

AIM: ALL, ASX: A11, OTCQX: ALLIF



28 November 2023

# 106m Continuous Pegmatite Interval Reported Broad Intervals of Visible Spodumene Observed in Multiple Drill Holes Outside of the Current Mineral Resource Estimate

Longest continuous pegmatite interval reported from the ongoing, recently-enhanced 2023 drilling programme

Atlantic Lithium Limited (AIM: ALL, ASX: A11, OTCQX: ALLIF, "Atlantic Lithium" or the "Company"), the African-focused lithium exploration and development company targeting to deliver Ghana's first lithium mine, is pleased to announce that multiple broad intervals of visible spodumene have been observed in drilling outside of the current Mineral Resource Estimate<sup>1</sup> ("Resource" or "MRE") at the Company's flagship Ewoyaa Lithium Project ("Ewoyaa" or the "Project") in Ghana, West Africa.

# Highlights

Multiple broad intervals of visible spodumene reported in drilling outside of the current MRE<sup>1</sup>, significantly increasing the potential for a resource upgrade.

Longest reported continuous pegmatite interval in the 2023 drilling programme to date of 106m in hole GRC1020 from 6m at the Dog-Leg extension target on the northern tip of the Ewoyaa Main deposit.

Visible coarse-grained spodumene fragment intervals reported at shallow depths in holes:

- GRC1017: 51m interval of 25-30% visual estimated spodumene modal abundance from 83m
- **GRC1020**: 74m interval of 20-25% visual estimated spodumene modal abundance from 39m and a 41m interval of 20-25% visual estimated spodumene modal abundance from 137m
- GRC1021: 24m interval of 15-25% visual estimated spodumene modal abundance from 93m

Coarse-grained, P1-type spodumene pegmatite is preferred for the Dense Media Separation ("DMS") process flowsheet considered in the Definitive Feasibility Study for the Project (*refer announcement of 29 June 2023*).

Resource drilling ongoing; completion of the enhanced 26,500m planned programme (*refer announcement of* **7** *November 2023*) targeted for Q2 2024.

**NOTE:** 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.

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#### Commenting, Neil Herbert, Executive Chairman of Atlantic Lithium, said:

"In line with our aim of delivering an increased resource at the Ewoyaa Lithium Project, we are very pleased to report broad intervals of visible, coarse-grained spodumene in multiple drill holes near surface and outside of the current MRE footprint. These intervals further improve our confidence in delivering an updated MRE upon completion of the current drilling programme in Q2 2024.

"We are excited to have intersected our longest pegmatite interval in the 2023 drilling programme to date. Located outside of the current Resource footprint and occurring only 6m from surface, the interval includes highlight intersections of visible coarse-grained spodumene over 74m from a depth of 39m and over 41m from a depth of 137m, respectively.

"The coarse-grained, P1-type nature of the spodumene fragments observed in Reverse Circulation drilling chips is very encouraging as it performs favourably in DMS-only processing, as planned at the Ewoyaa Lithium Processing Plant, with good recoveries.

"We look forward to providing further updates from the ongoing drilling programme in due course."



Figure 1: 106m continuous pegmatite interval from 6m observed in hole GRC1020 with coarse fragments of visible spodumene evident. Further pegmatite with coarse-grained visible spodumene intersected from 116m to 122m and 137m to 178m with end of hole at 250m (not shown in this photo)

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## Broad Intervals of Visible Spodumene

Drilling outside of the current MRE<sup>1</sup> has intersected multiple intervals of pegmatite, including multiple broad intervals of coarse-grained visible spodumene at the Dog Leg prospect extension (*refer Figure 1* and *Figure 3*). The drilling forms part of the ongoing resource infill and extensional programme, which was recently increased from 18,500m to 26,500m of planned drilling, due for completion in Q2 2024 (*refer announcement of 7 November 2023*).

Highlight logged pegmatite intervals with visible estimates of spodumene modal abundance in RC drill chips are summarised in *Table 1* below, with all logged intervals and collar details reported in *Table 2* and *Table 3*.

