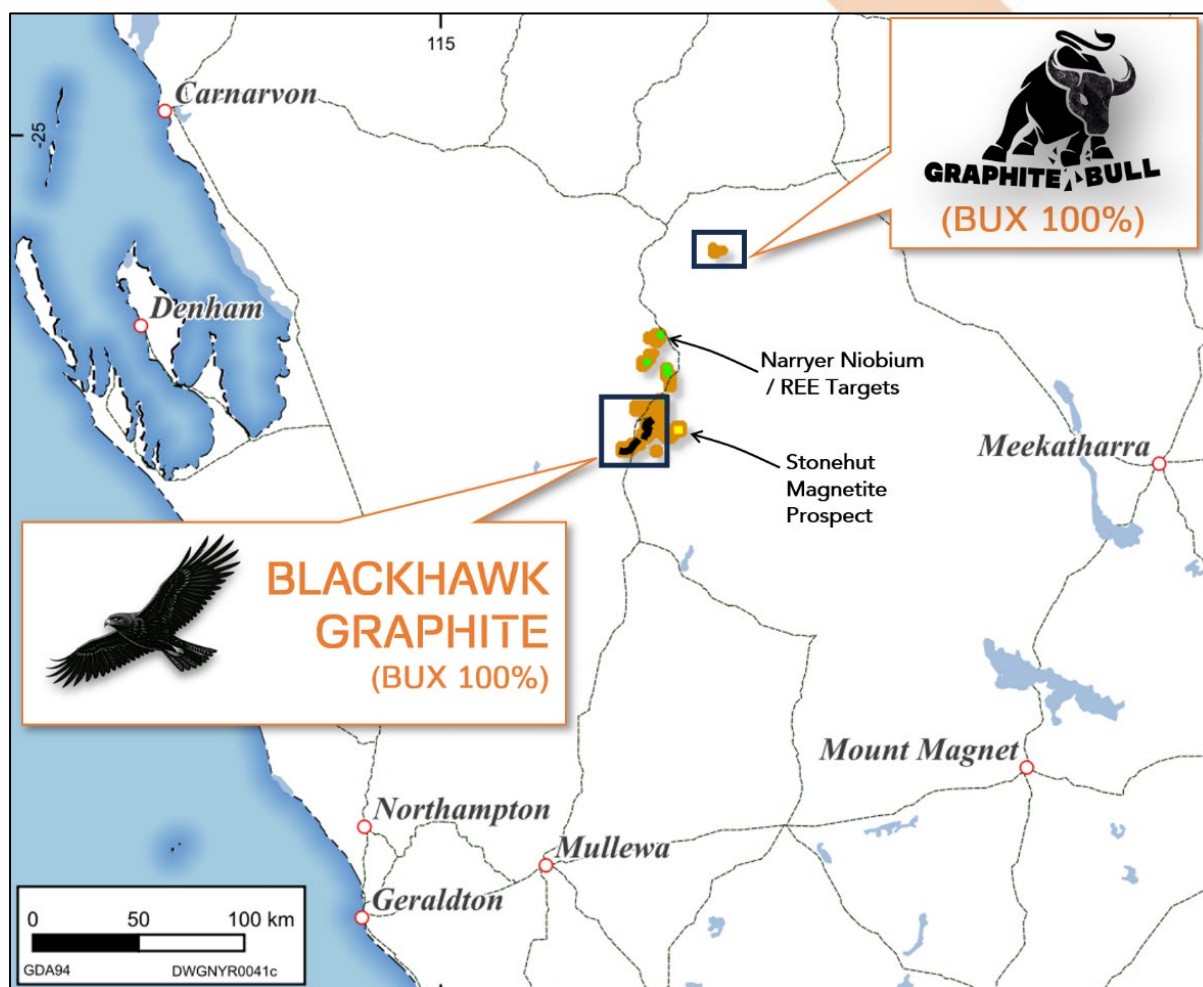
#### About the Graphite Bull Project

The at-surface, high-grade Graphite Bull Project is located in the Tier 1 mining jurisdiction of Western Australia, Gascoyne region, on granted Exploration License E09/1985. Graphite Bull was acquired by Buxton in 2012 and by 2014 two resource estimates were completed. The Graphite Bull project currently has a JORC (2012) compliant Inferred Resource of 4 Mt @ 16.2 % TGC (ASX 24/10/2014).

