ASX Release 7th February 2023

EXPLORATION UPDATE

Graphite Bull 100% BUX, Gascoyne Region, Western Australia

- **Ground EM results indicate potential for significant additional graphite resources along strike and at depth from the existing high-grade Resource**
- **Scout drilling program to test for strike extensions is imminent.**

Buxton Resources Ltd (ASX:BUX) is pleased to update shareholders on progress at Buxton's 100% owned Graphite Bull project, Gascoyne Region, WA.

Modelling of results from the recent Ground EM survey has now been completed by Southern Geoscience Consultants (see Fig 1 below). Multiple individual plates have been identified with conductance averaging 3,600 Siemens, up to 10,300 Siemens.

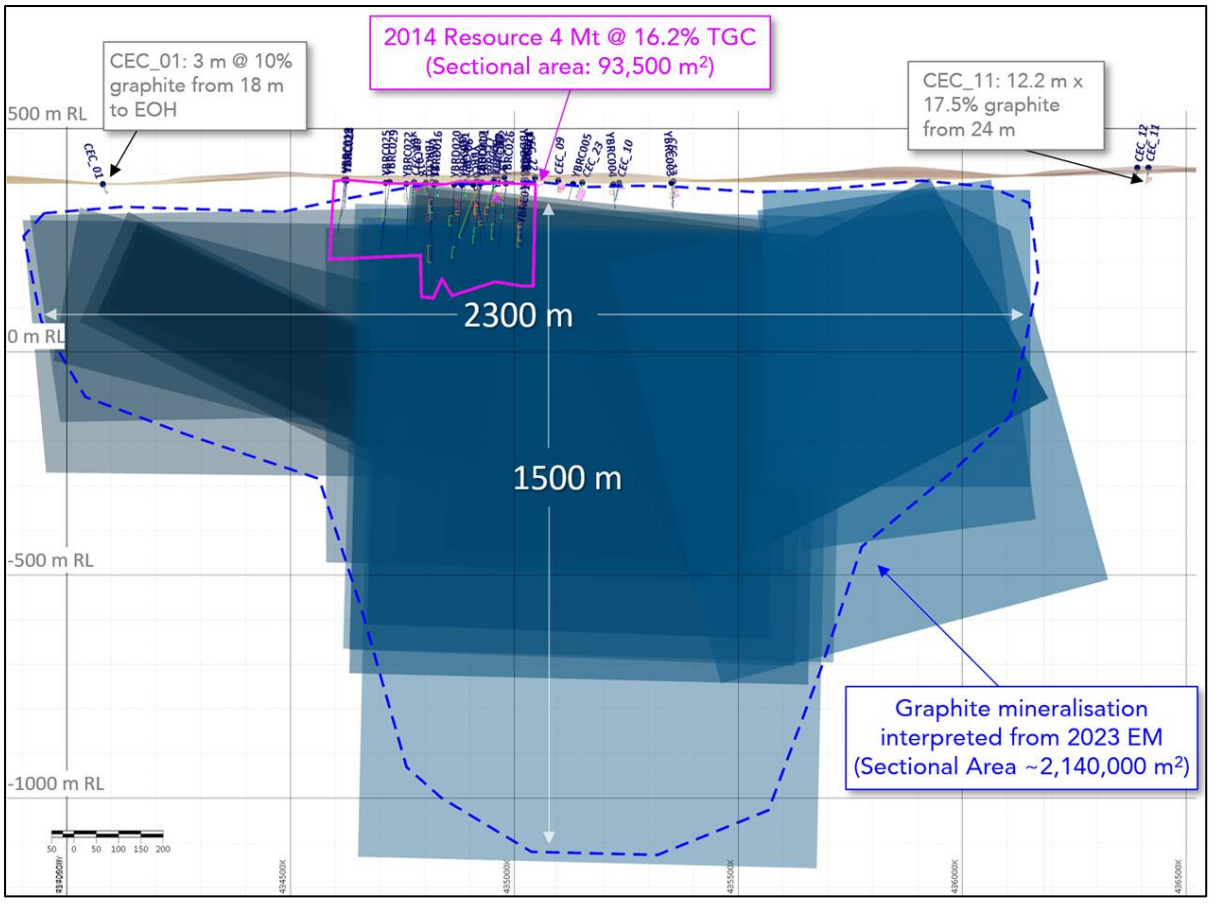

Figure 1: Long section showing modelled EM plates, the extent of Buxton's 2014 Inferred Resource along with the location of historical drillholes with significant graphite intersections noted.

