ATLANTIC LITHIUM

EXPLORATION UPDATE

AIM: ALL, ASX: A11, OTC: ALLIF

1 February 2023

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Ewoyaa Lithium Resource Increases to 35.3Mt at 1.25% Li_2O Measured and Indicated Resources Now 79% of Total Resource Cape Coast Lithium Portfolio, Ghana, West Africa

Atlantic Lithium Limited (AIM: ALL, OTC: ALLIF, "Atlantic Lithium" or the "Company"), the funded African- focussed lithium exploration and development company on track to become Ghana's first lithium producing mine, is pleased to announce a significant Mineral Resource Estimate ("MRE" or the "Resource") upgrade to 35.3Mt at 1.25% Li_2O for the Ewoyaa lithium deposit (collectively the "Ewoyaa Project" or the "Project") within the Cape Coast Lithium Portfolio in Ghana, West Africa. The Resource is reported in accordance with the JORC Code (2012).

HIGHLIGHTS:

- **MRE now increased to 35.3Mt at 1.25% Li_2O including 28Mt in the Measured and Indicated categories at the Ewoyaa deposit; reported in accordance with the JORC Code (2012).**
- **79% of the overall MRE now in higher confidence Measured and Indicated categories, with 3.5Mt at 1.37% Li_2O in the Measured category and 24.5Mt at 1.25% Li_2O in the Indicated category.**
- **Measured Resources reported for the first time and additional Indicated Resources converted from the Inferred category, highlighting strong geological and mineralisation continuity, favourable for ongoing studies.**
- **Definitive Feasibility Study ("DFS") well progressed and targeted for release Q2 2023.**
- **The DFS will evaluate an extended mine life and increased throughput to enhance Project economics.**
- **Significant exploration upside within the immediate Resource area with some pegmatites open along strike and at depth and only 15km^2 drilled to date within the broader 560km^2 Cape Coast lithium portfolio.**
- **MRE upgrade is based on a total 137,153m of drilling (inclusive 47,000m programme completed during 2022), and includes 120,845m of reverse circulation ("RC") and 16,308m of diamond core ("DD") drilling.**
- **Project has exceptional ESG credentials; local highly skilled workforce, low power requirements and well located with adjacent high-power transmission lines, within 1km of national highway and within 110km to the operating deep-sea port of Takoradi.**
- **Resource upgrade expected to significantly improve project economics. Previously announced Pre-Feasibility Study (*refer RNS of 22 September 2022*) delivers exceptional financial outcomes for a 2Mtpa operation,**

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producing an average c. 255,000tpa of 6% Li_2O spodumene concentrate ("SC6") over a 12.5-year operation based on a 30.1Mt at 1.26% Li_2O MRE:

- **LOM revenues exceeding US$4.84bn, Post-tax NPV_8 of US$1.33bn, IRR of 224% over 12.5 years**
- **US$125m capital cost with industry-leading payback period of <5 months**
- **C1 cash operating costs of US$278 per tonne of 6% lithium spodumene concentrate Free on Board ("FOB") Ghana Port, after by-product credits**
- **Average Life of Mine ("LOM") EBITDA of US$248m per annum**
- **18.9Mt at 1.24% Li_2O Maiden Ore Reserve**
- **Average annualised US$1,359/dry metric tonne SC6 pricing used with US$1,200/dry metric tonne long term pricing**

Commenting on the Company's latest progress, Lennard Kolff, Interim Chief Executive Officer of Atlantic Lithium, said:

"The Resource upgrade represents a significant de-risking milestone for the Company, with 79% of the Resource now in the higher confidence Measured and Indicated categories with potential for further exploration growth. This, in addition to the larger overall tonnage, will provide the opportunity to evaluate extended mine life and increased throughput to enhance project economics.

"Our goal was to convert the Inferred to Indicated category, define the first 1 to 2 years of planned production to Measured category and increase the overall Resource scale. We have comfortably achieved all our goals, demonstrating the robust geological fundamentals of the Project.