Due to projected growth of the global Lithium-ion battery market, and the essential part graphite will play in that – graphite is the single largest component of Li-ion batteries – Buxton recommenced work at Graphite Bull in 2022. Work since then has been focused on metallurgical test work through to final product (Activated Anode Material), and increasing Resource confidence and size, with very promising results to date.

Benchmark Mineral Intelligence predicts that global capacity of anode material will increase over fivefold between 2024 and the end of the decade, reach over 15Mtpa, a huge increase from the 2.3Mtpa of operational capacity in 2024. This battery-related demand means that by 2027, global graphite production needs to double and that, by 2040, eight times current production will be required to supply the world's lithium-ion battery anode market. Ex-China battery anode capacity, and investment, is being spurred by US IRA legislation. Graphite Bull is therefore a very attractive project, being a high-grade deposit located in a Tier 1, US FTA mining jurisdiction, with ore materials having demonstrated excellent electrochemical performance and with outstanding Resource growth potential. Buxton has also recently [confirmed the discovery of a new graphite mineral system](#) at the Blackhawk Project, some 100 km south from Graphite Bull.





**Figure 8:** Buxton's Graphite Bull & Blackhawk Projects are located within the Gascoyne / Murchison Region of Western Australia.



Table 2: Collar location details for 2024 DD and RC holes at Graphite Bull

Hole ID	Easting (m)	Northing (m)	RL (m)	Azimuth (grid)	Incl.	Total Depth (m)
GB006DD	435128.62	7172481.68	384.17	337.56	-66.58	641.4
GB007DD	435709.78	7172612.38	381.30	336.3	-60.07	582.3
GB008RC	435187.90	7172676.85	375.56	345.43	-61.67	150
GB009RC	435086.30	7172668.82	381.96	348.01	-59.4	66
GB010RC	435092.84	7172625.78	384.41	346.38	-60.97	138
GB011RC	435920.33	7172901.24	387.18	348.24	-80.54	120
GB012RC	435870.39	7172923.34	385.35	345.78	-80.31	192
GB013RC	435870.30	7172923.93	384.99	345.17	-55.69	96
GB014RC	435750.11	7172905.97	384.60	345.1	-60.69	90
GB015RC	435643.05	7172865.97	385.69	342.68	-70.36	168
GB016RC	435751.26	7172885.12	387.30	343.2	-75.38	246
GB017RC	435750.89	7172886.56	387.00	345.09	-60.66	180
GB018RC	435983.58	7172916.99	385.33	341.22	-75.49	168
GB019RC	435506.06	7172842.90	379.52	344.8	-65.88	180
GB020RC	435388.23	7172761.68	377.81	344.92	-65.26	192
GB021RC	435319.29	7172722.54	374.65	343.63	-60.99	114
GB022RC	436110.53	7172920.62	388.89	340.36	-61.2	132
GB023RC	435981.17	7172927.60	385.29	343.57	-55.65	84
GB024RC	436116.01	7172888.77	390.14	340.56	-60.54	162
GB025RC	435640.04	7172845.35	386.09	347.24	-76.47	210
GB026RC	435632.20	7172878.30	384.37	344.27	-55.78	96
GB027RC	435034.68	7172780.73	378.93	344.76	-61.16	174
GB028RC	435124.99	7172795.14	375.42	344.72	-67.73	162
GB029RC	435126.17	7172795.37	375.38	164.6	-65.55	138
GB030RC	434966.54	7172763.86	378.96	344.09	-60.53	156
GB031RC	434841.50	7172763.49	374.83	344.3	-61.1	126
GB032RC	434912.74	7172746.74	380.91	344.55	-60.63	150
GB033RC	435116.37	7172836.37	374.55	344.69	-55.01	114
GB034RC	435394.02	7172816.72	383.30	335.07	-60.61	156