Table 1: Highlight visual estimations of spodumene abundance in logged pegmatite intervals in new reported drilling

Hole_ID	Depth From_m	Depth To_m	Interval m	Lithology	Visible estimate Spodumene abundance %	Downhole length vs true width
GRC1017	83	134	51	Pegmatite	25-30	true width not known
GRC1018	154	157	3	Pegmatite	5	true width not known
GRC1018	160	170	10	Pegmatite	5	true width not known
GRC1020	6	38	32	Pegmatite	5-10	true width not known
GRC1020	39	113	74	Pegmatite	20-25	true width not known
GRC1020	116	122	6	Pegmatite	10-15	true width not known
GRC1020	137	178	41	Pegmatite	20-25	true width not known
GRC1021	93	117	24	Pegmatite	15-20	true width not known
GRC1022	130	152	22	Pegmatite	20-25	true width not known
GRC1022	158	187	29	Pegmatite	20-25	true width not known
GRC1023	139	147	8	Pegmatite	5-10	true width not known

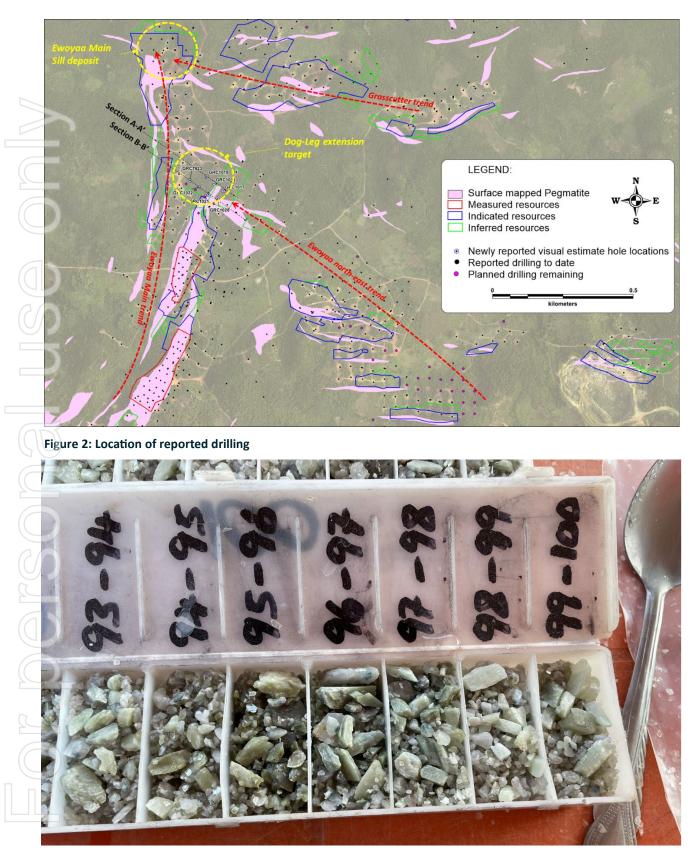
**NOTE:** Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical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

The drilling reported herewith is located at the Dog-Leg extension target on the northern tip of the Ewoyaa Main deposit, at the confluence of the Ewoyaa Main trend and the Ewoyaa North-East trend (*refer Figure 2 and Figure 6*).

A similar structural setting occurs further north at the Ewoyaa Main Sill deposit where the north-south trending Ewoyaa Main trend intersects the east-west trending Grasscutter trend and is significant as it results in flat lying sill geometry mineralisation. A similar pattern is emerging here at the Dog-Leg prospect with drilling evidence pointing to a potential flat lying geometry which may result in additional resource growth (*refer Figure 4, Figure 5 and Figure 6*).

Anticipated timing for assay receipt and review is approximately 2 to 3 months from the date of this announcement.





# Figure 3: An example of the coarse fragments of visible spodumene in RC drill chips logged in hole GRC1020 with meter depth intervals marked

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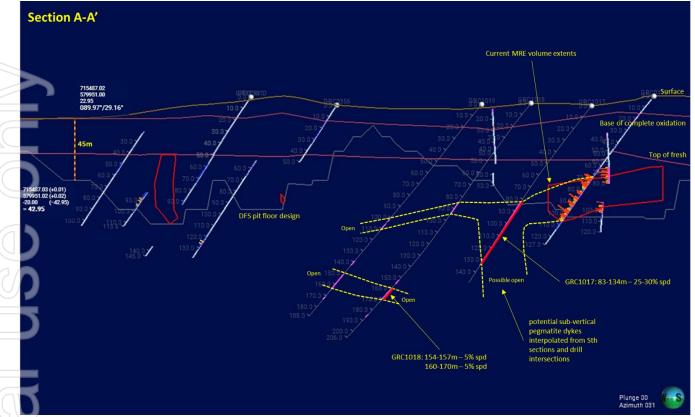


