

AIM: ALL, ASX: A11, OTCQX: ALLIF

8 August 2023

# Resource and Exploration Drilling Results Drilling Returns High-grade Infill and Extensional Intersections Ewoyaa Lithium Project Ghana, West Africa

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 further assay results from the resource and exploration drilling programme underway at the Ewoyaa Lithium Project ("Ewoyaa" or the "Project") in Ghana, West Africa.

# Highlights:

Further assay results received for 5,444m of infill and exploration reverse circulation ("RC") drilling completed at Ewoyaa as part of the broader 18,500m 2023 planned drilling programme.

Newly reported assay results infill mineralisation at the Ewoyaa South-2 deposit, part of the 35.3 Mt @ 1.25% Li<sub>2</sub>O Ewoyaa Mineral Resource Estimate<sup>1</sup> ("MRE" or the "Resource"), and extend mineralisation to depth at the Ewoyaa North-East deposit, outside of the current Resource.

Infill drilling designed to convert Inferred Resources to higher confidence Indicated Resources at the Ewoyaa South-2 deposit for future mine sequencing optionality and to grow the MRE where mineralisation remains open at depth or along strike.

Multiple high-grade drill intersections reported as downhole intercepts, with estimated true widths included in the intersections table, including highlights at a 0.4% Li<sub>2</sub>O cut-off and a maximum 4m of internal dilution of:

- GRC0928: 23m at 1.75% Li<sub>2</sub>O from 184m
- $\circ\quad$  GRC0911: **15m** at **1.3%** Li\_2O from 68m
- $\circ\quad$  GRC0911: 14m at 1.27% Li\_2O from 48m
- $\circ$  GRC0927: **9m** at **1.57%** Li<sub>2</sub>O from 263m
- $\circ\quad$  GRC0912: **14m** at **0.99%** Li\_2O from 6m
- GRC0910: 11m at 1.22% Li<sub>2</sub>O from 65m
- o GRC0914: 13m at 0.97% Li<sub>2</sub>O from 96m
- $\circ\quad$  GRC0935: 10m at 1.22% Li\_2O from 202m
- o GRC0918: 9m at 1.33% Li<sub>2</sub>O from 94m
- o GRC0915: 11m at 0.98% Li<sub>2</sub>O from 106m

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### Commenting on the Company's latest progress, Neil Herbert, Executive Chairman of Atlantic Lithium, said:

"We are pleased to report ongoing drilling assay results across the Ewoyaa Lithium Project, which have returned highgrade infill and extension intersections. These include some significant apparent widths and grades from relatively shallow depths.

"Results are from the Ewoyaa South-2 deposit, where we are infill drilling to convert Inferred to Indicated Resources to provide optionality for future mine scheduling, and from the Ewoyaa North-East deposit, where mineralisation has been confirmed outside of the current Resource envelope and at depth.

"A total of 18,500m of infill, extensional and exploration RC drilling has been planned for 2023. These programmes are intended to grow and improve the confidence of the Ewoyaa Resource, in turn, improving the economics of the Project.

"Following the completion of the passive seismic survey over the central portion of the Ewoyaa Resource area, we have decided to demobilise the equipment, rather than extending the survey. Due to various limitations, not all known pegmatites were identified by the survey. Whilst a 10m mineralised pegmatite was intersected in drilling from one of the targets, this was the extension of a known pegmatite where mineralisation remains open at depth.

"The survey has enhanced our knowledge of the Ewoyaa deposits and provided valuable learnings for potential future use of the technology across the Company's portfolio or new opportunities at a later date. However, at this stage, we see greater value in deploying capital towards the systematic drilling programmes that have been proven to deliver significant value to the Company to date. This will comprise further drilling for resource growth within the immediate Project area, whilst continuing to grow the exploration pipeline within the broader portfolio using soil sampling, geophysics and auger drilling ahead of RC drill testing.

"We look forward to updating shareholders on our ongoing progress, including as remaining assay results become available."