"Metallurgical test-work to date has consistently delivered high-purity, low contaminants >6% Li_2O coarse spodumene concentrate utilising simple gravity-only processing. Combining this with the excellent proximity to operational infrastructure and the availability of skilled services in pro-mining Ghana, we are on course to deliver one of the world's most efficient hard rock lithium projects, in terms of capital intensity and lower operating costs.

"The Company has transitioned from explorer to developer, with Ewoyaa funded to production through our agreement with Piedmont, key senior personnel recently recruited, and our Mining License application submitted. Today's Resource upgrade highlights the exceptional potential of the project and the value that it brings to Ghana and the Company."

Mineral Resource Estimate Upgrade

An upgraded MRE of 35.3Mt at 1.25% Li_2O was completed for the Ewoyaa deposit and surrounding pegmatites; collectively termed the "Ewoyaa Project". The Mineral Resource is reported in accordance with the JORC Code (2012). The MRE includes a total of 3.5Mt at 1.37% Li_2O in the Measured category, 24.5Mt at 1.25% Li_2O in the indicated category and 7.4Mt at 1.16% Li_2O in the Inferred category (*refer* ***Table 1***).

The independent MRE for Ewoyaa 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 requirements of the JORC Code (2012) and is therefore suitable for public reporting.

High-level Whittle optimisation was completed by Mining Focus Consultants Pty Ltd of Perth, Western Australia and demonstrates reasonable prospects for eventual economic extraction.

Table 1: *Ewoyaa Mineral Resource Estimate (0.5% Li_2O Cut-off)*

Type	Measured Mineral Resource		
	Tonnage Mt	Li_2O %	Cont. Lithium Oxide kt
Primary	3.5	1.37	48
Total	**3.5**	**1.37**	**48**
Type	**Indicated Mineral Resource**		
	Tonnage Mt	**Li_2O %**	**Cont. Lithium Oxide kt**
Weathered	0.5	1.09	5
Primary	24.1	1.26	302
Total	**24.5**	**1.25**	**307**
Type	**Inferred Mineral Resource**		
	Tonnage Mt	**Li_2O %**	**Cont. Lithium Oxide kt**
Weathered	1.8	1.13	20
Primary	5.6	1.17	66
Total	**7.4**	**1.16**	**86**
Type	**Total Mineral Resource**		
	Tonnage Mt	**Li_2O %**	**Cont. Lithium Oxide kt**
Weathered	2.2	1.12	25
Primary	33.1	1.25	415
Total	**35.3**	**1.25**	**440**

Competent Persons 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.

All Mineral Resources figures reported in the table above represent estimates at January 2023. 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).

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There are four main geometallurgical domains at Ewoyaa; coarse-grained type P1 and finer-grained type P2 pegmatites and their weathered equivalents. Their estimated relative abundances, metallurgical recoveries and concentrate grades are shown in ***Table 2***.

To show the tonnage and grade distribution throughout the entire deposit, a bench breakdown has been prepared using a 10m bench height which is shown in ***Figure 1*** and grade-tonnage curve for the classified resource in ***Figure 2***.

Table 2: *Material types, recoveries and concentrate grades (recoveries based on laboratory results)*

Geomet Type	Weathered				
	Tonnage	Li_2O	Cont. Lithium Oxide	Recovery	Conc. Grade
	Mt	%	kt	%	Li_2O (%)
P1	2.0	1.13	23	68	6.0
P2	0.2	1.00	2	50	6.0
Total	**2.2**	**1.12**	**25**		

Geomet Type	Primary				
	Tonnage	Li_2O	Cont. Lithium Oxide	Recovery	Conc. Grade
	Mt	%	kt	%	Li_2O (%)
P1	29.3	1.28	375	70	6.0
P2	3.8	1.06	40	50	5.5
Total	**33.1**	**1.25**	**415**		

Competent Persons Note: as per Table 1 above and metallurgical sign off in Competent Persons section at end of document.