Figure 4: Cross-section interpretation A-A' for holes GRC1017, GRC1018 and GRC1019

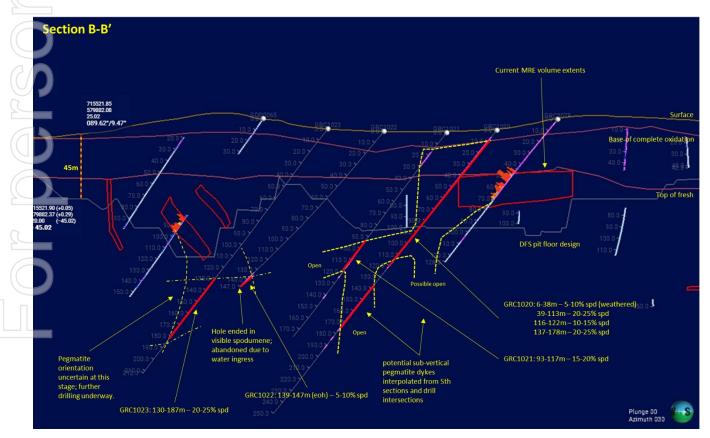


Figure 5: Cross-section interpretation B-B' for holes GRC1021, GRC1021, GRC1022 and GRC1023



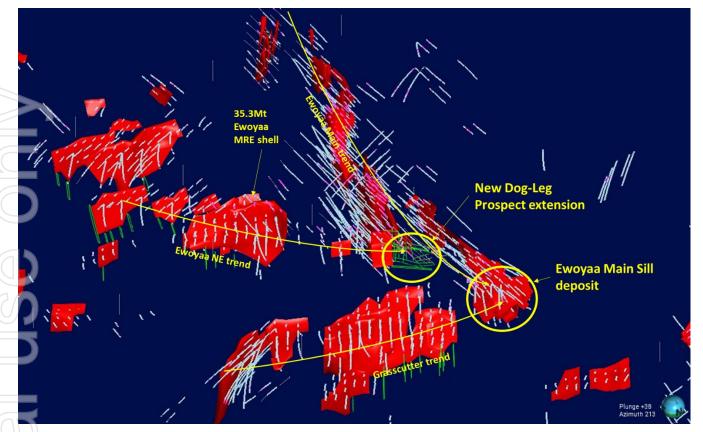


Figure 6: 3D view showing area of potential MRE<sup>1</sup> growth at the Dog-Leg prospect (circled), at the confluence of the N-S Ewoyaa Main trend and roughly E-W Ewoyaa North-East trend in a similar structural setting to the Ewoyaa North-West Sill deposit

Table 2:Reported pegmatite intervals and visual estimates of spodumene abundance. All intervening intervals are of schist<br/>lithology with no observed mineralisation. All spodumene-bearing pegmatite intervals occur as sills, dykes and veins<br/>of coarse-grained pegmatite with crystalline textured disseminated fine to coarse grained spodumene, quartz,<br/>feldspar, muscovite and accessory minerals. Where not visibly spodumene-bearing, the pegmatites occur as sills,<br/>dykes and veins of massive, crystalline coarse-grained quartz, feldspar, muscovite and accessory minerals.

Depth From_m	Depth To_m	Interval m	Lithology	Visible estimate Spodumene abundance %	True width vs downhole length
83	134	51	Pegmatite	25-30	true width not known
27	29	2	Pegmatite	not observed	
41	45	4	Pegmatite	not observed	
50	51	1	Pegmatite	not observed	
74	76	2	Pegmatite	not observed	
85	93	8	Pegmatite	not observed	
151	153	2	Pegmatite	not observed	
154	157	3	Pegmatite	5	true width not known
160	170	10	Pegmatite	5	true width not known
184	187	3	Pegmatite	not observed	
37	38	1	Pegmatite	not observed	
81	82	1	Pegmatite	not observed	
90	92	2	Pegmatite	not observed	
94	96	2	Pegmatite	not observed	
	From_m 83 27 41 50 74 85 151 154 160 184 37 81 90	From_m         To_m           83         134           27         29           41         45           50         51           74         76           85         93           151         153           154         157           160         170           184         187           37         38           81         82           90         92	From_mTo_mm8313451272924145450511747628593815115321541573160170101841873373818182190922	From_mTo_mmLithology8313451Pegmatite27292Pegmatite41454Pegmatite50511Pegmatite74762Pegmatite85938Pegmatite1511532Pegmatite1541573Pegmatite16017010Pegmatite37381Pegmatite81821Pegmatite90922Pegmatite	Depth From_mDepth To_mInterval mLithologySpodumene abundance %8313451Pegmatite25-3027292Pegmatitenot observed41454Pegmatitenot observed50511Pegmatitenot observed74762Pegmatitenot observed85938Pegmatitenot observed1511532Pegmatitenot observed1541573Pegmatite516017010Pegmatite51841873Pegmatitenot observed37381Pegmatitenot observed90922Pegmatitenot observed