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## JORC Table: Section 1 – Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down-hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i>	Diamond core drilling and Reverse Circulation drilling was completed using standard industry best practice.  Diamond drilling at Graphite Bull produced HQ diameter core (63.5mm diameter). All core runs are oriented using an Axis Mining Technology Champ Ori tool.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Diamond drilling core samples taken from halved or quartered (for duplicate samples) HQ2 core. Samples were cut at approximately 1 m intervals according to recommendations from previous resource estimate reports.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i>	Reverse Circulation drilling was completed using standard industry practices.  Reverse Circulation drilling produced samples that were collected at one-metre intervals. Metre delineation was controlled by the driller by means of visual marks on the mast chain on rig. A one metre 'split' sample was collected in pre-numbered calico bags at the time of drilling using a cone splitter integrated into the drill cyclone to produce a 1-3kg sample, which is considered representative of the full drill metre.  The residual material from each metre interval was collected in 600mm x 900mm biodegradable bags preserved at the drill site whilst laboratory analysis is ongoing.  All one metre split samples were sent to the laboratory for preparation. Sample weights are recorded on submission to the laboratory. A compositing program was then undertaken under laboratory conditions such that 250g pulp composites were prepared. These composites were generally two-metre samples for mineralised intervals (with some 1m samples where required by QA sampling). Three, four, or five-metre composites were then used either side of the two / one metre intervals for analysis.  All 1m pulps and bulk rejects are preserved for further testwork if required.  Laboratory analysis was undertaken by ALS Geochemistry in Perth and include Total Graphitic Carbon (see below).
Drilling techniques	<i>Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i>	Diamond drilling by Topdrill PL used a Sandvik DE880 truck mounted drill rig. Reverse Circulation (RC) drilling by Topdrill PL used a Schramm T685 truck mounted rig (RC).
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Sample recovery for DD core loss is recorded by the drillers with any core loss intervals noted on annotated wooden blocks inserted into the core boxes by the driller. Core loss averages 99.5% for the two holes. No significant core loss is recorded in the reported mineralised intervals.  Rod counts are routinely carried out and marked on the core blocks by the drillers to ensure the marked core block depths are accurate.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	
	<i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	



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		<p>RC recoveries were considered good with available air for drill sample recovery being deemed adequate for the ground conditions and depth of sampling undertaken.</p> <p>Appropriate measures have been undertaken to maximise sample recovery and ensure the representative nature of samples, including:</p> <ul style="list-style-type: none"> <li>- Terminating RC holes when recovery amounts are reduced at depth</li> <li>- Terminating RC holes when excess water is encountered</li> </ul> <p>Full assessment of recovery will be undertaken when the core is transported to BUX's core processing facility in Perth, with QA/QC of the recovery to be assessed by reconstructing the core into continuous runs in an angle iron cradle.</p> <p>No apparent relationship has been defined between sample recovery and grade based on the various drilling programs to date at Graphite Bull.</p>
Logging	<p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p><b>Diamond Drilling</b></p> <p>Logging of the diamond drill hole was conducted at the Project site by qualified geologists with sufficient knowledge of the deposit style and the geological terrane the drilling was completed in. Onsite logging of diamond core includes recording observations of lithology, mineralogy and mineralisation, which are recorded digitally. Logging completed can be considered qualitative in nature.</p> <p>Further qualitative logging, conducted once the core was transported to BUX's core processing facility in Perth, includes recording weathering, colour, and other features of the samples, along with quantitative measurement of magnetic susceptibility, density, structure and geotechnical parameters, along with the collection of spectral and portable XRF measurements.</p> <p>Photographs of all DD trays have been taken at BUX's core processing facility at the Project, and in Perth and retained on file with the original core trays stored at BUX's core library in Peth.</p> <p>Logging to date can be considered sufficient to report the intersection of low grade (trace-5% TGC), moderate (5-10%) and high-grade (&gt;10% TGC) graphite mineralisation based on visually estimates and with reference to previous drillhole samples and results.</p> <p>Logging has been designed to be adequate to support downstream exploration studies and follow-up drilling.</p> <p><b>Reverse Circulation Drilling</b></p> <p>For the RC program, chip trays were collected from each one metre interval this was used to log lithology, oxidation and visual graphite content estimate a streak test was used to assist with visual estimates alongside historical samples.</p> <p>Visual estimates for TGC were based on comparison with historic samples from Buxton's 2014 program, YBRC0018 and YBRC0019 which constituted 276 metres of previously assayed material with grades from 0.1% to 30.9% TGC. This included 52 samples greater than 10% TGC. 19 samples from 5-10% and 87 samples from 0-5%.</p>