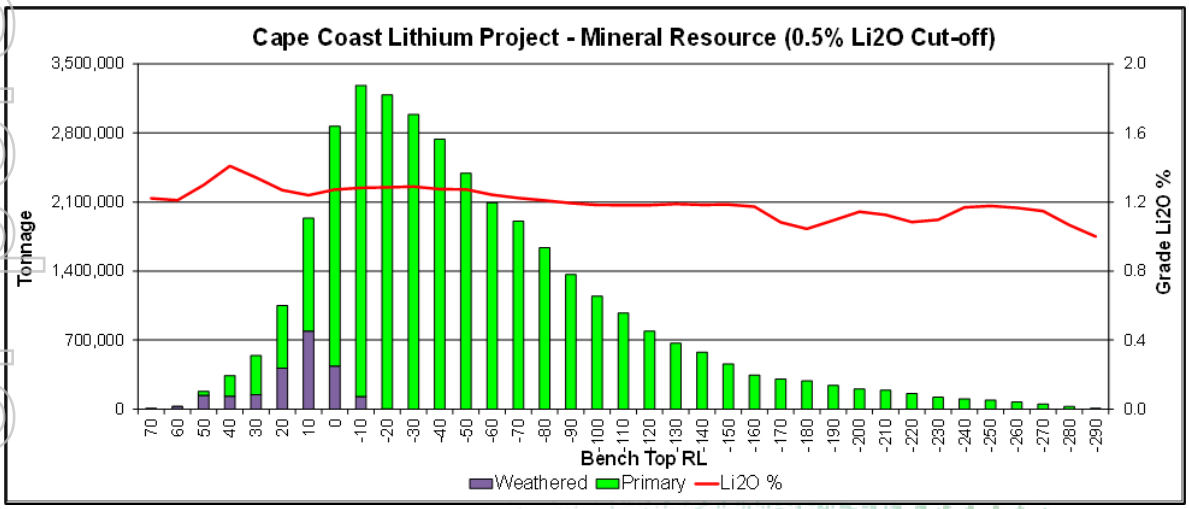

Figure 1: *Ewoyaa Tonnage and Grade – 10m Bench Elevation*

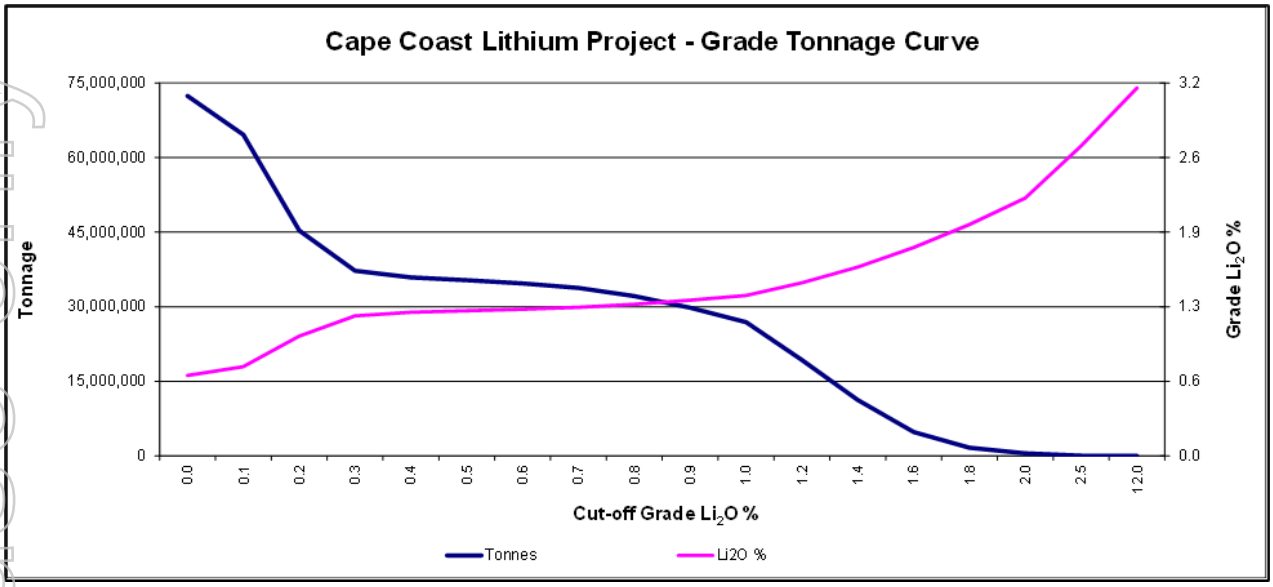

Figure 2: *Ewoyaa Lithium Project Grade - Tonnage curve for classified pegmatite resource*

A plan view of the deposit areas is shown in ***Figure 3*** with a long section shown in ***Figure 4*** and cross-section within the Ewoyaa Main indicated category zone shown in ***Figure 5***.