# **New Drilling Results**

Further assay results have been received for 5,444m of RC drilling from the ongoing infill, extensional and exploration drill programme at the Ewoyaa Lithium Project. Multiple high-grade drill intersections have been reported for infill drilling results at the Ewoyaa South-2 deposit within the current MRE<sup>1</sup> and the Ewoyaa North-East deposit, which currently sits outside of the current MRE<sup>1</sup> (*refer Table 1, Appendix 1 and Appendix 2*).

Drilling aims to intersect mineralised pegmatite dykes perpendicular to strike and dip to approximate true width. This is not always achieved due to the variable nature of pegmatites or challenging drill access, with some drill intersections drilled down-dip as apparent widths. Accordingly, estimated true widths are included in the intersections table in Appendix 1.



# Table 1: Drill intersection highlights at greater than 5 li x m, reported at a 0.4% Li<sub>2</sub>O cut-off and maximum of 4m of internal dilution

Hole_ID	From_m	To_m	Interval	Li20%	Intersection	Comment	Hole Purpose	metal content Li x m
GRC0928	184	207	23	1.74	GRC0928: 23m at 1.75% Li2O from 184m		<b>Resource Drilling</b>	40.12
GRC0911	68	83	15	1.30	GRC0911: 15m at 1.3% Li2O from 68m		<b>Resource Drilling</b>	19.45
GRC0911	48	62	14	1.26	GRC0911: 14m at 1.27% Li2O from 48m		<b>Resource Drilling</b>	17.68
GRC0927	263	272	9	1.56	GRC0927: 9m at 1.57% Li2O from 263m		<b>Resource Drilling</b>	14.07
GRC0912	6	20	14	0.99	GRC0912: 14m at 0.99% Li2O from 6m		<b>Resource Drilling</b>	13.79
GRC0910	65	76	11	1.22	GRC0910: 11m at 1.22% Li2O from 65m		Resource Drilling	13.4
GRC0914	96	109	13	0.97	GRC0914: 13m at 0.97% Li2O from 96m		Resource Drilling	12.61
GRC0935	202	212	10	1.22	GRC0935: 10m at 1.22% Li2O from 202m		<b>Geophysics</b> Target	12.19
GRC0918	94	103	9	1.33	GRC0918: 9m at 1.33% Li2O from 94m		<b>Resource Drilling</b>	11.97
GRC0915	106	117	11	0.98	GRC0915: 11m at 0.98% Li2O from 106m		<b>Resource Drilling</b>	10.78
GRC0928	133	137	4	2.26	GRC0928: 4m at 2.26% Li2O from 133m		<b>Resource Drilling</b>	9.02
GRC0918	79	86	7	1.27	GRC0918: 7m at 1.27% Li2O from 79m		<b>Resource Drilling</b>	8.89
GRC0925	125	134	9	0.80	GRC0925: 9m at 0.81% Li2O from 125m		Resource Drilling	7.23
GRC0910	23	32	9	0.79	GRC0910: 9m at 0.79% Li2O from 23m		<b>Resource Drilling</b>	7.11
GRC0910	12	18	6	1.18	GRC0910: 6m at 1.18% Li2O from 12m		Resource Drilling	7.08
GRC0926	134	140	6	1.08	GRC0926: 6m at 1.08% Li2O from 134m		<b>Resource Drilling</b>	6.45
GRC0932	218	223	5	1.16	GRC0932: 5m at 1.17% Li2O from 218m		<b>Resource Drilling</b>	5.81
GRC0925	38	44	6	0.92	GRC0925: 6m at 0.92% Li2O from 38m	weathered pegmatite	<b>Resource Drilling</b>	5.51
GRC0922	146	154	8	0.63	GRC0922: 8m at 0.63% Li2O from 146m		<b>Resource Drilling</b>	5.02

Note: Metal content is based on intercept rather than estimated true width

Infill drilling results confirm further mineralisation at the Ewoyaa South-2 deposit where multiple drilling intersections are reported over significant apparent widths and relatively shallow depths (*refer Figure 1 and Figure 2*).

Extensional drilling results at the Ewoyaa North-East deposit confirm mineralisation extensions outside of the current Resource envelope and remains open at depth (*refer Figure 1* and *Figure 3*).

