

Updated Feldspar Resource Estimate 36.8Mt at 41.9% Feldspar Ewoyaa Lithium Project, Ghana

Increased Feldspar MRE reaffirms Ewoyaa's potential as a major domestic source of feldspar in Ghana

Atlantic Lithium Limited (AIM: ALL, ASX: A11, GSE: ALLGH, 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 an updated JORC (2012) compliant Mineral Resource Estimate of 36.8Mt at 41.9% feldspar ("Feldspar MRE") for the Company's flagship Ewoyaa Lithium Project ("Ewoyaa" or the "Project") in Ghana, West Africa.

Highlights

- Updated JORC (2012) compliant Mineral Resource Estimate of 36.8Mt at 41.9% feldspar ("Feldspar MRE") reported in respect of the Project.
- The Feldspar MRE is based on the same geological model that resulted in the 36.8Mt at 1.24% Li₂O Mineral Resource Estimate¹ for the Project ("Lithium MRE") announced by the Company on 30 July 2024.
- The Feldspar MRE includes 29.8Mt (81%) in the Measured and Indicated categories, comprising a total of 3.7Mt at 40.2% feldspar in the Measured category, 26.1Mt at 42.1% feldspar in the Indicated category and 7.0Mt at 42.4% feldspar in the Inferred category.
- The Feldspar MRE represents all of the spodumene pegmatites drilled at Ewoyaa and considers the mine plan in respect of the Project's Life of Mine spodumene concentrate production, as detailed in the Ewoyaa Definitive Feasibility Study ("DFS"; refer announcement of **29 June 2023**).
 - o The resource upgrade builds upon the Maiden Feldspar MRE announced by the Company on 12 December 2023, which only constituted approximately the first five years of planned spodumene production.
- Quartz and muscovite also reported in the Feldspar MRE as additional potential by-products from spodumene concentrate production at Ewoyaa.
- Atlantic Lithium believes Ewoyaa represents a major domestic source of feldspar, which it intends to supply to the local Ghanaian ceramics market.

Commenting, Keith Muller, Chief Executive Officer of Atlantic Lithium, said:

"We are pleased to report an increased Feldspar Mineral Resource Estimate of 36.8Mt at 41.9% Feldspar in respect of the Company's Ewoyaa Lithium Project.

"The increased Feldspar MRE incorporates all of the spodumene pegmatites drilled at Ewoyaa and, therefore, considers the mine plan for the Project over its entire 12-year mine life. The increased resource gives us further confidence in Ewoyaa's potential as a major source of feldspar in Ghana, which will be produced as a by-product of spodumene concentrate production from the Project.

"Atlantic Lithium intends to supply the feldspar to the local Ghanaian ceramics market to support the growth of businesses associated with the industry and the wider local economy.

"As such, the Feldspar MRE enables the Company to incorporate life of mine production of feldspar in future revisions of the Ewoyaa feasibility studies, as well as in its considerations to bring the feldspar to market."

Authorised for release by Amanda Harsas, Finance Director and Company Secretary, Atlantic Lithium Limited.

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.

Updated Feldspar Mineral Resource Estimate

In respect of the Ewoyaa Lithium Project, the Company reports an updated JORC (2012) compliant Mineral Resource Estimate of 36.8Mt at 41.9% feldspar ("Feldspar MRE").

The Feldspar MRE is based on the same pegmatite geology wireframes and internal lithium mineralisation wireframes that resulted in the 36.8Mt at 1.24% Li₂O Mineral Resource Estimate¹ for the Project ("Lithium MRE"), as announced by the Company on 30 July 2024, and considers the mine plan in respect of the Project's Life of Mine spodumene concentrate production, as detailed in the Ewoyaa Definitive Feasibility Study ("DFS", *refer announcement of 29 June 2023*).

The Feldspar MRE includes 29.8Mt (81%) in the Measured and Indicated categories, comprising a total of 3.7Mt at 40.2% feldspar in the Measured category, 26.1Mt at 42.1% feldspar in the Indicated category and 7.0Mt at 42.4% feldspar in the Inferred category. In addition to the feldspar, quartz and muscovite were also estimated and included as potential by-products of spodumene concentrate production at Ewoyaa (*refer Table 1*).

The Company previously reported a Maiden Feldspar MRE for the Project (*refer announcement of 12 December 2023*), confined to the Ewoyaa Main, Ewoyaa Northeast, Ewoyaa South-1 and Ewoyaa South-2 deposits, which constituted approximately the first five years of spodumene production. This upgraded Feldspar MRE now represents all the spodumene pegmatites drilled at Ewoyaa, with the normative mineralogy calculated from total fusion X-ray fluorescence (XRF) major element data using a least squares method.

The Feldspar MRE enables the Company to include Life of Mine production of feldspar in future revisions of the Ewoyaa feasibility studies, expected to drive down operating costs for the Project, and in its strategy to bring the feldspar to market.

The Company believes that Ewoyaa could represent a major domestic producer of feldspar, which it intends to supply to the local Ghanaian ceramics market.

Metallurgical test work and ceramic application trials undertaken using feldspar samples from Ewoyaa for vitreous hotelware, high-end earthenware and floor tiles produced acceptable ware, comparable to industry standards in all aspects, including contraction, water absorption, density, porosity, shape, colour and appearance (*refer announcement of 12 December 2023*).

The Feldspar MRE was completed by Ashmore Advisory Pty Ltd ("Ashmore") of Perth, Western Australia, with results tabulated in the Statement of Mineral Resources in **Table 1**. The Statement of Mineral Resources is reported in line with the requirements of the JORC Code (2012) and is therefore suitable for public reporting.

Table 1: Ewoyaa Feldspar MRE (0.5% Li₂O Cut-off)

Type	Measured Mineral Resource						
	Tonnage Mt	Quartz %	Quartz Mt	Feldspar %	Feldspar Mt	Musc. %	Musc. Mt
Primary	3.7	32.6	1.20	40.2	1.48	7.2	0.27
Total	3.7	32.6	1.20	40.2	1.48	7.2	0.27
Type	Indicated Mineral Resource						
	Tonnage Mt	Quartz %	Quartz Mt	Feldspar %	Feldspar Mt	Musc. %	Musc. Mt
Weathered	0.5	34.5	0.16	37.6	0.17	8.4	0.04
Primary	25.6	31.8	8.14	42.1	10.80	6.3	1.61
Total	26.1	31.8	8.30	42.1	10.98	6.3	1.65
Type	Inferred Mineral Resource						
	Tonnage Mt	Quartz %	Quartz Mt	Feldspar %	Feldspar Mt	Musc. %	Musc. Mt
Weathered	1.8	36.0	0.65	41.3	0.75	6.3	0.11
Primary	5.2	32.2	1.67	42.8	2.22	6.1	0.32
Total	7.0	33.2	2.32	42.4	2.97	6.2	0.43
Type	Total Mineral Resource						
	Tonnage Mt	Quartz %	Quartz Mt	Feldspar %	Feldspar Mt	Musc. %	Musc. Mt
Weathered	2.3	35.7	0.81	40.6	0.92	6.7	0.15
Primary	34.5	31.9	11.02	42.0	14.51	6.4	2.20
Total	36.8	32.2	11.83	41.9	15.43	6.4	2.35

Note: The Mineral Resource has been compiled under the supervision of Mr. Shaun Searle who is a director of Ashmore Advisory Pty Ltd and a Registered 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 that he has undertaken to qualify as a Competent Person as defined in the JORC Code and a Qualified Person under the AIM Rules for Companies.

All Mineral Resources figures reported in the table above represent estimates at January 2025. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.

Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition).

The Feldspar MRE is based on the Lithium MRE reported by the Company in July 2024.

Geology and Geological Interpretation

In general, the Project area is largely underlain by rocks of the Birimian Supergroup, dominated by volcano-sedimentary lithologies of the Cape Coast Basin, situated on the southeast margin of the extensive Cape Coast Granitoid (refer **Figure 1**). Three forms of schist are developed in the area; mica schist, staurolite schist and garnet schist; all of which are a blue-grey colour when fresh, with weathering to a brown colour. All of the schist appears to be quartz-biotite rich and well-foliated. The staurolite occurs as 2mm to 20mm porphyroblasts, while the garnets are generally small 1 to 2mm and could be almandine or possibly spessartine within the quartz-mica schist.