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Graphite mineralisation is the only geological material identified in this area that can account for the EM anomalies.

The modelling results are best presented on long section (see Figure 1) and indicate graphite mineralisation extends along a strike length of at least **2,300 metres** within a cross-strike width of about 50 metres. Within this 2,300m, Buxton's 2014 Inferred Resource of 4 Mt @ 16.2 % Total Graphitic Carbon (TGC) occupies a strike length of just **460 metres**.

Historical drilling (1974) directly along strike but outside these modelled plates includes CEC_11 which intersected 12.2 metres @ 17.5% graphite, and CEC_13 which ended in 3 metres @ 10% graphite. These outlying intersections, coupled with existing Buxton drilling, substantially de-risk the EM modelling.

Buxton will immediately commence wide spaced exploration drilling to confirm along-strike graphite grades and thicknesses, which cannot be directly inferred from EM modelling. To that end, a second Programme of Work was submitted to DMIRS, and has been approved. This complements existing approvals for work in the central resource area, which allow for extensional drilling over approximately 1,000 metres of strike length.

Encouragingly, demand for Li-ion batteries, fuel cells and other graphite-intensive renewables technology continues to escalate, pushing the global graphite market into deficit for the first time in modern history (see Figure 2 below).

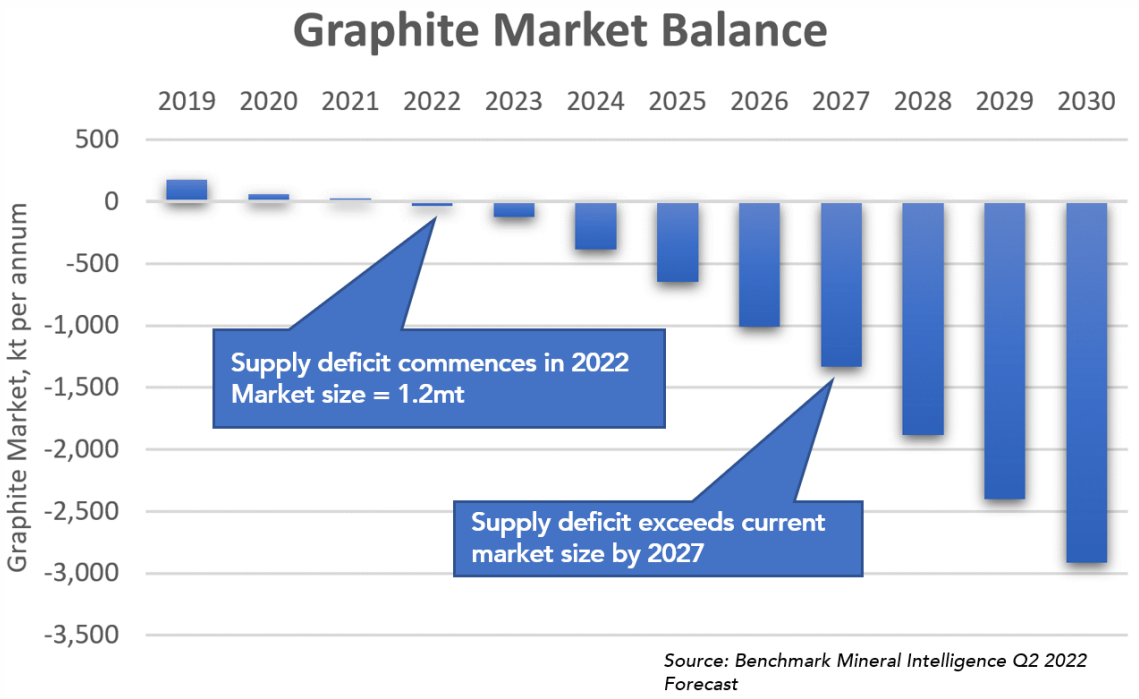

Figure 2: Increasing Graphite market deficit projected

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These ground EM results indicate that Graphite Bull is a large mineralised system, with conductive graphite mineralisation present over at least 20 times the long-sectional area of the defined Resource (see Figure 1). Mineralisation also extends far below existing drilling, with the deepest EM plates extending 1,500 m below surface. In comparison, the deepest part of the defined Resource is 250 m below surface.

Buxton looks forward to providing regular updates to shareholders on this exciting 100% Buxton-owned graphite project. For location, see Figure 3 below.