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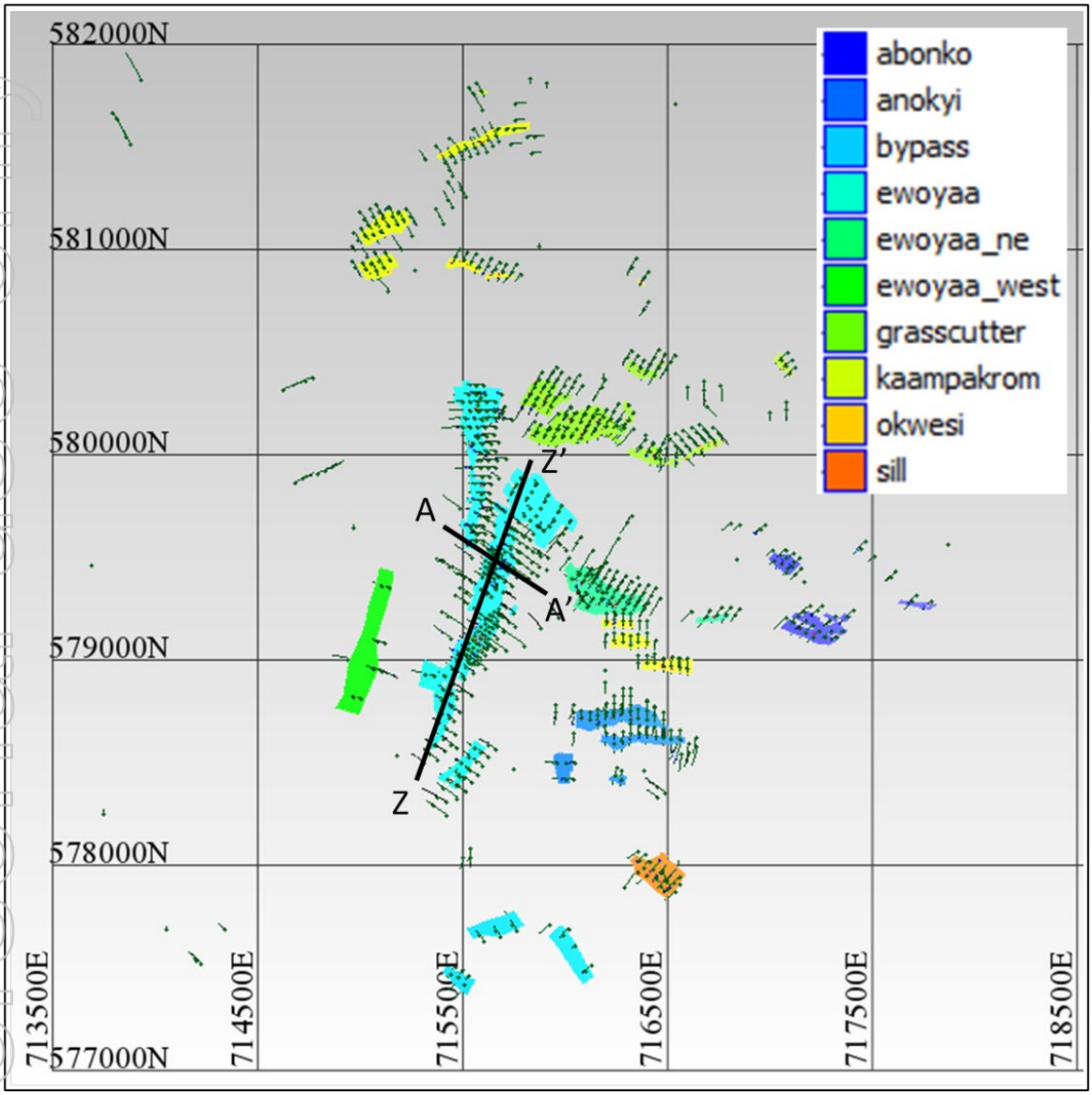