Several, presumably Eburnean-aged, granitoids intrude the basin metasediments as small bosses and plugs. These granitoids range in composition from intermediate granodiorite (often medium-grained) to felsic leucogranites (coarse to pegmatoidal grain size), both sometimes in close association with pegmatite veins and bodies.

Several roughly north-south trending dolerite dykes cut through the Birimian schist and the later granitic and pegmatite intrusions and are presumably of Miocene age. The dolerite dykes are some 5 to 30m wide and are easily mapped using the airborne magnetic data and also outcrop in places as rounded float and boulders. A single dolerite dyke cuts through the Abonko area, skirting the east side of the aggregate quarry. In the extreme west of the tenement area, a number of subparallel dolerite dykes extend from the coast northwards through and past the large Afrangwa granitic boss. This north-south trending structural corridor of parallel dolerite dykes appears to host roughly north-south trending elongate granitic intrusive bodies and pegmatites as well as the dolerite dykes.

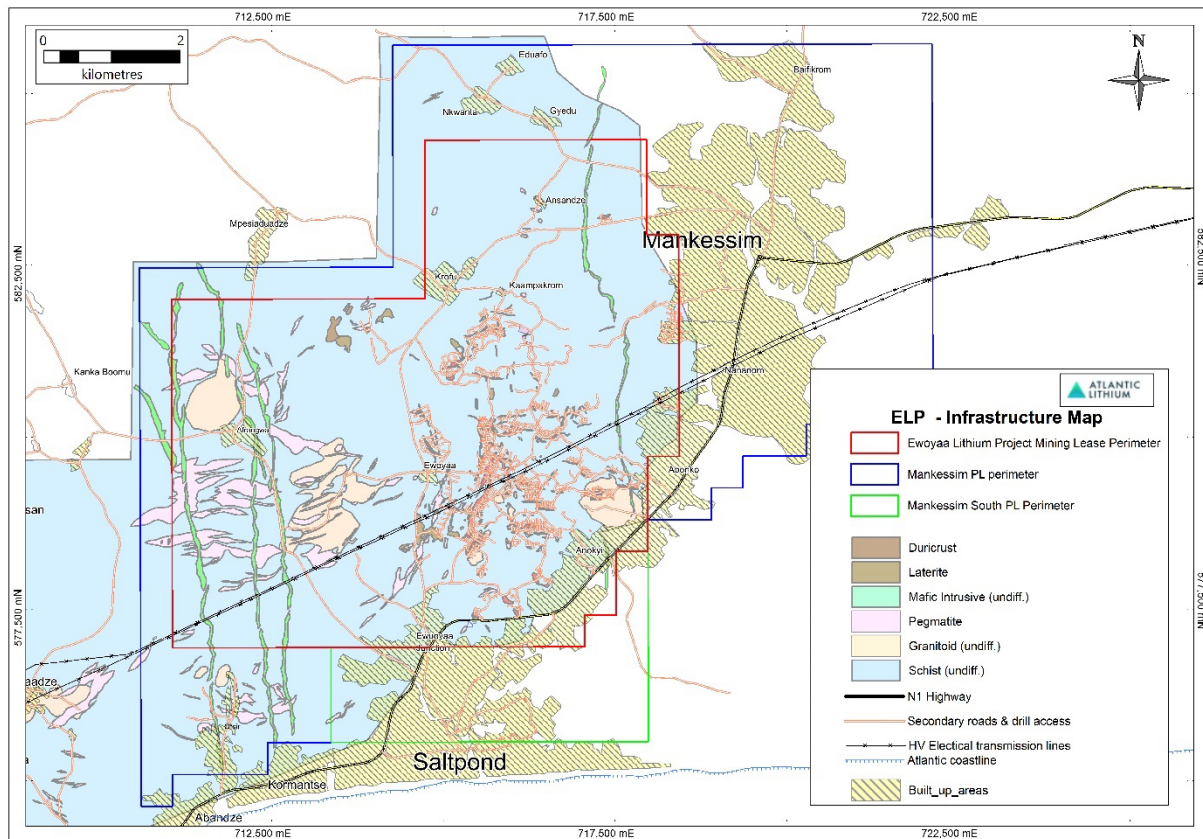


Figure 1: Geology of the Ewoyaa Lithium Project Area

To show the tonnage and grade distribution throughout the entire deposit, a bench breakdown has been prepared using a 10m bench height, shown graphically in **Figure 2**.

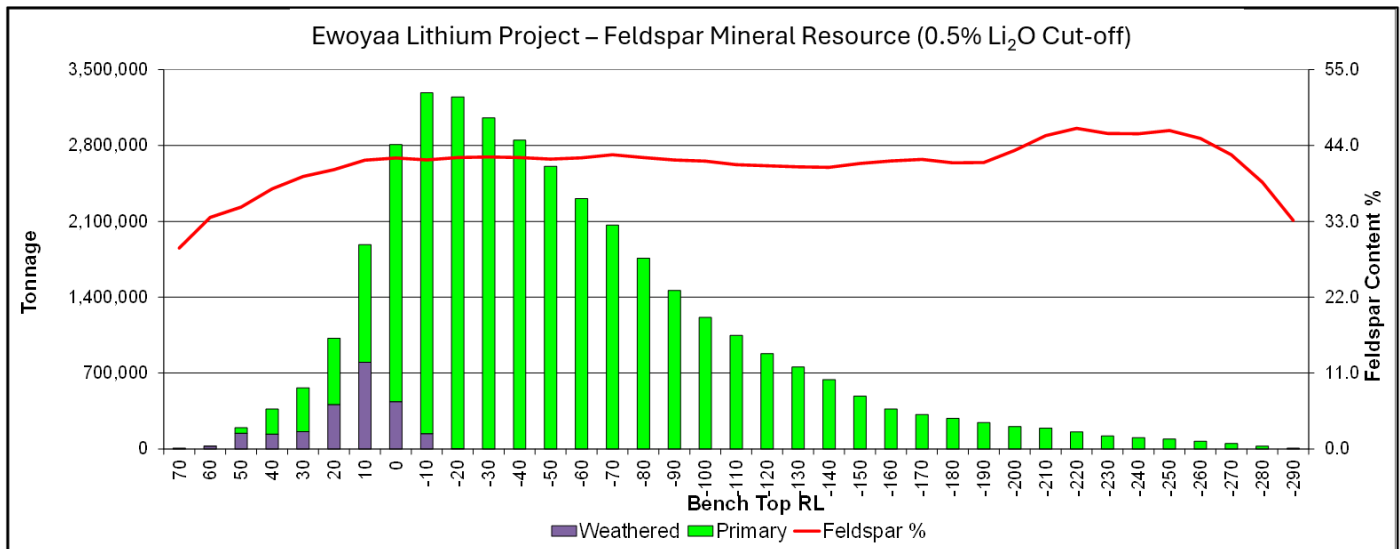


Figure 2: Ewoyaa Feldspar Tonnage and Grade – 10m Bench Elevation

The grade tonnage curve for the Ewoyaa Mineral Resource is shown in **Figure 3**.