		<p>Samples were noted if they were wet or where recovery was significantly impacted.</p> <p>Photographs of all RC chip trays were then taken at BUX's core processing facility at the Project, and in Perth and retained on file with the original chip trays stored at BUX's storage facility in Peth.</p> <p>Logging is considered to be semi-quantitative.</p> <p>The visual logging has been augmented by lithogeochemical analysis using portable XRF data collected on prepared pulps returned from ALS (for the RC samples) and from analyses collected directly on diamond core. Thorough statistical treatment of this data was undertaken, including validation, mitigating closure effects, k-means cluster analysis and principal component analysis to generate a classification that was verified firstly on the core logging and against other quantitative data such as magnetic susceptibility and density dataset. This lithological classification was then utilised by a contract structural geologist, who had undertaken ~2 weeks of surface mapping at Graphite Bull, to develop a 3D solid geology model.</p>
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	<p><b>Diamond Drilling</b></p> <p>Following core processing at BUX's core processing facility in Perth, the mineralised intervals will be subsampled into quarter and/or half-core using a wet-diamond-blade core saw and submitted to ALS Limited - Perth. All samples to be submitted for assay will be selected from the same side of the core (with respect to the orientation line, or principal foliation), with exceptions only being for duplicate samples of selected intervals, where quarter-core subsamples will be cut from the half-core.</p> <p><b>Reverse Circulation Drilling 2024</b></p> <p>All RC one-metre sub-samples from drill holes were collected from a cone splitter respectively, to produce an ~15% routine split sample for analysis. Field duplicates were collected for the RC programs.</p> <p>See below for further notes on quality control procedures.</p> <p>Samples were submitted to ALS Geochemistry for sample preparation and analysis. Samples were pulverised to better than 85% passing -75 micron and analysed for %TGC by C- IR18 method where Graphitic C is determined by digesting sample in 50% HCl to evolve carbonate as CO<sub>2</sub>. Residue is filtered, washed, dried and then roasted at 425C. The roasted residue is analysed for carbon by oxidation, induction furnace and infrared spectroscopy. This method has a lower detection limit of 0.02% TGC and an upper detection limit of 50% TGC.</p> <p><b>Reverse Circulation Drilling 2023 &amp; Total Carbon (TC) vs Total Graphitic Carbon (TGC)</b></p> <p>The 2023 results presented herein (from GB003RC and GB004RC) were from RC drilling material collected in essentially the same manner as described above, but analysed for Total Carbon by C- IR07 method, this involves induction furnace fusion digestion with total carbon determined by oxidation, induction furnace and infrared spectroscopy.</p>
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	
	<i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i>	
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	



		<p>A 32-sample suite has been analysed from 2013/2014 drilling sample which comprised ALS methods for Total Carbon (C-IR07) and TGC (C-IR18), in addition to the original Intertek TGC value (Leco furnace, equivalent to C-IR18). Of these 32 samples, three (180901, 180480 &amp; 61228) reported significant Total C vs TGC (Delta C) variances &gt; 1.25%. These samples also had the highest Ca values in the dataset. The Delta C value (simple difference in wt% abundance between methods) applied to the 32 sample population also shows a strong correlation with analytes (from Acid-Base Accounting analyses on this same sample suite) including CO<sub>2</sub>, Fizz Rating, NNP &amp; NP. Potentially meaningful, but weaker correlations are observed with Mg &amp; Sr (positive) and Al &amp; Si (negative) from pXRF analyses of these same pulps. These data are collectively interpreted to indicate that some carbonate is present in the three outlier samples. All three outlier samples are classified as Lith Group "Ad", which was probably originally a more carbonate bearing sediment, compared with the "Ap" unit, which would have been more pelitic. Two of the three Delta C outlier samples were from very shallow depths (180901, from 0 – to 1 m and 612287, from 3 – 4 m) and were logged as "weathered". The third, 180480, was from 29-30 m and logged as "transitional". This suggests the possibility that carbonate may be more likely driven by surficial weathering processes such as calcretisation, rather than any incomplete de-volatilisation during prograde metamorphism of originally calcareous sediments. When these three samples are excluded then the mean of the Delta C is approximately 0.15%, a value which is within 1 Standard Deviation (SD) of the C-IR07 method as indicated by the performance of 33 laboratory duplicates from the 2023 RC program (submissions BUX112 &amp; BUX116, SD = 0.22% TC). The laboratory duplicates from multi element analysis indicates a lower SD (submission BUX114, SD = 0.9% TC), however this is only a 3 sample population. The combined dataset of all laboratory duplicates by C-IR07 (Total Carbon) has a SD = 0.21% TC, which is presently the best &amp; most conservative value for the accuracy of the 2023 Graphite Bull assay intervals.</p> <p>As part of the 2023 scout RC drill program, 491 samples (being a mixture of 1m splits, 2, 3 &amp; 4m composites) were submitted to ALS under submission BUX112 for analysis by Total C (C-IR07 – reported as PH23058916) and 51 samples (45 RC samples + 6 CRM standards) were selected for additional analysis by TGC (C-IR18 – reported as PH23071694). The average difference between TC and TGC ("Delta C") for the 45 drill samples is 0.05% with an SD of 0.22%. Therefore, for the purposes of this Announcement, the TC values are essentially equivalent to the TGC values. However, to support the upcoming Resource Estimate, and on ERM's recommendation, Buxton has submitted pulp samples for all remaining 2023 RC intervals with TC-only data for reanalysis by C-IR18 (TGC).</p> <p>For both RC and Diamond drilling methods, the sample sizes are considered appropriate for the grain size and abundance levels of the material being sampled.</p>
<i>Quality of assay data and laboratory tests</i>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	ALS Geochemistry run a global quality program which includes inter-laboratory test programs and regularly