GRC	1019	101	104	3	Pegmatite	not observed	
GRC	1019	107	111	4	Pegmatite	not observed	
GRC	1019	139	142	3	Pegmatite	not observed	
GRC	1019	151	156	5	Pegmatite	not observed	
GRC	1019	157	164	7	Pegmatite	not observed	
GRC	1019	171	173	2	Pegmatite	not observed	
GRC	1020	6	38	32	Pegmatite	5-10	true width not known
GRC	1020	39	113	74	Pegmatite	20-25	true width not known
GRC	1020	116	122	6	Pegmatite	10-15	true width not known
GRC	1020	137	178	41	Pegmatite	20-25	true width not known
GRC	1020	183	186	3	Pegmatite	not observed	
GRC	1020	190	193	3	Pegmatite	not observed	
GRC	1021	17	30	13	Pegmatite	not observed	
GRC	1021	93	117	24	Pegmatite	15-20	true width not known
GRC	1021	124	126	2	Pegmatite	not observed	
GRC	1021	140	143	3	Pegmatite	not observed	
GRC	1021	235	237	2	Pegmatite	not observed	
GRC	1022	81	82	1	Pegmatite	not observed	
	1022	85	86	1	Pegmatite	not observed	
GRC	1022	126	127	1	Pegmatite	not observed	
GRC	1022	130	152	22	Pegmatite	20-25	true width not known
GRC	1022	158	187	29	Pegmatite	20-25	true width not known
GRC	1022	190	193	3	Pegmatite	not observed	
GRC	1023	89	91	2	Pegmatite	not observed	
GRC	1023	105	108	3	Pegmatite	not observed	
GRC	1023	139	147	8	Pegmatite	5-10	true width not known

**NOTE:** 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.

Table 3: Reported drill hole collars using handheld GPS as at time of reporting collars have not been surveyed

Hole_ID	Hole_Type	Hole_Depth m	Orig_Grid_ID	Orig_East	Orig_North	Orig_RL	Azimuth	Dip	Comments
GRC1017	RC	156	WGS84_30N	715788	579761	31	305	-50	
GRC1018	RC	206	WGS84_30N	715755	579787	33	306	-50	
GRC1019	RC	188	WGS84_30N	715731	579813	32	307	-50	
GRC1020	RC	250	WGS84_30N	715768	579733	27	308	-50	
GRC1021	RC	241	WGS84_30N	715736	579747	26	309	-50	
GRC1022	RC	147	WGS84_30N	715702	579775	27	310	-50	hole abandoned in mineralisation due to water ingress
GRC1023	RC	212	WGS84_30N	715671	579799	28	311	-50	



## **End Notes**

## <sup>1</sup> Ore Reserves, Mineral Resources and Production Targets

The information in this announcement that relates to Ore Reserves, Mineral Resources and Production Targets complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). The information in this announcement relating to the Mineral Resource Estimate ("MRE") of 35.3Mt @ 1.25% Li<sub>2</sub>O for Ewoyaa is extracted from the Company's announcement dated 1 February 2023, which is available at <u>atlanticlithium.com.au</u>. The MRE includes a total of 3.5Mt @ 1.37% Li<sub>2</sub>O in the Measured category, 24.5Mt @ 1.25% Li<sub>2</sub>O in the Indicated category and 7.4Mt @ 1.16% Li<sub>2</sub>O in the Inferred category. The Company confirms that all technical parameters underpinning the MRE continue to apply. Material assumptions for the Project have been revised on grant of the Mining Lease for the Project, announced by the Company on 20 October 2023. The Company is not aware of any new information or data that materially affects the information included in this announcement or the announcements dated 1 February 2023 and 20 October 2023.