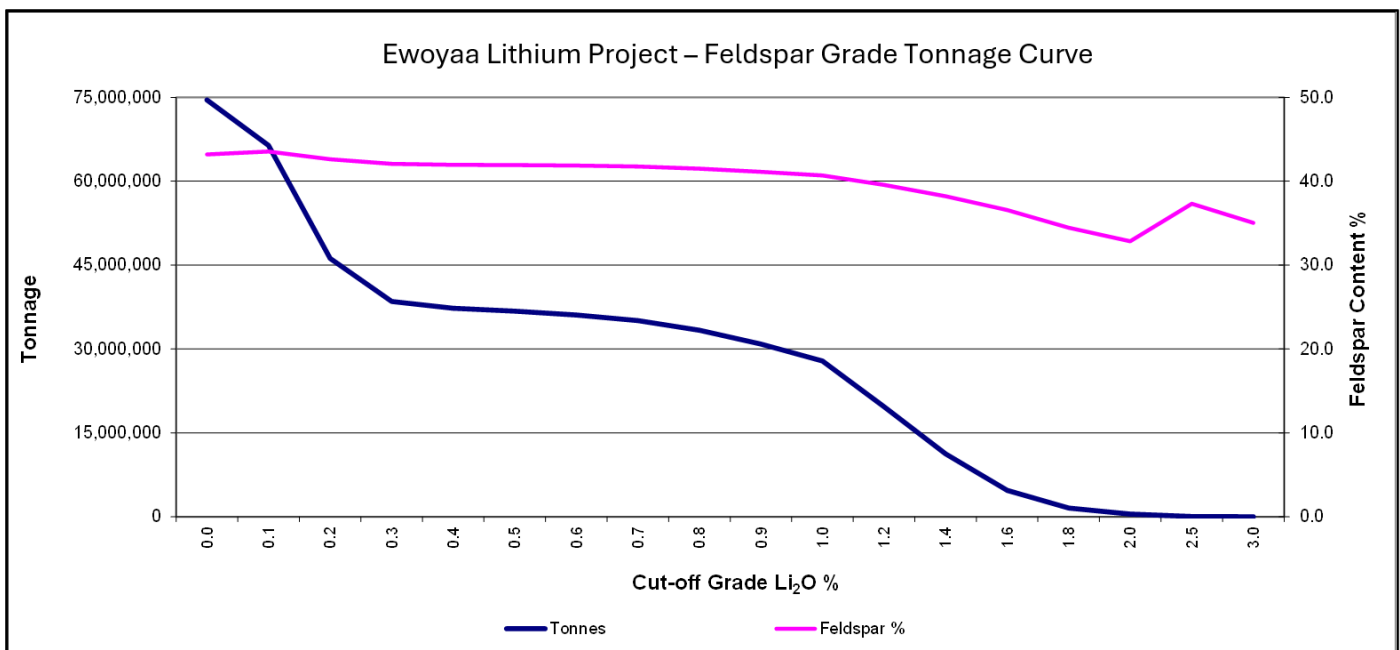


Figure 3: Ewoyaa Feldspar Grade - Tonnage Curve

The various areas of pegmatite intrusions have been named and grouped for reporting purposes. The prospect names and locations are shown in **Figure 4**.

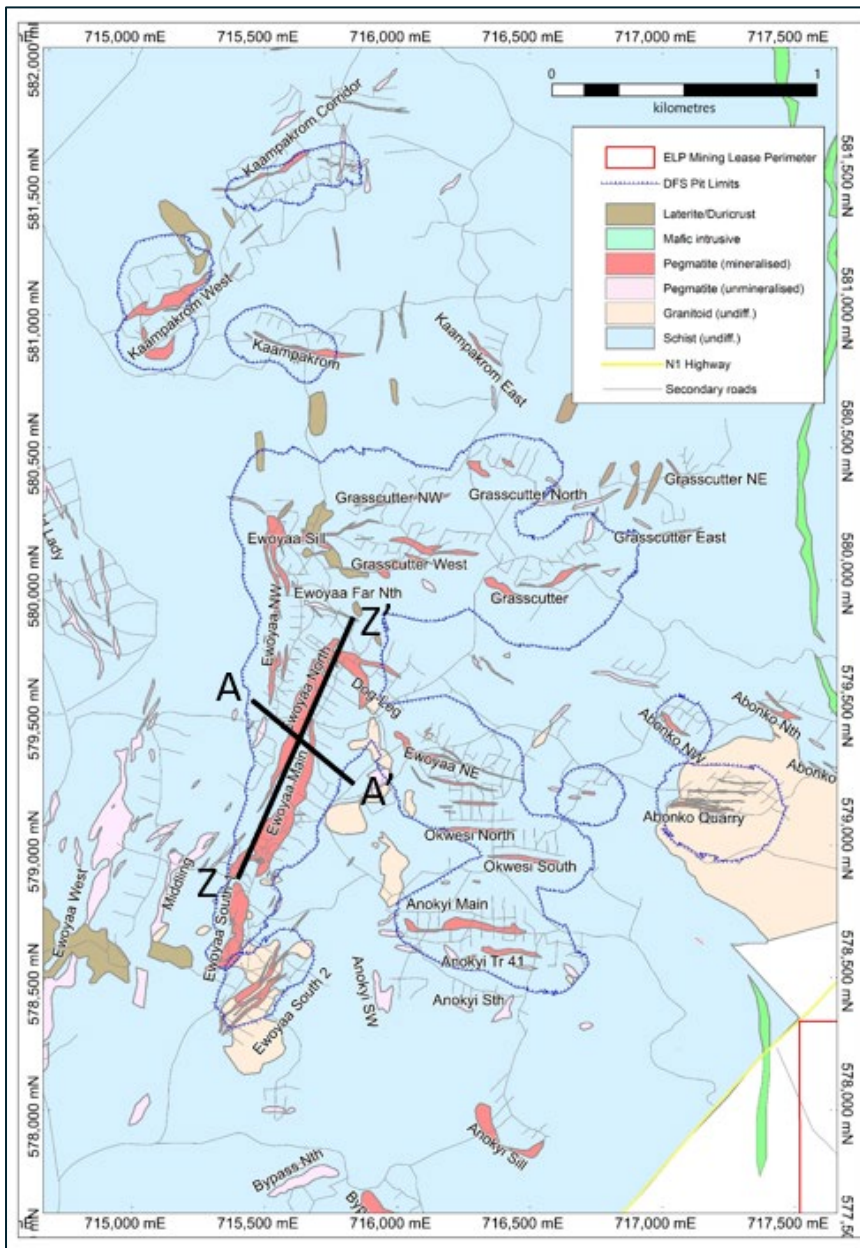


Figure 4: Ewoyaa Prospect Location Map (all pegmatite zones) – Asan is located approximately 2.2km northeast of Kaampakrom

A long section and cross section of the Ewoyaa wireframes and drilling are shown in **Figure 5** and **Figure 6** respectively.

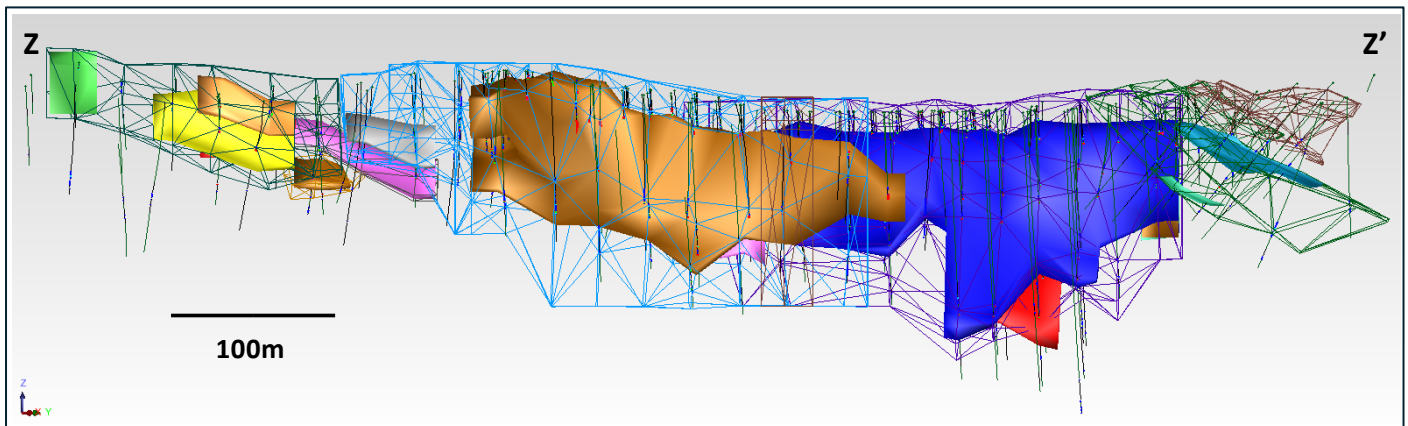


Figure 5: Long Section Z-Z' of Ewoyaa Main Wireframes and Drilling (View towards 300°; Solid colours = resource wireframes, Wireframe edges = pegmatite wireframes)