Figure 3: *Plan View of Ewoyaa Resource wireframes and drilling with prospect names*

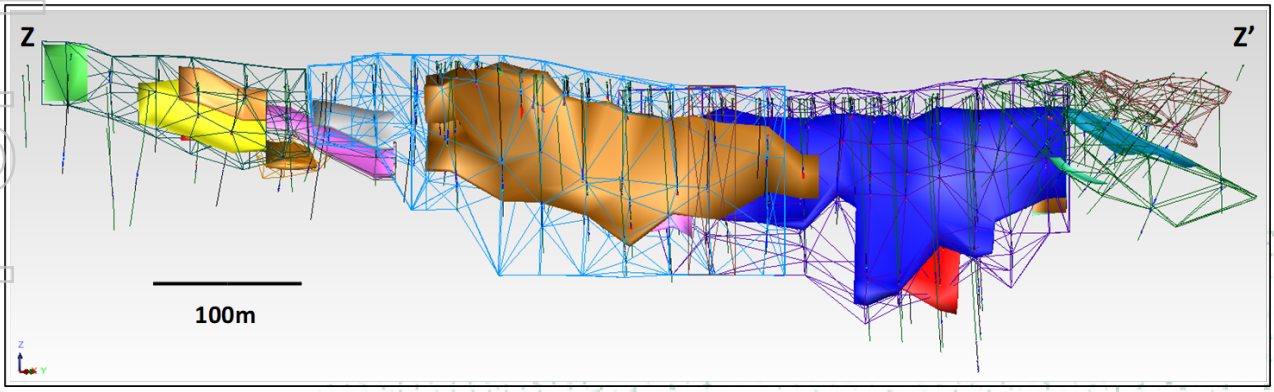

Figure 4: *Long Section Z-Z' of Ewoyaa Main wireframes and drilling (View towards 300°; solid colours = Resource wireframes, wireframe edges = pegmatite wireframes)*