## Competent Persons

Information in this report relating to the exploration results is based on data reviewed by Mr Lennard Kolff (MEcon. Geol., BSc. Hons ARSM), Chief Geologist of the Company. Mr Kolff is a Member of the Australian Institute of Geoscientists who has in excess of 20 years' experience in mineral exploration and is a Qualified Person under the AIM Rules. Mr Kolff consents to the inclusion of the information in the form and context in which it appears.

This announcement contains inside information for the purposes of Article 7 of the Market Abuse Regulation (EU) 596/2014 as it forms part of UK domestic law by virtue of the European Union (Withdrawal) Act 2018 ("MAR"), and is disclosed in accordance with the Company's obligations under Article 17 of MAR.

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## Notes to Editors:

#### **About Atlantic Lithium**

#### www.atlanticlithium.com.au

Atlantic Lithium is an AIM and ASX-listed lithium company advancing a portfolio of lithium projects in Ghana and Côte d'Ivoire through to production.

The Company's flagship project, the Ewoyaa Project in Ghana, is a significant lithium spodumene pegmatite discovery on track to become Ghana's first lithium-producing mine.

The Definitive Feasibility Study for the Project indicates the production of 3.6Mt of spodumene concentrate over a 12year mine life, making it one of the top 10 largest spodumene concentrate mines in the world.

The Project, which was awarded a Mining Lease in October 2023, is being developed under a funding agreement with Piedmont Lithium Inc.

Atlantic Lithium holds 509km<sup>2</sup> and 774km<sup>2</sup> of tenure across Ghana and Côte d'Ivoire respectively, comprising significantly under-explored, highly prospective licences.



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

(Criteria in this section apply to all succeeding sections).

Criteria		JORC Code Explanation		Commentary
Sampling techniques	•	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under		RC drill holes were routinely sampled at 1m intervals with a nominal 3-6kg sub-sample split off for assay using a rig-mounted cone splitter at 1m intervals.
		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.	•	For assaying, splits from all prospective ore zones (i.e. logged pegmatites +/- interburden) were sent for assay. Outside of these zones, the splits were composited to 4m using a portable riffle splitter.
	•	Include reference to measures taken to ensure sample	•	Holes without pegmatite were not assayed.
	•	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.	•	Approximately 5% of all samples submitted were standards and coarse blanks. Blanks were typically inserted with the interpreted ore zones after the drilling was completed.
	•	In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases more	•	Approximately 2.5% of samples submitted were duplicate samples collected after logging using a riffle splitter and sent to an umpire laboratory. This ensured zones of interest were duplicated and not missed during alternative routine splitting of the primary sample.
		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.	•	Although no assays are reported herewith, samples were sent to Intertek Tarkwa for sample preparation (SP02/SP12) and subsequently forwarded to Intertek Perth for analysis (FP6/MS/OES - 21 element combination Na <sub>2</sub> O <sub>2</sub> fusion with combination OES/MS).



Criteria	JORC Code Explanation		Commentary
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.)</li> </ul>	•	RC drilling was completed using a 5.75-inch face sampling hammer.
	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.).		Representative RC drill chips were collected on 1m intervative through all pegmatite zones using a rig mounted cone splitter for geological, structural and geotechnical logging
Drill sample	Method of recording and assessing core and chip	•	by a Company geologist. A semi-quantitative estimate of sample recovery was
recovery	sample recoveries and results assessed. Measures taken to maximise sample recovery and		completed for the vast majority of drilling. This involved weighing both the bulk samples and splits and calculating theoretical recoveries using assumed densities. Where
	<ul> <li>ensure representative nature of the samples.</li> <li>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.</li> </ul>		samples were not weighed, qualitative descriptions of the sample size were recorded. Some sample loss was recorded in the collaring of the RC drill holes.
Logging	geologically and geotechnically logged to a level of		All drill sample intervals were geologically logged by Company geologists.
	detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.		Where appropriate, geological logging recorded the abundance of specific minerals, rock types and weathering
	<ul> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> </ul>		using a standardised logging system that captured preliminary metallurgical domains.
	<ul> <li>The total length and percentage of the relevant intersections logged.</li> </ul>		Visual estimates of spodumene modal abundance were logged and estimated using a visual percentage estimatio chart as a guide.
D			All logging is qualitative, except for the systematic collection of magnetic susceptibility data which could be considered semi quantitative.
			Strip logs have been generated for each drill hole to cross check geochemical data with geological logging.
			A small sample of washed RC drill material was retained i chip trays for future reference and validation of geologica logging, and sample reject materials from the laboratory are stored at the Company's field office.
			All drill holes have been logged and reviewed by Compan technical staff.
		•	A total of 1,400m of RC drilling is reported which was logged in its entirety at 1m intervals.