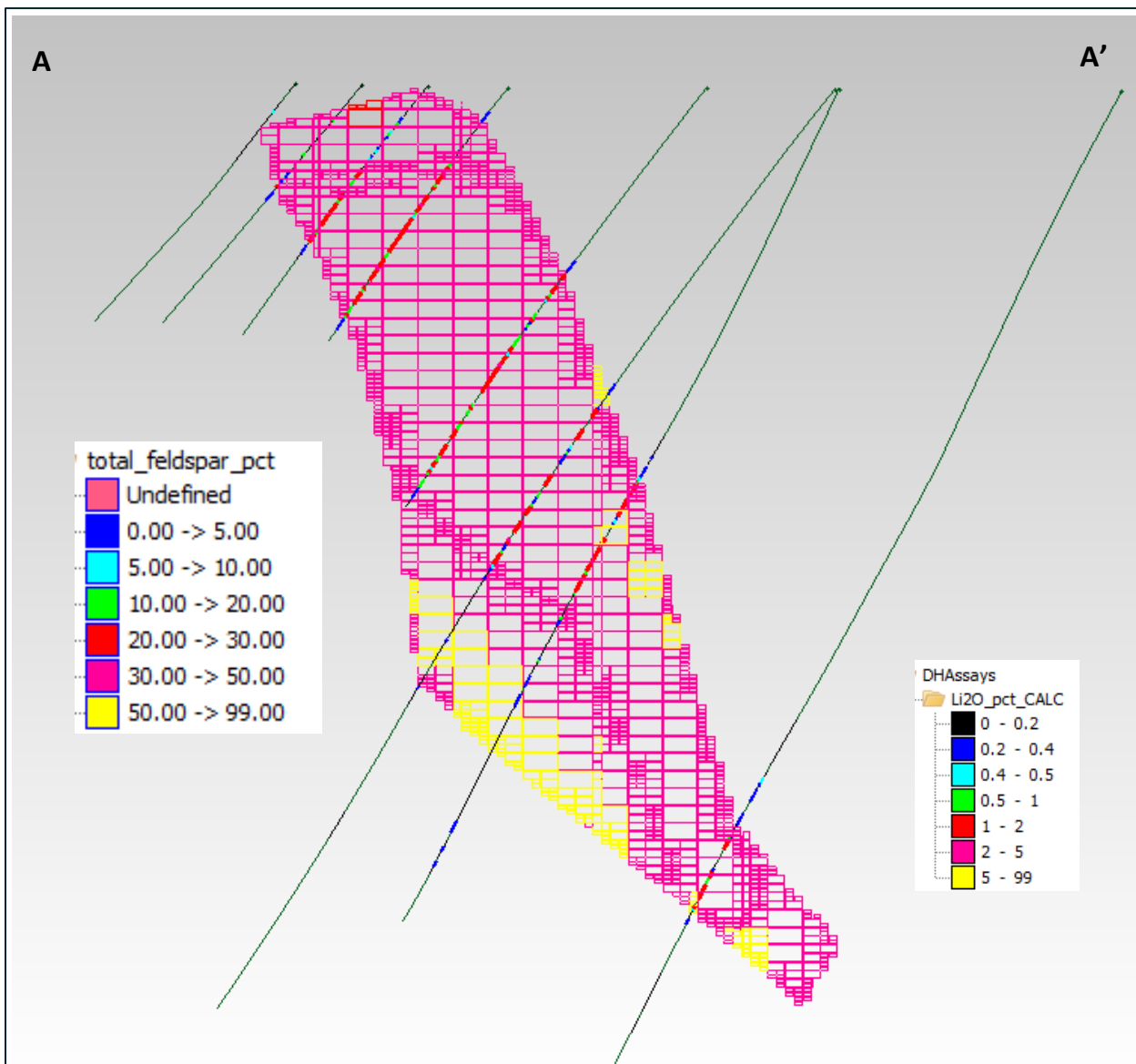


Figure 6: Cross Section of Ewoyaa Block Model Total Feldspar Grades on Section A-A'

Drill Methods

The database contains data for the drilling conducted by the Company since 2018, with an overview of drill types shown in **Figure 7**.

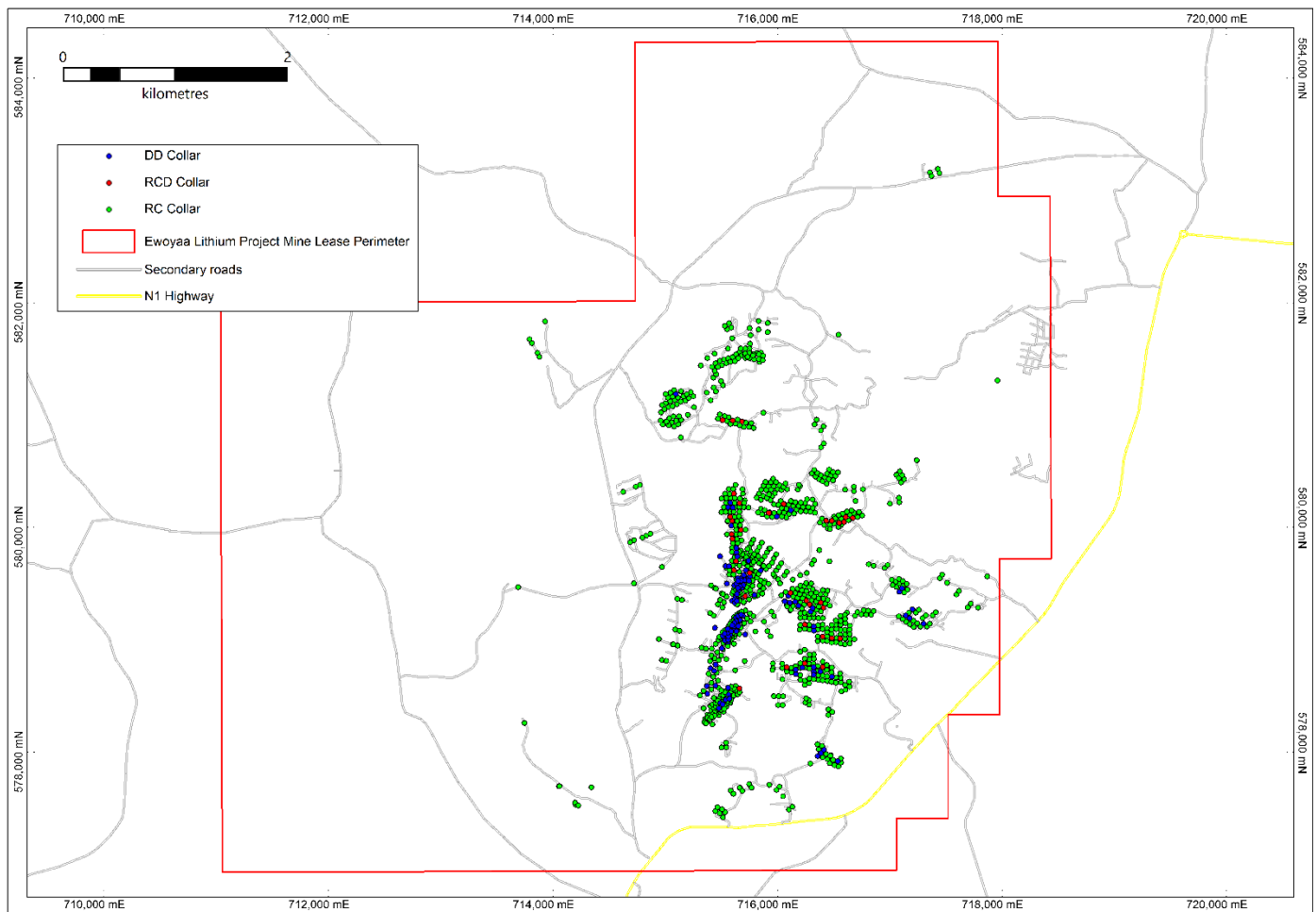


Figure 7: Drill Type Location Map

Drilling at the deposit extends to a maximum drill depth of 386m and the mineralisation was modelled from surface to a depth of approximately 360m below surface. The estimate is based on good quality reverse circulation (“RC”) and diamond core (“DD”) drilling data. Drill hole spacing is as close as 20m by 15m in some portions of the Ewoyaa deposit; then spacing is predominantly 40m by 40m across the Project and up to 80m by 80m in parts of lesser-known mineralisation.