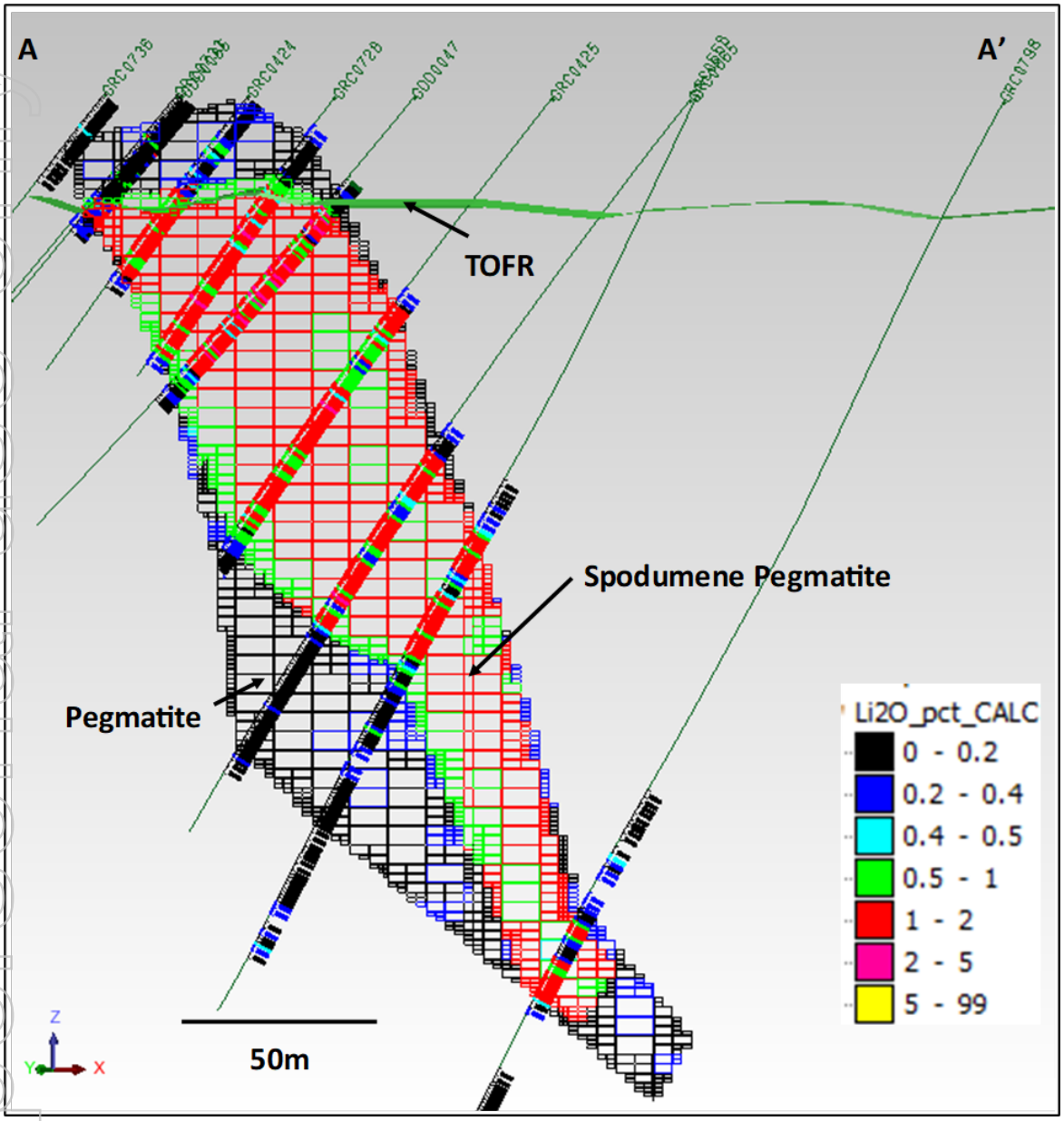

Figure 5: *Cross Section A-A' of Ewoyaa Block Model Li2O grades and drilling*

The current MRE is based on a 0.5% reporting cut-off grade within a 0.4% Li_2O wireframed pegmatite body. However, when assessing all pegmatite volumes (with no cut-offs applied), there is significant scope to increase the resource tonnage. ***Table 3*** below shows the overall resource tonnage and grade for the deposit, inclusive of all pegmatite material. For example, the Resource can be reported at a significantly larger tonnage by reducing the cut-off grade to 0.2% Li_2O, giving an increased resource of 45.3Mt at 1.03% Li_2O. Conversely, the Resource can be reported at a higher grade using a 0.8% Li_2O cut-off for a resource of 32.1Mt at 1.3% Li_2O.

Further studies will assess the potential benefits of increased production by reducing the cut-off grade or higher feed grade on overall Project economics, consistent with market price predictions and price trends realised by existing producers.

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Table 3: *Overall resource tonnage and grade for the deposit, inclusive all pegmatite material*

Cape Coast Lithium Project - Peg and Min 0.4% Wireframes
January 2023 Mineral Resource Estimate

Grade Range Li_2O	Incremental Resource Tonnage t	Li_2O %	Contained Li_2O (t)	Cut-off Grade Li_2O %	Cumulative Resource Tonnage t	Li_2O %	Contained Li_2O (t)
0.0 -> 0.1	7,805,784	0.07	5,451	0.0	72,387,265	0.69	500,147
0.1 -> 0.2	19,273,356	0.15	28,859	0.1	64,581,481	0.77	494,697
0.2 -> 0.3	8,080,136	0.23	18,974	0.2	45,308,125	1.03	465,838
0.3 -> 0.4	1,349,802	0.34	4,549	0.3	37,227,989	1.20	446,864
0.4 -> 0.5	542,526	0.44	2,411	0.4	35,878,187	1.23	442,314
0.5 -> 0.6	635,742	0.55	3,526	**0.5**	**35,335,661**	**1.25**	**439,903**
0.6 -> 0.7	932,862	0.65	6,099	0.6	34,699,919	1.26	436,377
0.7 -> 0.8	1,628,854	0.75	12,266	0.7	33,767,057	1.27	430,278
0.8 -> 0.9	2,352,414	0.85	20,053	0.8	32,138,203	1.30	418,012
0.9 -> 1.0	2,892,363	0.95	27,540	0.9	29,785,789	1.34	397,959
1.0 -> 1.2	7,606,691	1.10	83,979	1.0	26,893,426	1.38	370,418
1.2 -> 1.4	8,065,436	1.30	104,721	1.2	19,286,735	1.48	286,440
1.4 -> 1.6	6,413,684	1.49	95,753	1.4	11,221,299	1.62	181,719
1.6 -> 1.8	3,163,177	1.68	53,275	1.6	4,807,615	1.79	85,965
1.8 -> 2.0	1,121,909	1.88	21,101	1.8	1,644,438	1.99	32,690
2.0 -> 2.5	479,555	2.17	10,413	2.0	522,529	2.21	11,589
2.5 -> 3.0	36,310	2.66	966	2.5	42,974	2.66	1,176
3.0 -> 3.5	6,664	3.16	210	12.0	6,664	3.16	210
Total	**72,387,265**	**0.69**	**500,147**				