Drilling is designed to infill the Ewoyaa South-2 deposit to convert mineralisation from the Inferred to Indicated category. Approximately 3,000m of infill drilling has been planned at the Ewoyaa South-2 deposit, with a further 7,000m of resource extensional drilling planned at the Ewoyaa Main, Ewoyaa North-east and Kaampakrom deposits. A further 6,500m of exploration drilling and 2,000m of diamond core ("DD") drilling is planned as part of the 2023 field season (*refer announcement of 19 April 2023*).

Sample preparation was completed by Intertek Ghana and assay by Intertek Perth, with all reported results passing QA/QC protocols, providing confidence in reported results.





Figure 2: Cross-section A-A' showing assay results received for GRC0910 and GRC0911 at the Ewoyaa South-2 deposit





Figure 3: Cross-section B-B' showing assay results received for GRC0928 and GRC0929 at the Ewoyaa North-East deposit

# Passive Seismic Survey

The Company completed a passive seismic ambient noise tomography ("ANT") survey over the immediate Ewoyaa MRE<sup>1</sup> footprint to test the potential for concealed pegmatites (*refer announcement of* **19** April **2023**). The trial, covering **1**.8km<sup>2</sup> within the central portion of the Ewoyaa Resource area, is the first time the technology has been used in Ghana.

Due to the steep dipping nature of the Ewoyaa pegmatites and narrow velocity contrast between the pegmatite and host lithologies over the Resource, the survey encountered limitations on targets less than 20m true thickness and, accordingly, did not identify all of the known pegmatites within the survey area, in particular, the east-west trending Abonko pegmatites and areas along the boundary of the survey due to edge effects.

Eight shallow targets were identified by the survey, with follow-up drill testing completed. Mineralisation, however, was only intersected as depth extensions of the known Okwesikrom South deposit (GRC0935: 10m at 1.22% Li<sub>2</sub>O from 202m), with barren pegmatite intersected (assays pending) in one target along the western margin of the Ewoyaa Main deposit and no significant pegmatite intersections in the remaining six targets drill tested.

Deeper targets were identified beyond the depth limitation of the drill rig on site but have not been tested at this stage due to their depth and the Company's belief that there is greater value in drilling strike extensions of the known resource or potential near surface exploration targets within the Project footprint.

While providing useful additional data to better understand parts of the Ewoyaa Resource, the results of the survey and drill testing, in addition to the cost of retaining the equipment on site, resulted in the decision to demobilise the equipment at this stage.

While the Company may revisit ANT surveying at a later stage, the Company intends to instead allocate the capital in the shorter term towards systematic and calculated drilling programmes of shallow targets which has been proven to deliver significant value to the Company to date.



# End note

#### <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 35.3 Mt @ 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 3.5 Mt @ 1.37% Li<sub>2</sub>O in the Measured category, 24.5 Mt @ 1.25% Li<sub>2</sub>O in the Indicated category and 7.4 Mt @ 1.16% Li<sub>2</sub>O in the Inferred category. The Company confirms that all material assumptions and technical parameters underpinning the Mineral Resource Estimate continue to apply and have not materially changed, and it is not aware of any new information or data that materially affects the information included in this announcement or the announcement dated 1 February 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.

Information in this report relating to Mineral Resources was compiled by Shaun Searle, a Member of the Australian Institute of Geoscientists. Mr Searle has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Searle is a director of Ashmore. Ashmore and the Competent Person are independent of the Company and other than being paid fees for services in compiling this report, neither has any financial interest (direct or contingent) in the Company. Mr Searle consents to the inclusion in the report of the matters based upon the information in the form and context in which it appears.

The reported Ore Reserves have been compiled by Mr Harry Warries. Mr Warries is a Fellow of the Australasian Institute of Mining and Metallurgy and an employee of Mining Focus Consultants Pty Ltd. He has sufficient experience, relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking, to qualify as a Competent Person as defined in the 'Australasian Code for Reporting of Mineral Resources and Ore Reserves' of December 2012 ("JORC Code") as prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and the Minerals Council of Australia. Mr Warries gives Atlantic Lithium Limited consent to use this reserve estimate in reports.

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.

# For any further information, please contact:

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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 Company signed a funding agreement with Piedmont Lithium Inc. towards the development of the Ewoyaa Project. Atlantic Lithium is currently advancing the Ewoyaa Project through feasibility studies and intends to be producing a spodumene concentrate via simple gravity only process flowsheet.