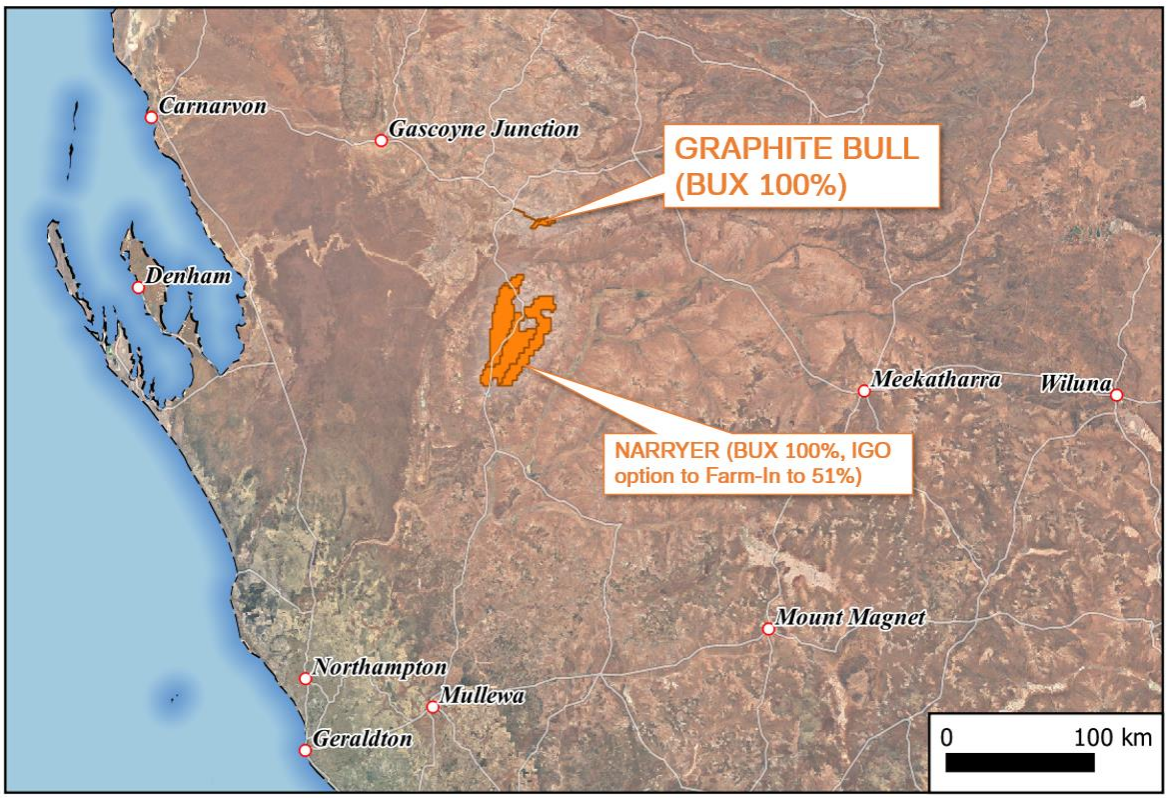

Figure 3: Graphite Bull Project Location Map

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About the Graphite Bull Project

The outcropping, high-grade Graphite Bull project, (formerly Yalbra Project) is located in the Tier 1 jurisdiction of Western Australia, Gascoyne region, on granted Exploration License E09/1985. Graphite Bull was acquired by Buxton in 2012 and by 2014 Buxton had completed an airborne EM survey, several drilling programs and two resource

estimates. The Graphite Bull project currently has a JORC (2012) compliant inferred resource of 4 Mt @ 16.2 % TGC. In 2015 Buxton completed a detailed metallurgical program with SGS laboratories in Canada which targeted coarse flake recovery.

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 accelerated work at Graphite Bull earlier in 2022. Metallurgical testwork through to final product, and increasing the Resource size, are early priorities.

According to Benchmark Mineral Intelligence, by 2040 the mining industry needs to be producing nearly 8 times as much graphite as it currently does to supply the world's lithium-ion battery anode market. Graphite Bull is therefore a very attractive investment proposition, being a high-grade deposit located in a Tier 1 mining jurisdiction, with outstanding Resource growth potential.

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 Martin Moloney, Member of the Australian Institute of Geoscientists and Society of Economic Geologist. Mr Hannon and Mr Moloney are full-time employees of Buxton Resources. Mr Hannon and Mr Moloney 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 Moloney consent to the inclusion in this report of the matters based on the information in the form and context in which it appears.