Geology and Geological Interpretation

The Ewoyaa 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-southeast (Abonko, Anokyi, Ewoyaa Northeast, Grasscutter, Kaampakrom and Okwesi) dipping sub-vertically northeast; or north-northeast (Ewoyaa Main) dipping sub-vertically to moderately to the east. Pegmatite thickness varies across the Project, with thinner mineralised units intersected at Abonko and Kaampakrom between 4 and 12m; and thicker units intersected at Ewoyaa Main between 30 and 60m, and up to 100m at surface.

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Drill Methods

The database contains data for the auger, RC and DD drilling conducted by the Company since 2018. The drilling was completed by the Company in six phases commencing in April 2018. All the drilling was undertaken by GeoDrill (Ghana), using both RC and DD rigs.

Drilling at the deposit extends to a vertical depth of approximately 319m and the mineralisation was modelled from surface to a depth of approximately 330m below surface. The estimate is based on good quality RC and DD drilling data. Drill hole spacing is predominantly 20m by 20m and 40m by 40m in the well-drilled portions of the Project and up to 80m by 80m to 100m by 100m across the breadth of the known mineralisation.

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 or as tails 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. Eleven DD twins of RC holes were completed.

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. During Phase 3, Phase 4, Phase 5 and Phase 6, RC samples were split with a rig mounted cone spitter, which took duplicate samples for quality control purposes.

DD was cut with a core saw and selected half core samples was dispatched to Nagrom Laboratory in Australia for 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, Ghana for sample preparation. Prior to that, samples were sent to SGS Laboratory in Tarkwa for 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, Australia for assaying.

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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 Na_2O_2 fusion with ICP-OES. ICP-MS was added to some submissions for additional trace element characterisation purposes.

Mineral Resource Classification Criteria

The Ewoyaa lithium 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 Ewoyaa Mineral Resource was classified as Measured, Indicated and Inferred Mineral Resource based on data quality, sample spacing, and lode continuity. The Measured Mineral Resource was defined within areas of close spaced RC and DD drilling of less than 20m by 20m, and where the continuity and predictability of the lode positions was good. Indicated Mineral Resource was defined within areas of close spaced RC and DD 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 confined to the fresh rock. 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.

Estimation Methodology

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 block size was selected based on results of Kriging Neighbourhood Analysis ("KNA") and also in consideration of two predominant mineralisation orientations of 30° and 100 to 120°.

The parent block size was selected based on KNA, while dimensions in other directions were selected to provide sufficient resolution to the block model in the across-strike and down-dip direction.

Bulk densities ranging between 1.7t/m^3 and 2.78t/m^3 were assigned in the block model dependent on lithology, mineralisation and weathering. These densities were applied based on 13,901 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.

Cut-off Grade

The Statement of Mineral Resources has been constrained by the mineralisation solids and reported above a cut-off grade of 0.5% Li_2O. The reporting cut-off grade is supported by a high-level Whittle optimisation.