Atlantic Lithium holds 560km<sup>2</sup> and 774km<sup>2</sup> of tenure across Ghana and Côte d'Ivoire respectively, comprising significantly under-explored, highly prospective licences.



# Appendix 1 New drill intersections reported in hole ID order, reported at a 0.4% Li<sub>2</sub>O cut-off and maximum 4m of internal dilution

				estimated true					metal conte
Hole_ID	From_m	To_m	Interval	width _m	Li20%	Intersection	Comment	Hole Purpose	Li x m
GRC0910	12	18	6	5	1.18	GRC0910: 6m at 1.18% Li2O from 12m		<b>Resource Drilling</b>	7
GRC0910	23	32	9	7	0.79	GRC0910: 9m at 0.79% Li2O from 23m		<b>Resource Drilling</b>	7
GRC0910	56	61	5	5	0.69	GRC0910: 5m at 0.69% Li2O from 56m		Resource Drilling	3
GRC0910	65	76	11	. 5	1.22	GRC0910: 11m at 1.22% Li2O from 65m		Resource Drilling	1
GRC0911	48	62	14	5	1.26	GRC0911: 14m at 1.27% Li2O from 48m		Resource Drilling	17
GRC0911	64	66	2		1.19	GRC0911: 2m at 1.19% Li2O from 64m		Resource Drilling	2
GRC0911	68	83	15	5	1.30	GRC0911: 15m at 1.3% Li2O from 68m		Resource Drilling	19
GRC0912	6	20	14	5		GRC0912: 14m at 0.99% Li2O from 6m		Resource Drilling	13
GRC0912	21	23	2			GRC0912: 2m at 1.36% Li2O from 21m		Resource Drilling	
GRC0912	30	32	2			GRC0912: 2m at 0.5% Li2O from 30m		Resource Drilling	(
GRC0913	32	36	4			GRC0913: 4m at 0.7% Li2O from 32m		Resource Drilling	
GRC0913	38	42	4			GRC0913: 4m at 1.08% Li2O from 38m		Resource Drilling	4
GRC0913	44	46				GRC0913: 2m at 1.07% Li20 from 44m		Resource Drilling	2
GRC0914	62	68	6			GRC0914: 6m at 0.59% Li20 from 62m		Resource Drilling	3
GRC0914	96	109	13			GRC0914: 13m at 0.97% Li20 from 96m		Resource Drilling	12
GRC0914 GRC0914	119	109	2			GRC0914: 15m at 0.97% Li20 from 119m		Resource Drilling	12
GRC0914 GRC0915	87	88	1			GRC0914. 2m at 0.45% Li2O from 119m GRC0915: 1m at 0.59% Li2O from 87m		Resource Drilling	(
GRC0915 GRC0915	106	88 117	11			GRC0915: 11m at 0.59% Li2O from 87m GRC0915: 11m at 0.98% Li2O from 106m		Resource Drilling	10
			2						
GRC0915	120	122				GRC0915: 2m at 1.44% Li2O from 120m		Resource Drilling	
GRC0916	34	35	1		0.64	GRC0916: 1m at 0.64% Li2O from 34m		Resource Drilling	(
GRC0917	40	41	1			no significant intersections		Resource Drilling	
GRC0917	46	50	4			no significant intersections		Resource Drilling	
GRC0917	52	57				no significant intersections		Resource Drilling	
GRC0917	59	63	4			no significant intersections		Resource Drilling	
GRC0917	92	95	3			no significant intersections		Resource Drilling	
GRC0917	101	102	1			no significant intersections		Resource Drilling	
GRC0918	79	86	7			GRC0918: 7m at 1.27% Li2O from 79m		Resource Drilling	5
GRC0918	90	91	1			GRC0918: 1m at 1.13% Li2O from 90m		Resource Drilling	:
GRC0918	94	103	9		1.33	GRC0918: 9m at 1.33% Li2O from 94m		Resource Drilling	1:
GRC0919	100	102				no significant intersections		Resource Drilling	
GRC0919	109	110				no significant intersections		Resource Drilling	
GRC0920	0	160				no significant intersections	No pegmatite intersected	Resource Drilling	
GRC0921	183	184	1		0.57	GRC0921: 1m at 0.57% Li2O from 183m		Resource Drilling	(
GRC0922	146	154			0.63	GRC0922: 8m at 0.63% Li2O from 146m		Resource Drilling	Į.
GRC0923	317	318	1		0.67	GRC0923: 1m at 0.67% Li2O from 317m		<b>Resource Drilling</b>	(
GRC0924	338	340	2			no significant intersections		Resource Drilling	
GRC0925	38	44	6	5.5	0.92	GRC0925: 6m at 0.92% Li2O from 38m	weathered pegmatite	<b>Resource Drilling</b>	
GRC0925	125	134	9	8	0.80	GRC0925: 9m at 0.81% Li2O from 125m		<b>Resource Drilling</b>	
GRC0925	148	150	2		0.72	GRC0925: 2m at 0.72% Li2O from 148m		Resource Drilling	:
GRC0926	125	133	8	6	0.51	GRC0926: 8m at 0.51% Li2O from 125m		Resource Drilling	4
GRC0926	134	140	6	4	1.08	GRC0926: 6m at 1.08% Li2O from 134m		Resource Drilling	(
GRC0926	154	156	2		0.93	GRC0926: 2m at 0.93% Li2O from 154m		Resource Drilling	
GRC0926	195	198	3		1.16	GRC0926: 3m at 1.17% Li2O from 195m		Resource Drilling	
GRC0927	263	272	9	6	1.56	GRC0927: 9m at 1.57% Li2O from 263m		Resource Drilling	14
GRC0928	133	137	4			GRC0928: 4m at 2.26% Li2O from 133m		Resource Drilling	
GRC0928	184	207	23	15	1.74	GRC0928: 23m at 1.75% Li2O from 184m		Resource Drilling	40
GRC0929	257	259				GRC0929: 2m at 0.81% Li2O from 257m		Resource Drilling	
GRC0930A	62					no significant intersections		Resource Drilling	
GRC0930A	232					no significant intersections		Resource Drilling	
GRC0931	258	259			0 40	GRC0931: 1m at 0.4% Li2O from 258m		Resource Drilling	
GRC0932	230	215	1			GRC0932: 1m at 0.46% Li2O from 214m		Resource Drilling	(
GRC0932	214	223	5			GRC0932: 5m at 1.17% Li20 from 214m		Resource Drilling	
GRC0933	80	82	2		1.10	no significant intersections		Geophysics Target	
GRC0934	53	54				no significant intersections		Geophysics Target	
0//00004	55	54	1			no significant intersections		Scopinysics ranget	