The information presented herein that relates to Exploration Results from analysis of the Ground Electromagnetic survey results is based on information compiled and reviewed by the Russell Mortimer, a Competent Person who is a Member of The Australian Institute of Geoscientists and fairly represents this information. Mr Mortimer has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activities 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 Mortimer is an independent Consultant Geophysicist at Southern Geoscience Consultants Pty Ltd and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Supplementary Table 1 - Historical Drillhole Data (not used in Resource Estimates)

Hole_ID	Easting	Northing	RL	Depth	Azimuth	Logged Graphite Intercept
CEC_01	434093	7172377	376	24.38	135	6.1m @ 6.0% graphite from 18.3m
CEC_02	433980	7172110	385	45.72	295	12.9m @ 17.8% graphite from 0m
CEC_03	434137	7172960	374	38.1	161	22.8 m @ 17.4% graphite
CEC_04	432712	7172486	379	35.05	143	16.7m @ 13.7% graphite
CEC_06	434867	7172835	380	40.54	184	33.5m @ 5.40% graphite
CEC_08	434937	7172780	386	51.82	342	21.3m @ 38.6% graphite
CEC_09	435084	7172753	384	29.57	179	23.5m @ 31.6% graphite
CEC_10	435209	7172881	379	43.89	199	40.8m @ 9.60% graphite inc. 9.1m @ 26.1% graphite
CEC_11	436396	7172938	413	42.67	340	12.2m @ 17.5% graphite
CEC_12	436371	7172936	412	28.96	341	No significant intersections
CEC_13	435333	7172859	382	53.34	356	24.4m @ 14.4% graphite
CEC_18	434927	7172850	381	51.82	169	9.1m @ 33.5% graphite
CEC_19	434963	7172749	391	41.15	162	No significant intersections

CEC_20	434760	7172747	380	39.62	349	18.3m @ 19.5% graphite
CEC_21	434807	7172764	379	35.05	360	32.0 m @ 6.80% graphite
CEC_22	435032	7172749	390	45.72	165	18.3m @ 13.4% graphite
CEC_23	435137	7172764	379	39.62	225	27.4m @ 45.8% graphite
CEC_24	436531	7173034	405	30.48	186	No significant intersections
CEC_25	433803	7172003	383	53.34	360	19.8m @ 16.0% graphite
CEC_26	433810	7171962	384	48.77	360	15.2 @ 11.0% graphite
CEC_27	433721	7171992	383	36.58	360	No significant intersections

Notes: All holes drilled at -60 degrees dip, coordinates in MGA z50, GDA94 datum. Data compiled from Shaw 1975, WAMEX A6556).

JORC Table: Section 1 – Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	*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.*	The Ground Electromagnetic (EM) survey was undertaken by Wireline Services Group using GeoResults DRTX TX4 high power transmitter (~100 Amps), highly sensitive EMIT Fluxgate B-field sensors and single-turn 16 mm copper cable. The SMTFluxgate B-field receiver used an In-loop Position. Both Moving Loop EM (MLEM) and Fixed Loop EM layouts (FLEM). The MLEM used 200 m per side loops, while the FLEM used two 550 m x 400 m loops.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	
	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.	
Drilling techniques	*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).*	Historical drilling by CEC (1974) used the Rotary Air Flush drilling technique using blade and hammer bits (hammer only being required for drilling through quartz veins)
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	CEC's 1974 report (WAMEX A6556) indicates sampling of the graphite was done at 2 m intervals, and particularly attractgive intersections were bagged in their entirety in large plastic sacks in case beneficiation tests were required.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	
	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.	
Logging	*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.*	CEC's 1974 report (WAMEX A6556) indicates percussion samples were logged for visual graphite percentage using a binocular microscope. Gangue mineralogy was also noted on approximately 3m drill rod runs.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	
	The total length and percentage of the relevant intersections logged.	
	If core, whether cut or sawn and whether quarter, half or all core taken.	CEC's 1974 report (WAMEX A6556) does notes that the entire recovered sample was stored, however the