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		<p>scheduled internal audits that meet all requirements of ISO/IEC 17025:2017 and ISO 9001:2015.</p> <p>Per above, the C-IR18 (and C-IR07) method is considered a (total) graphitic carbon method appropriate for this type of sample material.</p>
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	The release does not include data from geophysical or handheld XRF tools.
	<i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i>	<p>Quality Control and Quality Assurance procedures implemented to check sampling and assaying precision included duplicate samples using the same sub-sampling technique. Standards and blanks were also included to ensure sampling quality at a rate of 1 in 10.</p> <p>The QA results indicate that an appropriate level of laboratory precision and accuracy has been established.</p>
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	<p>Senior company geological personnel onsite for the entirety of the drilling and logging process.</p> <p>The logging is be validated by a BUX on-site geologist and in Perth and compiled onto the BUX MX Deposit drill hole database</p> <p>Assay data is be imported directly from digital assay files from contract analytical company ALS (Perth) and merged in the Company MX Deposit drill hole database.</p> <p>Data is backed up regularly in off-site secure servers.</p> <p>No new geophysical results are used in exploration results reported.</p>
	<i>The use of twinned holes.</i>	No historic holes were twinned as part of this program, however the program did include a component of check drilling in the existing Resource area. This program also utilised scissor holes to confirm mineralisation orientation and continuity.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Logging and sampling were recorded directly into a digital database (MX Deposit).
	<i>Discuss any adjustment to assay data.</i>	No adjustments to assay data have been made.
Location of data points	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	<p>The surface hole collar location was initially surveyed using a handheld GPS unit with an expected accuracy of <math>\pm 6</math> m for easting and northing with elevation also recorded. The collar positions were subsequently picked up by differential GPS (reported above).</p> <p>Drill path gyroscopic surveys were at 0m and at subsequent 30m downhole intervals to final hole depth using an Axis Gyro tool.</p>
	<i>Specification of the grid system used.</i>	All coordinates are presented in GDA2020 / MGA Zone 50 South grid system.
	<i>Quality and adequacy of topographic control.</i>	Topographic control was provided by a Digital Elevation Model (DEM) derived from the 2024 Drone survey which provided a DEM with a 0.05cm resolution and +/- 0.5m vertical accuracy.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	<p>See table in the body of the release for drill hole locations and collar orientations.</p> <p style="text-align: center;">Diamond Drilling</p> <p>The spacing and distribution of the new Diamond Drilling is considered not suitable for mineral resource estimations at the present time as the program was designed to test the relationship between EM</p>
	<i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>	
	<i>Whether sample compositing has been applied.</i>	