The drilling was completed in six phases commencing in April 2018. All the drilling was undertaken by Geodrill (Ghana), using both RC and DD rigs.

The RC drilling used a combination of 5.25’ and 5.75’, face sampling hammers. The DD used PQ and HQ (85mm and 63.5mm) diameter core barrels. The DD holes were completed from surface with PQ to maximise recovery in weathered zones, with reversion to HQ once ground conditions improved within fresh material.

In 2018, Phase 1 RC holes were completed on a nominal 100m by 50m grid pattern, targeting the Ewoyaa Main mineralised system. Phases 2 to 5 reduced the wide spacing to 80m by 40m and down to 40m by 40m in the well drilled portions of the Project. Phase 5 was a major infill drilling program down to 40m by 40m over most of the Project. Phases 6 and 7 included extensional drilling in areas of open mineralisation, as well as close spaced infill drilling in portions of the Ewoyaa deposit.

A summary of the drilling data within the Ewoyaa Lithium Project Mineral Resource area is shown in **Table 2**.

Table 2: Summary of Drilling at the Project

Hole Type	In Database		In Mineral Resource		
	Drill holes		Drill holes		Intersection
	Number	Metres	Number	Metres	
RCH	12	1,200			
RC	1,048	148,865	722	106,609	19,580
RCD	36	5,311	33	4,881	786
DD	109	12,639	101	11,558	5,393
Total	1,205	168,015	856	123,048	25,759

Sampling Methodology

During Phase 1 and 2, RC drilling bulk samples and splits were collected at the rig for every metre interval drilled, the splits being undertaken using a riffle splitter. Since Phase 3, RC samples were split with a rig mounted cone splitter which took duplicate samples for quality control purposes.

Diamond core was cut with a core saw and selected half core samples totalling 2,131.1kg were dispatched to Nagrom Laboratory in Australia for preliminary metallurgical test work.

Selected core intervals were cut to quarter core with a saw at one metre intervals or to geological contacts; and since December 2018 were sent to Intertek Laboratory in Tarkwa for sample preparation. Prior to that, samples were sent to SGS Laboratory in Tarkwa for sample preparation.

Sample Preparation

All Phase 1 samples were submitted to SGS Tarkwa for preparation (PRP100) and subsequently forwarded to SGS Johannesburg and later SGS Vancouver for analysis (ICP90A).

PRP100 - Samples <3kg are dried in trays, crush to 100% passing 2mm, split using a rotary splitter to 5kg and pulverised in a LM2 to a nominal 85% passing 75µm. Approximately 100g sub-sample is taken for assay. All the preparation equipment is flushed with barren material prior to the commencement of the job. Coarse reject material was kept in the original bag.

Since December 2018, samples have been submitted to Intertek Tarkwa (SP02/SP12) for sample preparation. Samples were weighed, dried and crushed to -2mm in a Boyd crusher with 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.

For the sodium analysis of historical drilling, retention pulps within the relevant pegmatites were retrieved from storage, sorted and composited into 2m intervals to send to the laboratory for analysis. For all new drilling subsequently completed on site, all samples are routinely assayed for sodium on 1m intervals.

Sample Analysis Method

Since December 2018, samples were sent to Intertek Laboratory in Perth for analysis (FP6/MS/OES). FP6/MS/OES is an analysis for lithium and a suite of 21 other elements. Detection limits for lithium range between 5ppm and 20,000ppm. The sodium peroxide fusion (in nickel crucibles) is completed with hydrochloric acid to dissolve the sub-sample and is considered a total dissolution. Analysis is conducted by Inductively Coupled Plasma Mass Spectrometry ("ICP-MS").

Prior to December 2018, Phase 1 samples were submitted to SGS Johannesburg and later SGS Vancouver for analysis (ICP90A). ICP90 is a 28 element combination Na₂O₂ fusion with ICP-OES. ICP-MS was added to some submissions for additional trace element characterisation purposes.

All phase 1 SGS pulps were subsequently sent to Intertek Laboratory Perth for re-analysis (FP6/MS/OES) and included in the resource estimate.

During 2023, 8,793 pulps from the first four drilling campaigns were analysed for Na using four-acid digestion. The majority of these pulps were analysed as 2m composites of the original 1m interval pulps. These re-assayed pulps formed the basis for normative mineralogy calculations by Telemark Geosciences Ltd. During 2024, an additional 11,860 pulps from the remaining drilling were analysed for Na, underpinning the normative mineralogy calculations by Telemark.

Mineral Resource Classification

The Project deposits show good continuity of the main mineralised units which allowed the drill hole intersections to be modelled into coherent, geologically robust domains. Consistency is evident in the thickness of the structure, and the distribution of grade appears to be reasonable along and across strike.

The Feldspar MRE was classified as Measured, Indicated and Inferred Mineral Resource based on data quality, sample spacing, and lode continuity; with the same parameters used to classify the Lithium MRE. The Measured Mineral Resource was confined to fresh rock within areas drilled at 20m by 15m along with robust continuity of geology and Li_2O grade. The Indicated Mineral Resource was defined within areas of close spaced drilling of less than 40m by 40m, and where the continuity and predictability of the lode positions was good. In addition, Indicated Mineral Resource was classified in weathered rock overlying fresh Measured Mineral Resource. The Inferred Mineral Resource was assigned to transitional material, areas where drill hole spacing was greater than 40m by 40m, where small, isolated pods of mineralisation occur outside the main mineralised zones, and to geologically complex zones.

The block model has an attribute “class_feldspar” for all blocks within the mineralisation wireframes coded as either “mes” for Measured, “ind” for Indicated or “inf” for Inferred. The Mineral Resource classification is shown in **Figure 8**.