Sub-sampling techniques and sample preparation	*If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	subsampling methodology for subsequent assaying is not defined. Neither are any quality control measures reported. The historic CEC results cannot be considered suitable for inclusion in resource estimates, and the accuracy of the results is unknown, however they can be considered a useful indicator of the presence of graphite mineralisation.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	
	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.	
	Whether sample sizes are appropriate to the grain size of the material being sampled.	
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	CEC's 1974 report (WAMEX A6556) indicates that all "better grade samples and selected lower grade samples" were assayed for loss on ignition, ferric oxide, alumina, lime magnesia, chromic oxide and silica as well as combined water and carbon as graphite.
	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.	The EM survey was undertaken by Wireline Services Group using the following key components: - EMIT SMARTem 24 Receiver - EMIT SMARTem Fluxgate - GeoResults DRTX TX4 Transmitter - 100 Amp / 250 Voltage output - EMIT Tx controller
	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.	EM data is recorded digitally and displayed live in the field, enabling operators to review the raw data for live data quality assessement. EM data was reviewed daily by an experienced independent geophysicist. The field data collection contractor Wireline Services Group operates under the following accredited systems: - ISO 14001:2015 Environmental Management Systems - ISO 45001:2018 Occupational Health & Safety Management Systems - ISO 9001:2008 Quality Management Systems
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Buxton have verified the historical intersections using twinned holes. Buxton's YBRC003 intersected 14 m @ 10.4 % TGC in comparison with CEC_13 which returned 24.4m @ 14.4% graphite. It is unknown if the variance is related to geological variance and/or variation in drilling / sampling / assaying procedures.
	The use of twinned holes.	Not applicable – the announcement does not relate to assay data.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	MLEM data was recorded digitally using EMIT SMARTem 24 Receiver. The digital data was backed-up via email from the field camp to head office and the consulting geophysicist.
	Discuss any adjustment to assay data.	CEC's 1974 report (WAMEX A6556) indicates that visual grades were then modified by a factor to reduce the

		difference between visual estimates (which were high) and percentage graphite to reduce assay costs.
Location of data points	*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.*	Where possible, Buxton have recorded hand-held GPS positions for 11 historical collars in the field. Coordinates for the remaining 10 CEC holes were determined by digitising historical maps using GPS ground control.
	Specification of the grid system used.	All surface surveying was completed using a handheld GPS to MGA94 / Zone 50 South grid system.
	Quality and adequacy of topographic control.	The MLEM crew used handheld Garmin GPS units for topographic control. The estimated accuracy of this system is 1-2m which his deemed sufficient for this type of suvey.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	The MLEM survey consisted of 75 stations conducted on 200m spaced lines with 200m spaced acquisition centres. The FLEM survey consisted of two loops, with 115 stations conducted 100 m x 100 m centres.
	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.	
	Whether sample compositing has been applied.	
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 MLEM survey achieves an unbiased sampling of the EM field by constantly moving the transmitter loop. The FLEM survey used the dip of graphitic lodes established from known drilling and resource modelling and assumed an average dip of 80 degrees toward 165 degrees azimuth.
	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.	
Sample security	*The measures taken to ensure sample security.*	The EM data was maintained on secure servers managed by WSG and the independent contractor. Final data as received by Buxton is also stored on a secure network.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	The EM survey was managed and reviewed by an independent geophysicist (Southern Geoscience Consultants).

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.*	BUX have a 100% interest in exploration license E09/1985. 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 & OTCQB:ELECF).
	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 DMIRS and there are no known impediments for exploration on this tenement.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	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. No other parties were involved in the exploration program that generated data that was used in this release.
Geology	*Deposit type, geological setting and style of mineralisation.*	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 Carton, on the southwestern margin of the Capricorn Orogen. 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. 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
Drill hole Information	*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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length* *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.*	See the body of the release for CEC drillhole data as compiled by Buxton.
Data aggregation methods	*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.* *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.* *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	CEC's 1974 report (WAMEX A6556) does not indicate the cut-off basis for reporting graphite intersections. Where Buxton has reported intersects in the JORC table above, a cutoff of 3% TGC has been used.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *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').*	Drillholes reported in this announcement were drilled at approximately 60 degrees toward the north-northwest, with graphite mineralisation having a consistently steep dip 75-85 degrees) toward the south-southeast. The resulting true thickness of these intersections are approximately 95% of the measured thickness in drilling. However, the geometry of mineralisation is relevant to the design of FLEM surveys. This geometry is well established by surface geological mapping and historical and Buxton drillhole data.
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 announcement does not relate to drilling or assay data. The basis of balanced reporting of the EM data presented herein is established by reporting all EM plates as modelled by the independent geophysicist. The aim of the modelling is to delineate subsurface zones which give rise to the anomalies as measured by the EM survey. The zones can be forward modelled such that there is a good fit between measured and modelled EM anomalies. The subsurface zones are represented as "infinitely thin plates". The plates are 3-dimensional rectangular shapes which have a conductance value but which have no thickness value. The lack of a thickness value for the modelled plates is a well-established limitation of the 3D modelling of electromagnetic data software. The relationship between grade and thickness of graphite mineralisation and the conductance of the modelled plates is unknown.
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 EM data has been presented on the figures, including historical drillhole data from CEC's .
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.

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