		<p>conductors and graphite mineralisation along at depth from the known resource. The results from this drill hole may be utilised in future mineral resource estimations at the discretion of the relevant Competent Person.</p> <p><b>Reverse Circulation Drilling</b></p> <p>The spacing and distribution of the new RC drilling is considered suitable for mineral resource and the results from the RC drill holes are intended to be utilised in future mineral resource estimations at the discretion of the relevant Competent Person.</p>
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The orientation of the drilling aimed to reduce sampling bias within the access limitations imposed by topographic relief.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The orientation of the drilling in respect to the interpreted orientation of mineralised zones is presented in the accompanying figures.
Sample security	The measures taken to ensure sample security.	<p>The chain-of-sample custody is managed by the BUX staff from collection at the rig to the submission of the samples to ALS Limited – Perth for analysis.</p> <p>Samples are being stored at the drill site before being transported and processed at BUX's secure sample processing and storage facility in Belmont, Perth.</p> <p>Sample reconciliation advice is sent by ALS-Perth to BUX's Geological Database Administrator on receipt of the samples.</p> <p>Any inconsistencies between the despatch paperwork and samples received is resolved with BUX before sample preparation commences.</p> <p>Sample preparation and analysis is completed at one of the ALS laboratories in Perth.</p> <p>The risk of deliberate or accidental loss or contamination of samples is considered very low.</p>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Sampling procedures are essentially identical to those followed by Buxton in 2013/14 which have previously been reviewed and found to be adequate by an independent resource geologist.

## JORC Table: Section 2 – Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	<p>BUX have a 100% interest in exploration license E09/1985.</p> <p>A 0.75% Gross Revenue Royalty was granted under a Tenement Sale Agreement dated 31 March 2016, between Montezuma Mining Company Ltd ("Montezuma") and Buxton Resources Limited. This royalty is currently held by Electric Royalties Ltd (TSXV:ELEC &amp; OTCQB:ELEC).</p>
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenement is in good standing with DEMIRS and there are no known impediments for exploration on this tenement.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<p>Numerous exploration parties have held portions of the area covered by BUX tenure previously. The only substantive historical exploration for graphite was undertaken by CEC in 1974 – see WAMEX report A6556.</p> <p>No other parties were involved in the exploration program that generated data that was used in this release.</p>



<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>The Graphite Bull Project area lies within the Errabiddy Shear Zone, situated at the contact between the Glenburgh Terrane of the Gascoyne Province and the Narryer Terrane of the Yilgarn Craton, on the southwestern margin of the Capricorn Orogen.</p> <p>The known graphitic mineralisation occurs as lenses in graphitic paragneiss assigned to the Quartpot Pelite. This unit has been interpreted to have been deposited between 2000 Ma and 1985 Ma in a fore-arc setting to the Dalgaringa continental margin arc (part of the Glenburgh Terrain), and subsequently deformed between 1965–1950 Ma during the Glenburgh Orogeny within the Errabiddy Shear Zone which represents the suture between the colliding Pilbara–Glenburgh and Yilgarn Cratons.</p> <p>All units at Graphite Bull show evidence for metamorphism in the amphibolite to granulite facies, with the production of voluminous leucosomes and leucogranites within the pelitic lithologies.</p>
<b>Drill hole Information</b>	<p><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i></p> <ul style="list-style-type: none"> <li>o easting and northing of the drill hole collar</li> <li>o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>o dip and azimuth of the hole</li> <li>o down hole length and interception depth</li> <li>o hole length</li> </ul> <p><i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></p>	See the body of the release for drillhole data as compiled by Buxton.
<b>Data aggregation methods</b>	<p><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i></p> <p><i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<p>Simple composites were calculated using Micromine software at three cutoff grades (5%, 10% and 15%) to allow for assessment of TGC grade variability and continuity. Waste is allowed such that the overall intersection is limited by the cutoff grade.</p> <p>The intersections reported are length-weighted averages. The TGC results do not show a strong log-normal distribution and a nugget effect is therefore not apparent - no high-grade cut-off has been used.</p> <p>The background TGC levels outside the reported intervals are &lt; 0.02% TGC. The lowest cut-off grade applied (5%) is therefore &gt;250 x background.</p> <p>The visual estimates of graphite abundance were used to manually select these intercepts, which contain material with estimated graphite content above 5%. The intercept intervals have been selected to contain minimal internal dilution (material less than 5% visual estimated TGC over a maximum of 10% of the estimated interval length). No weighted averages are reported for visual estimates and a high-grade cut-off of 10% visually estimated TGC has been used.</p> <p>No reporting of metal equivalent values has been included in this release.</p>
	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	See text and figures in body of release for the orientation of drillholes.



*Relationship between mineralisation widths and intercept lengths*

*If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*

*If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*

Well-drilled graphite mineralisation, and modelling of Ground EM results, indicate that graphite mineralisation has a consistently steep dip (75-85 degrees) toward the south-southeast, however folding and faulting results in local variation documented by analysis of recent surface structural mapping and logging of orientated diamond drilling core. Buxton is presently utilising this information (along with systematic pXRF, density, SWIR and mag susc measurements) to prepare a solid 3D geological model.