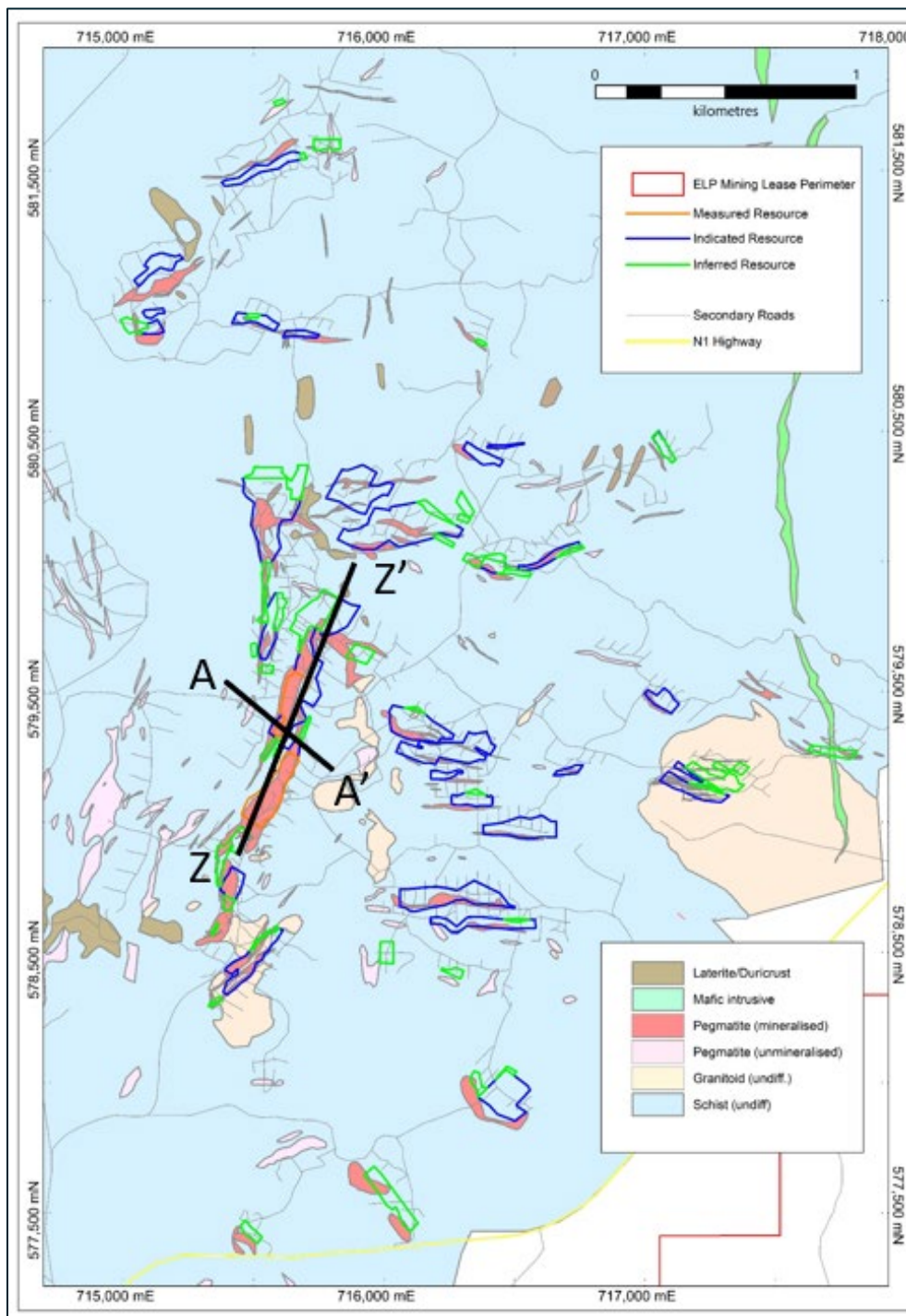


Figure 8: Mineral Resource Classification Plan View

The extrapolation of the lodes along strike and down-dip have been limited to distances of 40m. Zones of extrapolation are classified as Inferred Mineral Resource.

The JORC Code (2012) describes a number of criteria which must be addressed in the documentation of Mineral Resource estimates prior to public release of the information. The criteria provide a means of assessing whether or not parts of or the entire data inventory used in the estimate are adequate for that purpose. The Mineral Resources stated in this document are based on the criteria set out in Table 1 of that Code. These criteria are listed in **Appendices 1 and 2**.

Cut-off Grade

The Statement of Mineral Resources has been constrained by the mineralisation solids, reported above a cut-off grade of 0.5% Li₂O. Whittle optimisations demonstrate reasonable prospects for eventual economic extraction.

Estimation Methodology

The block model was created and estimated in Surpac using Ordinary Kriging ("OK") grade interpolation. The feldspar mineralisation was constrained by pegmatite geology wireframes and internal lithium-bearing mineralisation wireframes prepared using a minimum down-hole length of 3m. The wireframes were used as hard boundaries for the interpolation. After review of the statistics, high grade cuts were not warranted. Variography and Kriging Neighbourhood Analysis ("KNA") was conducted in Supervisor software on 1m composited intervals.

The block model was rotated on a bearing of 30°, with block dimensions of 10m NS by 10m EW by 5m vertical with sub-cells of 2.5m by 2.5m by 1.25m. The block size was selected based on results of KNA and also in consideration of two predominant mineralisation orientations of 30° and 100 to 120°.

Bulk densities ranging between 1.7t/m³ and 2.78t/m³ were assigned in the block model dependent on lithology, mineralisation and weathering. These densities were applied based on 14,046 bulk density measurements conducted by the Company on 101 DD holes and 35 RC holes with diamond tails conducted across the breadth of the Project. The measurements were separated using weathering surfaces, geology and mineralisation solids, with averages assigned in the block model.

Mining and Metallurgical Methods and Parameters

It is assumed that the Project can be mined with open pit mining techniques.

Based on the Ewoyaa DFS, the Project could produce approximately 330,000 tonnes per annum of mixed K₂O / Na₂O feldspar as a by-product from spodumene concentrate which will be sold for lithium purification. The feldspar will be processed by dense media separation to produce two grades, 2.6 sg O/F with high total alkalis and 2.6 sg U/F with lower alkalis but significant Li₂O at approximately 0.70%, which is a strong flux.

Following examination of chemical and mineralogical composition, ceramic application trials were undertaken in Stoke on Trent (The Potteries) for vitreous hotelware, high-end earthenware and floor tiles. Samples were wet ground to the required particle size and incorporated into commercial recipes, substituting for standard feldspars and nepheline syenite. Each prepared body was factory fired and, in the case of vitreous hotelware and high-end earthenware, biscuit (not glazed), glazed and decorated pieces were produced.

In all cases the trial firings produced acceptable ware, comparable to the standards in all aspects, including contraction, water absorption, density, porosity, shape, colour and appearance. Good results were delivered at the vitreous hotelware factory (a world leading manufacturer of tableware for the international hospitality industry) where the Ewoyaa feldspars were substituted for Forshammer feldspar (mined in Sweden by Sibelco).

Provided Atlantic Lithium can consistently produce feldspar to the same or better quality than the samples provided, there is a very good potential to compete in local and international ceramic markets for tableware, including vitreous hotelware, earthen ware and floor tiles.

JORC Table 1, Section 1 (Sampling Techniques and Data) and **Section 2** (Reporting of Exploration Results) are included in **Appendix 1**.


JORC Table 1, Section 3 (Estimation and Reporting of Mineral Resources) is included in **Appendix 2**.

For any further information, please contact:


Atlantic Lithium Limited

Neil Herbert (Executive Chairman)

Amanda Harsas (Finance Director and Company Secretary)

 www.atlanticlithium.com.au

 IR@atlanticlithium.com.au

 **Tel: +61 2 8072 0640**



SP Angel Corporate Finance LLP

Nominated Adviser

Jeff Keating

Charlie Bouverat

Tel: +44 (0)20 3470 0470



Yellow Jersey PR Limited

Charles Goodwin

Bessie Elliot

atlantic@yellowjerseypr.com

Tel: +44 (0)20 3004 9512



Canaccord Genuity Limited

Financial Adviser:

Raj Khatri (UK) /

Duncan St John, Christian Calabrese
(Australia)

Corporate Broking:

James Asensio

Tel: +44 (0) 20 7523 4500

Notes to Editors:

About Atlantic Lithium

www.atlanticlithium.com.au

Atlantic Lithium is an AIM, ASX, GSE and OTCQX-listed lithium company advancing its flagship project, the Ewoyaa Lithium Project, a significant lithium spodumene pegmatite discovery in Ghana, through to production to become the country's first lithium-producing mine.

The Definitive Feasibility Study for the Project indicates the production of 3.6Mt of spodumene concentrate over a 12-year mine life, making it one of the largest spodumene concentrate mines in the world.^{1,2}

The Project was awarded a Mining Lease in October 2023, an Environmental Protection Agency ("EPA") Permit in September 2024, and a Mine Operating Permit in October 2024 and is being developed under an earn-in agreement with Piedmont Lithium Inc.

The Ewoyaa Mineral Resource Estimate (JORC) totals 36.8Mt at 1.24% Li₂O and includes 3.7Mt at 1.37% Li₂O in the Measured category, 26.1Mt at 1.24% Li₂O in the Indicated category and 7.0Mt at 1.15% Li₂O in the Inferred category.¹ Ore Reserves (Probable) of 25.6Mt at 1.22% Li₂O have been reported for the Project.¹

Atlantic Lithium holds a portfolio of lithium projects within 509km² and 771km² of granted and under-application tenure across Ghana and Côte d'Ivoire respectively, which, in addition to the Project, comprises significantly under-explored, highly prospective licences.

End Note

¹ Ore Reserves, Mineral Resources and Production Targets

The information in this announcement that relates to Exploration Results, 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 36.8Mt at 1.24% Li₂O for the Ewoyaa Lithium Project ("Ewoyaa" or the "Project") is extracted from the Company's announcement entitled *"New Dog-Leg Target Delivers Increase to Ewoyaa MRE"*, dated 30 July 2024. The MRE includes a total of 3.7Mt at 1.37% Li₂O in the Measured category, 26.1Mt at 1.24% Li₂O in the Indicated category and 7.0Mt at 1.15% Li₂O in the Inferred category. The information in this announcement relating to Ore Reserves (Probable) of 25.6Mt at 1.22% Li₂O and the Production Target of 3.6Mt of spodumene concentrate over a 12-year mine life is extracted from the Company's announcement entitled *"Ewoyaa Lithium Project Definitive Feasibility Study"*, dated 29 June 2023. The Company confirms, in the case of Mineral Resources, Ore Reserves and Production Targets, that all material assumptions and technical parameters underpinning the estimates 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 in the announcement entitled, *"Mining Lease Granted for Ewoyaa Lithium Project"*. The Company is not aware of any new information or data that materially affects the information included in this announcement or the announcements dated 30 July 2024, 20 October 2023 and 29 June 2023, which are available at www.atlanticlithium.com.au.