Note 1: Metal content is based on intercept rather than estimated true width

Note 2: Estimated true width only included for mineralised intersections greater than 4m



Hole_ID	Easting_m	Northing_m	Elevation	Dip	<b>Hole Azimuth</b>	Hole depth_m	Hole Purpose
GRC0910	715549	578519	32.85	-50	305	120	<b>Resource Drilling</b>
GRC0911	715579	578497	32.26	-50	305	151	<b>Resource Drilling</b>
GRC0912	715547	578553	29.52	-50	305	56	Resource Drilling
GRC0913	715584	578527	29.17	-50	305	80	Resource Drilling
GRC0914	715610	578505	30.20	-50	305	145	Resource Drilling
GRC0915	715638	578518	27.64	-50	305	145	Resource Drilling
GRC0916	715585	578586	26.57	-50	305	63	Resource Drilling
GRC0917	715621	578563	27.21	-50	305	120	Resource Drilling
GRC0918	715642	578545	26.40	-50	305	150	Resource Drilling
GRC0919	715525	578415	52.48	-50	305	127	Resource Drilling
GRC0920	715645	578512	27.96	-65	305	160	Resource Drilling
GRC0921	715783	579215	19.80	-50	305	266	Resource Drilling
GRC0922	715744	579361	16.03	-80	305	224	Resource Drilling
GRC0923	715790	579385	15.76	-60	305	332	Resource Drilling
GRC0924	715864	579412	15.36	-70	305	355	Resource Drilling
GRC0925	715698	579335	16.20	-65	305	190	Resource Drilling
GRC0926	716424	579404	13.61	-50	210	224	Resource Drilling
GRC0927	716446	579438	12.86	-50	210	296	Resource Drilling
GRC0928	716378	579405	13.58	-50	210	230	Resource Drilling
GRC0929	716399	579443	12.88	-50	210	280	Resource Drilling
GRC0930A	716344	579421	13.23	-50	210	250	Resource Drilling
GRC0931	716310	579449	13.34	-60	210	330	Resource Drilling
GRC0932	716279	579471	13.50	-60	210	270	Resource Drilling
GRC0933	716372	579802	31.40	-50	210	280	Geophysics Targ
GRC0934	716458	579703	29.94	-50	210	300	Geophysics Targ
GRC0935	716605	579149	18.53	-50	180	300	Geophysics Targe