Criteria		JORC Code Explanation		Commentary
Sub-sampling techniques and sample	•	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary	•	RC samples were cone split at the drill rig. For interpreted waste zones the 1 or 2m rig splits were later composited using a riffle splitter into 4m composite samples.
preparation	•	split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique.	•	Since December 2018, samples were submitted to Intertek Tarkwa (SP02/SP12) for sample preparation. Samples were weighed, dried and crushed to -2mm in a Boyd crusher with
	•	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.		an 800-1,200g rotary split, producing a nominal 1,500g split crushed sample; which was subsequently pulverised in a LM2 ring mill. Samples were pulverised to a nominal 85% passing 75µm. All the preparation equipment was flushed
	•	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.		with barren material prior to the commencement of the job. Coarse reject material was kept in the original bag. Lab sizing analysis was undertaken on a nominal 1:25 basis. Final pulverised samples (20g) were airfreighted to Intertek in Perth for assaying.
	Whether sample sizes are appropriate to the grain of the material being sampled.		•	The vast majority of samples were drilled dry. Moisture content was logged qualitatively. All intersections of the water table were recorded in the database.
			•	Field sample duplicates were taken to evaluate whether samples were representative and understand repeatability, with good repeatability.
			•	Sample sizes and laboratory preparation techniques were appropriate and industry standard.
Quality of assay data and	•	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	•	No assay results are being reported.
laboratory tests	•	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.		
$\mathcal{O}$	•	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.		
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Criteria		JORC Code Explanation		Commentary
Verification of sampling and assaying	f•	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes.	•	Significant intersections were visually field verified by company geologists and Shaun Searle of Ashmore during the 2019 site visit.
	•	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	•	Drill hole data was compiled and digitally captured by Company geologists in the field. Where hand-written information was recorded, all hardcopy records were kep and archived after digitising.
	•	Discuss any adjustment to assay data.	•	Drilling data were captured on paper and locked excel templates and migrated to LogChief which has inbuilt dat validation protocols. All analytical results were transferred digitally and loaded into the database by a Datashed consultant.
			•	The data was audited, and any discrepancies checked by the Company personnel before being updated in the database.
			•	No assay results are being reported.
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. Specification of the grid system used. Quality and adequacy of topographic control.	•	The time of reporting, the collar locations were surveyed WGS84 Zone 30N using handheld GPS. Prior to Resource estimation, the collar locations will be surveyed in WGS84 Zone 30 North using DGPS survey equipment, which is accurate to 0.11mm in both horizon and vertical directions by qualified surveyors. Once validated, the survey will be uploaded into Datashed.
000	• Quality and adequacy of topographic control.	•	RC drill holes were routinely down hole surveyed using a Reflex SPRINT tool. LiDAR survey was completed by Southern Mapping to produce rectified colour images and a digital terrain mod (DTM) 32km <sup>2</sup> , Aircraft C206 aircraft-mounted LiDAR Rieg Q780 Camera Hasselblad H5Dc with 50mm Fixfocus lens Coordinate system: WGS84 UTM30N. The topographic survey and photo mosaic output from t survey is accurate to 20mm. Locational accuracy at collar and down the drill hole is considered appropriate for reporting of exploration resu	
Data spacing and distribution	•	Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and	•	The RC holes were drilled on a nominal 40m x 40m grid a 50 degree inclination towards 305 azimuth. Where possible, holes are generally angled perpendicula to interpreted mineralisation orientations at the Project.
		Ore Reserve estimation procedure(s) and classifications applied.	•	Samples were composited to 1m intervals prior to loggin
	•	Whether sample compositing has been applied.		