² Ewoyaa to become one of the largest spodumene concentrate producers globally - Based on a comparison of targeted spodumene concentrate production capacity (ktpa, 100% basis) of select hard rock spodumene projects globally (*refer Company presentation dated 8 September 2023*).

Competent Persons

Information in this announcement 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' and is a Qualified Person under the AIM Rules. 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 this report of the matters based upon the information in the form and context in which it appears.

Information in this announcement relating to Ore Reserves was compiled by Mr Harry Warries. All stated Ore Reserves are completely included within the quoted Mineral Resources and are quoted in dry tonnes. 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.

The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcement.

APPENDIX 1

JORC Table 1, Section 1 – Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> 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. DD holes were quarter core sampled at 1m intervals or to geological contacts for geochemical analysis. 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. Holes without pegmatite were not assayed. 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. 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. Prior to the December 2018 - SGS Tarkwa was used for sample preparation (PRP100) and subsequently forwarded to SGS Johannesburg for analysis; and later SGS Vancouver for analysis (ICP90A). 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 Na2O2 fusion with combination OES/MS). 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 lithium are 0.01-10%. Sodium Peroxide fusion is considered a "total" assay technique for lithium. In addition, 22 additional elements assayed with Na2O2 fusion, and combination MS/ICP analysis. During 2023, 8,793 pulps from the first four drilling campaigns were analysed for Na using four-acid digestion. During 2024, an additional 11,860 pulps from the remaining drilling were analysed for Na, underpinning the normative mineralogy calculations by Telemark. The majority of these pulps were analysed as 2m composites of the original 1m interval pulps.
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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). 	<ul style="list-style-type: none"> Seven phases of drilling were undertaken at the Project using RC and DD techniques. All the RC drilling used face sampling hammers. Phase 1 and 2 programs used a 5.25 inch hammers while Phase 3 used a 5.75-inch hammer. 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 II 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	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. 	<ul style="list-style-type: none"> A semi-quantitative estimate of sample recovery was completed for the vast majority of drilling. This involved weighing both the bulk samples and splits and calculating

Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> 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. 	<p>theoretical recoveries using assumed densities. Where 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.</p> <ul style="list-style-type: none"> DD recoveries were measured and recorded. Recoveries in 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	<ul style="list-style-type: none"> 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> All drill sample intervals were geologically logged by Company geologists. Where appropriate, geological logging recorded the abundance of specific minerals, rock types and weathering using a standardised logging system that captured preliminary metallurgical domains. 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 in chip trays for future reference and validation of geological 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 Company technical staff. The logging is of sufficient detail to support the current reporting of a Mineral Resource.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. 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. 	<ul style="list-style-type: none"> 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. DD core was cut with a core saw and selected half core samples dispatched to Nagrom Laboratory in Perth for preliminary metallurgical test work. 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 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 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.

Criteria	JORC Code Explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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 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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> 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. During 2023, 8,793 pulps from the first four drilling campaigns were analysed for Na using four-acid digestion. During 2024, an additional 11,860 pulps from the remaining drilling were analysed for Na. The majority of these pulps were analysed as 2m composites of the original 1m interval pulps. These re-assayed pulps formed the basis for normative mineralogy calculations by Telemark. 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. 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. 155 samples were sent to an umpire laboratory (ALS) and/assayed using equivalent techniques, with results demonstrating good repeatability. Atlantic Lithium’s review of QAQC suggests the SGS Vancouver and Intertek Perth laboratories performed within acceptable limits. No geophysical methods or hand-held XRF units have been used for determination of grades in the Mineral Resource.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Significant intersections were visually field verified by company geologists and Shaun Searle of Ashmore during the 2019 site visit. 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. 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. Adjustments to the original assay data included converting Li ppm to Li₂O%.
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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

Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> • Specification of the grid system used. • Quality and adequacy of topographic control. 	<p>by qualified surveyors. Once validated, the survey data was uploaded into Datashed.</p> <ul style="list-style-type: none"> • 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) 32km², 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 considered appropriate for resource estimation purposes.
Data spacing and distribution	<ul style="list-style-type: none"> • 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 Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied. 	<ul style="list-style-type: none"> • The RC holes were initially drilled on 100m spaced sections 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. • 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 and 2m intervals prior to estimation.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit 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. 	<ul style="list-style-type: none"> • The drill line and drill hole orientation are oriented as close as practicable to perpendicular to the orientation of the general mineralised orientation. • 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	<ul style="list-style-type: none"> • The measures taken to ensure sample security. 	<ul style="list-style-type: none"> • 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 Takoradi. • For the Na analysis, stored pulps were retrieved from secure container storage at the project field site for compositing, re-packing and delivery to Intertek.
Audits or reviews	<ul style="list-style-type: none"> • The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> • Prior to the drilling program, 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 Table 1, Section 2 – Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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 license to operate in the area. 	<ul style="list-style-type: none"> Part of the Project is a joint-venture, with the license in the name of the joint-venture party (Barari DV Ghana Ltd). The southern portion of the deposit occurs within a license held by wholly owned local subsidiary Green Metals Resources Ltd. The deposits are located on two licences Mankessim RL3/55 and Mankessim South PL109. Mankessim South – (Green Metals Resources Ltd – 100% Atlantic Lithium) licence was renewed for three years and expires on 5th November 2026. Mankessim - (Barari DV Ghana Ltd – 80% Atlantic Lithium) was renewed for three years and expires on the 26th July 2024 (Licence renewal application submitted). The licenses are in good standing with no known impediments. A Mining License ML3/239 has been granted over the project area and expires 19 October 2038.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> 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 dry drainages. The Ewoyaa pegmatites contain relatively consistent amounts of spodumene (within the mineralised zones), quartz, albite, potassic feldspar ("k-feldspar") and muscovite mica, along with numerous other minerals in relatively minor amounts.
Drill hole information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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 down hole 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. 	<ul style="list-style-type: none"> Exploration results are not being reported. All information has been included in the appendices. No drill hole information has been excluded.

Criteria	JORC Code Explanation	Commentary
Data aggregation methods	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Exploration results are not being reported. Not applicable as a Mineral Resource is being reported. No metal equivalent values are being reported.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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 (e.g. 'down hole length, true width not known'). 	<ul style="list-style-type: none"> The drill line and drill hole orientation are oriented as close to 90° degrees to the orientation of the anticipated mineralised orientation as practicable. The majority of the drilling intersects the mineralisation between 60° and 80° degrees.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Relevant diagrams have been included within the Mineral Resource report main body of text.
Balanced Reporting	<ul style="list-style-type: none"> 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 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. 	<ul style="list-style-type: none"> 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. Exploration results are not being reported.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Results were estimated from drill hole assay data, with geological logging used to aid interpretation of mineralised contact positions. Geological observations are included in the report.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> Follow up RC and DD drilling may be undertaken. Further metallurgical test work may be required as the Project progresses through the study stages. Drill spacing is currently considered adequate for the current level of interrogation of the Project.