#### Newly reported drill hole collar locations Appendix 2



The following extract from the JORC Code 2012 Table 1 is provided for compliance with the Code requirements for the reporting of Exploration Results.

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

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

Criteria	JORC Code Explanation	Commentary
Criteria Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standar 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.</li> <li>Include reference to measures taken to ensure samp representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that</li> </ul>	<ul> <li>RC drill holes were routinely sampled at 1m intervals with a nominal 3-6kg sub-sample split off for assay using a riger mounted cone splitter at 1m intervals.</li> <li>DD holes were quarter core sampled at 1m intervals or to geological contacts for geochemical analysis.</li> <li>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</li> </ul>
	<ul> <li>are Material to the Public Report.</li> <li>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 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.</li> </ul>	<ul> <li>and coarse blanks. Blanks were typically inserted with the interpreted ore zones after the drilling was completed.</li> <li>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</li> </ul>
		<ul> <li>Post December 2018 to present – Intertek Tarkwa was used 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).</li> </ul>
		<ul> <li>ALS Laboratory in Brisbane was used for the Company's initial due diligence work programs and was selected as the umpire laboratory since Phase 1. ALS conducts ME-ICP89, with a Sodium Peroxide Fusion. Detection limits for lithiun are 0.01-10%. Sodium Peroxide fusion is considered a "total" assay technique for lithium. In addition, 22 additional elements assayed with Na<sub>2</sub>O<sub>2</sub> fusion, and combination MS/ICP analysis.</li> </ul>



Criteria		JORC Code Explanation		Commentary
Drilling techniques	h a	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	•	Six phases of drilling were undertaken at the Project using RC and DD techniques. All the RC drilling used face sampling hammers.
	0		•	Phase 1 and 2 programs used a 5.25 inch hammers while Phase 3 used a 5.75-inch hammer.
	ſſ	nethod, etc.).	•	All DD holes were completed using PQ and HQ core from surface (85mm and 63.5mm).
			•	All DD holes were drilled in conjunction with a Reflex ACT tool; to provide an accurate determination of the bottom of-hole orientation.
			•	All fresh core was orientated to allow for geological, structural and geotechnical logging by a Company geologist.
Drill sample recovery		Aethod of recording and assessing core and chip ample recoveries and results assessed.	•	A semi-quantitative estimate of sample recovery was completed for the vast majority of drilling. This involved
		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.		weighing both the bulk samples and splits and calculating theoretical recoveries using assumed densities. Where
	re			samples were not weighed, qualitative descriptions of th sample size were recorded. Some sample loss was recorded in the collaring of the RC drill holes.
			•	DD recoveries were measured and recorded. Recoveries excess of 95.8% have been achieved for the DD drilling program. Drill sample recovery and quality is adequate for the drilling technique employed.
			•	The DD twin program has identified a positive grade bias for iron in the RC compared to the DD results.
Logging	g	Vhether core and chip samples have been eologically and geotechnically logged to a level of letail to support appropriate Mineral Resource	•	All drill sample intervals were geologically logged by Company geologists.
	e	estimation, mining studies and metallurgical studies.	•	Where appropriate, geological logging recorded the abundance of specific minerals, rock types and weathering
		Vhether logging is qualitative or quantitative in ature. Core (or costean, channel, etc.) photography.		using a standardised logging system that captured preliminary metallurgical domains.
		he total length and percentage of the relevant ntersections logged.	•	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 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 Compartechnical staff.
			•	The logging is of sufficient detail to support the current reporting of a Mineral Resource.