Criteria		JORC Code Explanation		Commentary
Orientation of data in relation to	•	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit	•	As a guiding rule, the drill line and drill hole orientation are oriented as close as practicable to perpendicular to the orientation of the general mineralised orientation.
geological structure	•	type. 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.	•	As this is a new area of drilling, the general mineralised orientation is not well constrained and some reported intervals may be oblique to mineralisation. Orientation based sampling bias is identified in the data.
Sample security	•	The measures taken to ensure sample security.	•	Samples were stored on site prior to road transportation by Company personnel to the SGS preparation laboratory.
			•	With the change of laboratory to Intertek, samples were picked up by the contractor and transported to the sample preparation facility in Tarkwa.
Audits or reviews	•	The results of any audits or reviews of sampling techniques and data.	•	Prior to the drilling programme, a third-party Project review was completed by an independent consultant experienced with the style of mineralisation.
			•	In addition, Shaun Searle of Ashmore reviewed drilling and sampling procedures during the 2019 site visit and found that all procedures and practices conform to industry standards.



## 'JORC Code 2012 Table 1' Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section).

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. 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 Project covers two contiguous licences the Mankessim (RL 3/55) and Mankessim South (PL3/109) licence. The Mankessim is a joint-venture, with the licence in the name of the joint-venture party (Barari DV Ghana Limited). Document number: 0853652-18. The Project occurs within a Mineral Prospecting licence and was renewed on the 27 July 2021 for a further three-year period, valid until 27 July 2024. The Mankessim South licence is a wholly-owned subsidiary of Green Metals Resources. The Mineral Prospecting licence renewal was submitted in Nov 2022 for a further three-year period. The tenement is in good standing with no known impediments. Mining Lease granted in respect of the Project for a period of 15 years, effective 20 October 2023 until 19 October 2038, file
				number ML 3/239.
Exploration done by other parties	•	Acknowledgment and appraisal of exploration by other parties.	•	Historical trenching and mapping were completed by the Ghana Geological survey during the 1960s. But for some poorly referenced historical maps, none of the technical data from this work was located. Many of the historical trenches were located, cleaned and re-logged. No historical drilling was completed.
Geology	•	Deposit type, geological setting and style of mineralisation.	•	Pegmatite-hosted lithium deposits are the target for exploration. This style of mineralisation typically forms as dykes and sills intruding or in proximity to granite source rocks.
			•	Surface geology within the Project area typically consists of sequences of staurolite and garnet-bearing pelitic schist and granite with lesser pegmatite and mafic intrusives. Outcrops are typically sparse and confined to ridge tops with colluvium and mottled laterite blanketing much of the undulating terrain making geological mapping challenging. The hills are often separated by broad, sandy drainages.
Drillhole	•	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:	•	All information is included in the body of the announcement and appendices. No drill hole information was excluded.
	•	easting and northing of the drill hole collar		
	•	elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar		
	•	dip and azimuth of the hole		
	•	downhole length and interception depth		
	•	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.		



Criteria		JORC Code Explanation		Commentary
Data aggregation methods	•	<ul> <li>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.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of</li> </ul>	•	Visual estimates of modal spodumene abundance are being reported within all intersected pegmatite intervals within the reported drill holes of this announcement. Average ranges with 5% visual estimation variance were composited for summary reporting into larger intervals dependent on spodumene modal abundance within logged 1m drill sample intervals.
		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	•	For assay, the samples have not been composited as per the visual estimate spodumene logs, and have been submitted at 1m intervals within all pegmatite intervals for reporting once received.
	•	equivalent values should be clearly stated.	•	No metal equivalent values are being reported.
			•	Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses wher 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
Relationship between mineralisation	•	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect	•	The drill line and drill hole orientation are oriented as close to 90° degrees to the orientation of the anticipated mineralised orientation as practicable.
widths and intercept lengths		to the drill hole angle is known, its nature should be reported.	•	The majority of the drilling is interpreted to intersect the mineralisation at 45°, however this is uncertain without further drilling.
D	•	If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').	•	Downhole lengths are reported and true widths are uncertain at this stage.
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.	•	Relevant diagrams have been included within the body of the announcement.
Balanced reporting	•	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should	•	All hole collars were surveyed WGS84 Zone 30 North grid using a handheld GPS. All RC holes were down-hole surveyed with a north-seeking gyroscopic tool.
15		be practiced to avoid misleading reporting of Exploration Results.	•	All pegmatite intervals have been reported whether observe with visual spodumene or not.
Other substantive exploration	•	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results;	•	Results were visually estimated from drill hole chips, with geological logging used to aid interpretation of mineralised contact positions.
data		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.	•	Geological observations are included in the announcement.
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).	•	Follow up RC and DD drilling may be undertaken. Further metallurgical test work may be required as the Projectory of the study states.
	•	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	•	progresses through the study stages. Drill spacing is currently considered adequate for the current level of interrogation of the Project.