APPENDIX 2

JORC Table 1, Section 3 – Estimation and Reporting of Mineral Resources

Criteria	JORC Code Explanation	Commentary
Database integrity	<ul style="list-style-type: none"> Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	<ul style="list-style-type: none"> The database has been systematically audited by Atlantic Lithium geologists. All drilling data has been verified as part of a continuous validation procedure. Once a drill hole is imported into the database a report of the collar, down-hole survey, geology, and assay data are produced. This is then checked by an Atlantic Lithium geologist and any corrections are completed by the database manager.
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> A site visit was conducted by Shaun Searle of Ashmore during February 2019. Shaun inspected the deposit area, drill core/chips and outcrop. During this time, notes and photos were taken. Discussions were held with site personnel regarding drilling and sampling procedures. No major issues were encountered.
Geological interpretation	<ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<ul style="list-style-type: none"> The confidence in the geological interpretation is considered to be good and is based on visual confirmation in outcrop and within drill hole intersections. Geochemistry and geological logging have been used to assist identification of lithology and mineralisation. The Project area lies within the Birimian Supergroup, a Proterozoic volcano-sedimentary basin located in Western Ghana. The Project area is underlain by three forms of metamorphosed schist; mica schist, staurolite schist and garnet schist. Several granitoids intrude the basin metasediments as small plugs. These granitoids range in composition from intermediate granodiorite (often medium grained) to felsic leucogranites (coarse to pegmatoidal grain size), sometimes in close association with pegmatite veins and bodies. Pegmatite intrusions generally occur as sub-vertical dykes with two dominant trends: either east-northeast or north-northeast and dip sub-vertically to moderately southeast to east-southeast. Thickness varies across the Project, with thinner mineralised units intersected at Abonko and Kaampakrom between 4 to 12m; and thicker units intersected at Ewoyaa Main between 30 to 60m and up to 100m at surface. Infill drilling has supported and refined the model and the current interpretation is considered robust. Observations from the outcrop of mineralisation and host rocks; as well as infill drilling, confirm the geometry of the mineralisation. Infill drilling has confirmed geological and grade continuity.
Dimensions	<ul style="list-style-type: none"> The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. 	<ul style="list-style-type: none"> The Project Mineral Resource area extends over a north-south strike length of 4,390m (from 577,380mN – 581,770mN), and includes the 360m vertical interval from 80mRL to -280mRL.
Estimation and modelling techniques	<ul style="list-style-type: none"> The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. 	<ul style="list-style-type: none"> Using parameters derived from modelled variograms, Ordinary Kriging ("OK") was used to estimate average block grades in three passes using Surpac software. Linear grade estimation was deemed suitable for the Cape Coast Mineral Resource due to the geological control on mineralisation. The extrapolation of the lodes along strike and down-dip has been limited to a distance of 40m. Zones of extrapolation are classified as Inferred Mineral Resource.

Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	<ul style="list-style-type: none"> It is assumed that there are no by-products or deleterious elements as shown by metallurgical test work. The Li₂O (%), Fe_Factored (%), K (%), Mn (%), Na (%) and Ti (ppm) grades; as well as spodumene (%), quartz (%), albite (%), k-feldspar (%) and muscovite (%) mineral contents were interpolated into the Surpac block model. A Surpac block model was created to encompass the extents of the known mineralisation. The block model was rotated on a bearing of 30°, with block dimensions of 10m NS by 10m EW by 5m vertical with sub-cells of 2.5m by 2.5m by 1.25m. The parent block size dimension was selected on the results obtained from Kriging Neighbourhood Analysis and also in consideration of two predominant mineralisation orientations of 30° and 100 to 120°. An orientated 'ellipsoid' search was used to select data and adjusted to account for the variations in lode orientations, however all other parameters were taken from the variography derived from Domains 1, 2, 3, 4, 7 and 8. Up to three passes were used for each domain. First pass had a range of 50m, with a minimum of 8 samples. For the second pass, the range was extended to 100m, with a minimum of 4 samples. For the third pass, the range was extended to 200m, with a minimum of 1 or 2 samples. A maximum of 16 samples was used for each pass with a maximum of 4 samples per hole. No assumptions were made on selective mining units. Correlation analysis was conducted on the domains at Ewoyaa Main. The mineralisation was constrained by pegmatite geology wireframes and internal lithium bearing mineralisation wireframes prepared using a nominal 0.4% Li₂O cut-off grade and a minimum down-hole length of 3m. The wireframes were used as hard boundaries for the interpolation. Statistical analysis was carried out on data from 93 mineralised domains. Following a review of the population histograms and log probability plots and noting the low coefficient of variation statistics, it was determined that the application of high grade cuts was not warranted. Validation of the model included detailed visual validation, comparison of composite grades and block grades by strike panel and elevation. Validation plots showed good correlation between the composite grades and the block model grades.
Moisture	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> Tonnages and grades were estimated on a dry in situ basis.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> The Statement of Mineral Resources has been constrained by the mineralisation solids and reported above a cut-off grade of 0.5% Li₂O. Whittle optimisations demonstrate reasonable prospects for eventual economic extraction.
Mining factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	<ul style="list-style-type: none"> Ashmore has assumed that the deposit could be mined using open pit mining techniques. A high level Whittle optimisation of the Mineral Resource supports this view.

Criteria	JORC Code Explanation	Commentary
Metallurgical factors or assumptions	<ul style="list-style-type: none"> The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. 	<ul style="list-style-type: none"> Based on the ELP Feasibility Study, Atlantic Lithium could produce approximately 330,000 tonnes per annum of mixed K_2O / Na_2O feldspar as a by-product from spodumene concentrate which will be sold for lithium purification. The feldspar will be processed by dense media separation to produce two grades, 2.6 sg O/F with high total alkalis and 2.6 sg U/F with lower alkalis but significant Li_2O at approximately 0.70%, which is a strong flux. Following examination of chemical and mineralogical composition, ceramic application trials were undertaken in Stoke on Trent (The Potteries) for vitreous hotelware, high end earthenware and floor tiles. Samples were wet ground to the required particle size and incorporated into commercial recipes, substituting for standard feldspars and nepheline syeneite. Each prepared body was factory fired and, in the case of vitreous hotelware and high-end earthenware, biscuit (not glazed), glazed and decorated pieces were produced. In all cases the trial firings produced acceptable ware, comparable to the standards in all aspects, including contraction, water absorption, density, porosity, shape, colour and appearance. Results at the vitreous hotelware factory (a world leading manufacturer of tableware for the international hospitality industry) where the Atlantic Lithium feldspars substituted for Forshammer feldspar (mined in Sweden by Sibelco) were good. Provided Atlantic Lithium can consistently produce feldspar to the same or better quality than the samples provided, there is a very good potential to compete in local and international ceramic markets for tableware, including vitreous hotelware, earthen ware and floor tiles.
Environmental factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	<ul style="list-style-type: none"> No assumptions have been made regarding environmental factors. Atlantic Lithium will work to mitigate environmental impacts as a result of any future mining or mineral processing.
Bulk density	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<ul style="list-style-type: none"> Bulk density measurements were completed on selected intervals of diamond core drilled at the deposit. The measurements were conducted at the Cape Coast core processing facility using the water immersion/Archimedes method. The weathered samples were coated in paraffin wax to account for porosity of the weathered samples. A total of 14,046 measurements were conducted on the Cape Coast mineralisation, with samples obtained from oxide, transitional and fresh material. Bulk densities ranging between 1.7t/m³ and 2.78t/m³ were assigned in the block model dependent on lithology, mineralisation and weathering.
Classification	<ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories. 	<ul style="list-style-type: none"> The Mineral Resource estimate is reported here in compliance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'

Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	<p>by the Joint Ore Reserves Committee (JORC). The ELP feldspar Mineral Resource was classified as Measured, Indicated and Inferred Mineral Resource based on data quality, sample spacing, and lode continuity; with the same parameters used to classify the lithium Mineral Resource. The Measured Mineral Resource was confined to fresh rock within areas drilled at 20m by 15m along with robust continuity of geology and Li₂O grade. The Indicated Mineral Resource was defined within areas of close spaced drilling of less than 40m by 40m, and where the continuity and predictability of the lode positions was good. In addition, Indicated Mineral Resource was classified in weathered rock overlying fresh Measured Mineral Resource. The Inferred Mineral Resource was assigned to transitional material, areas where drill hole spacing was greater than 40m by 40m, where small, isolated pods of mineralisation occur outside the main mineralised zones, and to geologically complex zones.</p> <ul style="list-style-type: none"> The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. The definition of mineralised zones is based on high level geological understanding producing a robust model of mineralised domains. This model has been confirmed by infill drilling which supported the interpretation. Validation of the block model shows good correlation of the input data to the estimated grades. The Mineral Resource estimate appropriately reflects the view of the Competent Person.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> Internal audits have been completed by Ashmore which verified the technical inputs, methodology, parameters and results of the estimate.
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	<ul style="list-style-type: none"> The geometry and continuity have been adequately interpreted to reflect the applied level of Measured, Indicated and Inferred Mineral Resource. The data quality is good, and the drill holes have detailed logs produced by qualified geologists. A recognised laboratory has been used for all analyses. The Mineral Resource statement relates to global estimates of tonnes and grade. No historical mining has occurred; therefore, reconciliation could not be conducted.