Criteria		JORC Code Explanation		Commentary
Sub-samplin 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	•	DD core was cut with a core saw and selected half core samples dispatched to Nagrom Laboratory in Perth for preliminary metallurgical test work.
	•	appropriateness of the sample preparation technique. Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	•	The other half of the core, including the bottom-of-hole orientation line, was retained for geological reference. The remaining DD core was quarter cored for geochemical
	•	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.	•	analysis. 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
	•	Whether sample sizes are appropriate to the grain size of the material being sampled.		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 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.
			•	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 laboratory	•	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF	•	Analysis for lithium and a suite of other elements for Phase 1 drilling was undertaken at SGS Johannesburg / Vancouver by ICP-OES after Sodium Peroxide Fusion. Detection limits for lithium (10ppm – 100,000ppm). Sodium Peroxide fusion is considered a "total" assay technique for lithium.
		instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. 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.	•	<ul> <li>Review of standards and blanks from the initial submission to Johannesburg identified failures (multiple standards reporting outside control limits). A decision was made to resubmit this batch and all subsequent batches to SGS Vancouver – a laboratory considered to have more experience with this method of analysis and sample type.</li> <li>Results of analyses for field sample duplicates are consistent with the style of mineralisation and considered to be representative. Internal laboratory QAQC checks are reported by the laboratory, including sizing analysis to monitor preparation and internal laboratory QA/QC. These were reviewed and retained in the company drill hole database.</li> <li>155 samples were sent to an umpire laboratory (ALS) and/assayed using equivalent techniques, with results demonstrating good repeatability.</li> <li>Atlantic Lithium's review of QAQC suggests the SGS Vancouver and Intertek Perth laboratories performed within acceptable limits.</li> </ul>
			<u> </u>	No geophysical methods or hand-held XRF units have been used for determination of grades in the Mineral Resource.



Criteria		JORC Code Explanation		Commentary
Verification of sampling and	•	The verification of significant intersections by either independent or alternative company personnel.	•	Significant intersections were visually field verified by company geologists and Shaun Searle of Ashmore during
assaying	•	The use of twinned holes.		the 2019 site visit.
	•	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	•	Drill hole data was compiled and digitally captured by Company geologists in the field. Where hand-written information was recorded, all hardcopy records were kept and archived after digitising.
		Discuss any aujustiment to assay data.	•	Phase 1 and 2 drilling programs were captured on paper or locked excel templates and migrated to an MS Access database and then into Datashed (industry standard drill hole database management software). The Phase 3 to 6 programs were captured using LogChief which has inbuilt data 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.
			•	Twin DD holes were drilled to verify results of the RC drilling programs. Results indicate that there is iron contamination in the RC drilling process.
			•	Reported drill hole intercepts were compiled by the Chief Geologist.
.0			•	Adjustments to the original assay data included converting Li ppm to Li <sub>2</sub> O%.
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.	•	The collar locations were surveyed in WGS84 Zone 30 North using DGPS survey equipment, which is accurate to 0.11mm in both horizontal and vertical directions. All holes were surveyed by qualified surveyors. Once validated, the survey
	•	Specification of the grid system used.		data was uploaded into Datashed.
	•	Quality and adequacy of topographic control.	•	RC drill holes were routinely down hole surveyed every 6m using a combination of EZ TRAC 1.5 (single shot) and Reflex Gyroscopic tools.
			•	After the tenth drill hole, the survey method was changed to Reflex Gyro survey with 6m down hole data points measured during an end-of-hole survey.
			•	All Phase 2 and 3 drill holes were surveyed initially using
				the Reflex Gyro tool, but later using the more efficient Reflex SPRINT tool. Phase 4 and 5 drill holes were surveyed
			•	using a Reflex SPRINT tool. LiDAR survey Southern Mapping to produce rectified colour
				images and a digital terrain model (DTM) 32km <sup>2</sup> , Aircraft C206 aircraft-mounted LiDAR Riegl Q780 Camera
			•	Hasselblad H5Dc with 50mm Fixfocus lens. Coordinate system: WGS84 UTM30N with accuracy to ±0.04.
			•	The topographic survey and photo mosaic output from the survey is accurate to 20mm.
			•	Locational accuracy at collar and down the drill hole is
Data spacing	•	Data spacing for reporting of Exploration Results.	•	considered appropriate for resource estimation purposes. The RC holes were initially drilled on 100m spaced sections
and distribution	•	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and		and 50m hole spacings orientated at 300° or 330° with dips ranging from -50° to -60°. Planned hole orientations/dips were occasionally adjusted due to pad and/or access constraints.
	•	Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	•	Hole spacing was reduced to predominantly 40m spaced sections and 40m hole spacings, with infill to 20m by 15m in the upper portions of the Ewoyaa Main deposit. Holes