*example of folding in GB007DD, ~458.8m depth*

Preliminary interpretation presented in the figures in the body of the release was used to determine a drilled : true thicknesses ratio for each reported hole, which are presented below as a true thickness factor.

Hole	True thickness factor
GB006DD	71%
GB008RC	69%
GB009RC	100%
GB010RC	100%
GB011RC	92%
GB012RC	38%
GB013RC	63%
GB014RC	76%
GB015RC	58%
GB016RC	74%
GB017RC	77%
GB018RC	44%
GB019RC	66%
GB020RC	67%
GB021RC	54%
GB022RC	57%
GB023RC	74%
GB024RC	60%
GB025RC	33%
GB026RC	63%
GB027RC	64%



		<table><tr><td>GB028RC</td><td>81%</td></tr><tr><td>GB029RC</td><td>9%</td></tr><tr><td>GB030RC</td><td>59%</td></tr><tr><td>GB031RC</td><td>74%</td></tr><tr><td>GB032RC</td><td>80%</td></tr><tr><td>GB033RC</td><td>91%</td></tr><tr><td>GB034RC</td><td>63%</td></tr></table>	GB028RC	81%	GB029RC	9%	GB030RC	59%	GB031RC	74%	GB032RC	80%	GB033RC	91%	GB034RC	63%
GB028RC	81%															
GB029RC	9%															
GB030RC	59%															
GB031RC	74%															
GB032RC	80%															
GB033RC	91%															
GB034RC	63%															
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	See text and figures in body of release.														
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	The basis of reporting mineralised intervals is described above. The release is considered comprehensive and balanced with respect to assays and visually estimated grades and widths intersected in the drilling program.														
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.	All exploration data which may be meaningful and material to the interpretation of the drilling results is presented within this release.														
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	See text and figures in body of release.														
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	See figures in body of release.														

### Cautionary Note Regarding Forward-Looking Information

This Announcement contains forward-looking statements and forward-looking information within the meaning of applicable Australian securities laws, which are based on expectations, estimates and projections as of the date of publication. This forward-looking information includes, or may be based upon, without limitation, estimates, forecasts and statements as to management's expectations with respect to, among other things, the timing required to execute the Company's programs, and the length of time required to obtain permits, certifications and approvals.

Wherever possible, words such as "anticipate", "believe", "expect", "intend", "should", "intend", "may" and similar expressions have been used to identify such forward-looking information. Forward-looking information is based on the opinions and estimates of management at the date the information is given, and on information available to management at such time. Forward-looking information involves significant risks, uncertainties, assumptions, and other factors that could cause actual results, performance or achievements to differ materially from the results discussed or implied in the forward-looking information. These factors, including, but not limited to, fluctuations in currency markets, fluctuations in commodity prices, the ability of the Company to access sufficient capital on favourable terms or at all, changes in national and local government legislation, taxation, controls, regulations, political or economic developments in Australia or other countries in which the Company does business or may carry on business in the future, operational or technical difficulties in connection with exploration or development activities, employee relations, the speculative nature of



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mineral exploration and development, obtaining necessary licenses and permits, contests over title to properties, especially title to undeveloped properties, the inherent risks involved in the exploration and development of mineral properties, the uncertainties involved in interpreting drill results and other geological data, environmental hazards, industrial accidents, limitations of insurance coverage and the possibility of project cost overruns or unanticipated costs and expenses, and should be considered carefully.

Many of these uncertainties and contingencies can affect the Company's actual results and could cause actual results to differ materially from those expressed or implied in any forward-looking statements made by, or on behalf of, the Company. Prospective investors should not place undue reliance on any forward-looking information. Although the forward-looking information contained on in this Announcement is based upon what management believes, or believed at the time, to be reasonable assumptions, the Company cannot assure prospective purchasers that actual results will be consistent with such forward-looking information, as there may be other factors that cause results not to be as anticipated, estimated or intended, and neither the Company nor any other person assumes responsibility for the accuracy and completeness of any such forward-looking information.

The Company does not undertake, and assumes no obligation, to update or revise any such forward-looking statements or forward-looking information contained herein to reflect new events or circumstances, except as may be required by law. No stock exchange, regulation services provider, securities commission or other regulatory authority has approved or disapproved the information contained in this Announcement.