are generally angled perpendicular to interpreted mineralisation orientations at the Project.

 Samples were composited to 1m intervals prior to estimation.

	Criteria		JORC Code Explanation		Commentary
$\geq$	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	•	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.	•	Most of the drilling intersects the mineralisation at close to 90 degrees ensuring intersections are representative of true widths. It is possible that new geological interpretations and/or infill drilling requirements may result in changes to drill orientations on future programs.
				•	No orientation based sampling bias has been 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 program, a third-party Project review was completed by an independent consultant experienced with the style of mineralisation.
G	5			•	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	•	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 license in the name of the joint venture party (Parari Davalament Change
		interests, historical sites, wilderness or national park and environmental settings.		of the joint-venture party (Barari Development Ghana Limited). Document number: 0853652-18.
	•	The security of the tenure held at the time of reporting along with any known impediments to	•	The Project occurs within a Mineral Prospecting license and was renewed on the 27th July 2021 for a further three-year period, valid until 27th July 2024.
		obtaining a licence to operate in the area.	•	The Mankessim South licence is a wholly-owned subsidiary of Green Metals Resources. The Mineral Prospecting license renewal was submitted in Nov 2022 for a further three-year period.
			•	The tenement is in good standing with no known impediments.
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 1960's. 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	•	No exploration results are being reported.
		understanding of the exploration results including a tabulation of the following information for all Material drill holes:	•	All information was included in the appendices (of the Mineral Resource report). No drill hole information were excluded (from the Mineral Resource report).
	•	easting and northing of the drill hole collar		
$\bigcirc$	•	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 low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Exploration results are not being reported.</li> <li>Not applicable as a Mineral Resource is being reported.</li> <li>No metal equivalent values are being reported.</li> </ul>
Relationship between mineralisation	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect</li> </ul>	<ul> <li>The drill line and drill hole orientation are oriented as close t 90° degrees to the orientation of the anticipated mineralised orientation as practicable.</li> </ul>
widths and intercept lengths	<ul><li>to the drill hole angle is known, its nature should be reported.</li><li>If it is not known and only the downhole lengths</li></ul>	<ul> <li>The majority of the drilling intersects the mineralisation between 60° and 80° degrees.</li> </ul>
	are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').	
Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>Relevant diagrams have been included within the Mineral Resource report 'Ewoyaa Lithium Project Mineral Resource Estimate' dated 25 March 2023.</li> </ul>
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should</li> </ul>	<ul> <li>All hole collars were surveyed WGS84 Zone 30 North grid using a differential GPS. All RC and DD holes were down-hole surveyed with a north-seeking gyroscopic tool.</li> </ul>
	be practiced to avoid misleading reporting of Exploration Results.	<ul> <li>Exploration results are not being reported.</li> </ul>
Other substantive exploration	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results;</li> </ul>	<ul> <li>Results were estimated from drill hole assay data, with geological logging used to aid interpretation of mineralised contact positions.</li> </ul>
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.	<ul> <li>Geological observations are included in the report.</li> </ul>
Further work	• The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or	Follow up RC and DD drilling may be undertaken.
	large-scale step-out drilling).	<ul> <li>Further metallurgical test work may be required as the Proje progresses through the study stages.</li> </ul>
	<ul> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Drill spacing is currently considered adequate for the curren level of interrogation of the Project.</li> </ul>