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Mining and Metallurgical Methods and Parameters

The Statement of Mineral Resources has been constrained by the mineralisation solids, reported at a cut-off grade of 0.5% Li_2O. Whittle optimisations demonstrate reasonable prospects for eventual economic extraction. Preliminary metallurgical test work indicates four main geometallurgical domains; weathered and fresh coarse-grained spodumene-bearing pegmatite (P1) and weathered and fresh medium-grained spodumene-bearing pegmatite (P2). From test work completed for the Scoping Study at a 6.3mm crush, the P1 material produces a 6% Li_2O concentrate at approximately 70 to 85% recovery (average 75% recovery), whilst P2 material produces 5.5 to 6% Li_2O concentrate at approximately 35 to 65% recovery (average 47% recovery).

Further metallurgical test work completed for the PFS was done at a 10mm crush. Recoveries for P1 material into primary concentrate at a 10mm crush were 50-80% from the HLS test work with an average 68% recovery for weathered and 70% for the fresh used for the PFS before discounting.

A P2 recovery of 50% was used for weathered and fresh for the purpose of the PFS study. In the Scoping study, HLS tests on P2 weathered and fresh material at a 6.3mm crush size gave recoveries of 46-61%. Recoveries of P2 to primary concentrates at 10mm crush size ranged from 7-30% and averaged 20%. The middlings contained ~60% of the lithium and it is expected that after finer crushing at least 50% of this will be recovered giving an overall recovery of 50% before discounting.

Recoveries selected for the DMS Plant process design criteria were interpreted from laboratory results discounted by 4% to simulate the typical loss of recoveries from laboratory conditions to on-site, large-scale operations resulting in 66% recovery for P1 fresh, 64% recovery for P1 weathered and 46% for P2 weathered and fresh materials (*refer announcement of 22 September 2022*).

Further geological, geotechnical, engineering and metallurgical studies are recommended to further define the lithium mineralisation and marketable products.

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***.

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 and ASX 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.

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Information in this report relating to metallurgical results is based on data reviewed by Mr Noel O'Brien, Director of Trinol Pty Ltd. Mr O'Brien is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the December 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Mr O'Brien consents to the inclusion in the report of the matters based upon the information in the form and context in which it appears.

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

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Notes to Editors:

About Atlantic Lithium
www.atlanticlithium.com.au

Atlantic Lithium (formerly "IronRidge Resources") is an AIM and ASX-listed lithium company advancing a portfolio of 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. for US$103m towards the development of the Ewoyaa Project. Based on the Pre-Feasibility Study, the Ewoyaa Project has indicated Life of Mine revenues exceeding US$4.84bn, producing a spodumene concentrate via simple gravity only process flowsheet.

Atlantic Lithium holds a 560km^2 & 774km^2 tenure across Ghana and Côte d'Ivoire respectively, comprising significantly under-explored, highly prospective licenses.

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APPENDIX 1

JORC Table 1, Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *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.*	• 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 Na_2O_2 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 Na_2O_2 fusion, and combination MS/ICP analysis.
Drilling techniques	• *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).*	• Six 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. Phase 5 and 6 programmes used 5.5 inch hammer for RC and diamond pre-collar drilling. • 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

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Criteria	JORC Code explanation	Commentary
		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	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *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.*	• 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 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. • 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 phase 2 DD twin program has identified a positive grade bias for lithium in the DD compared to the RC results.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• 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	• *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.*	• 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 totalling 427.1kg 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

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Criteria	JORC Code explanation	Commentary
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	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.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.*	• 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. • 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. • 200 samples were sent to an umpire laboratory (ALS) and/assayed using equivalent techniques, with results demonstrating good repeatability. • ALL'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	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry*	• 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.

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Criteria	JORC Code explanation	Commentary
	procedures, data verification, data storage (physical and electronic) protocols. • *Discuss any adjustment to assay data.*	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). Since the Phase 3 drilling program data was 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 a positive bias towards the DD method when compared to RC drilling for Li_2O, and it was shown that there is severe 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 Li_2O%.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• The 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 data was uploaded into Datashed. For the current resource upgrade, HHGPS collar positions were used. • 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. • All Phase 4 and 5 drill holes were surveyed with 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.

Criteria	JORC Code explanation	Commentary
		• Locational accuracy at collar and down the drill hole is considered appropriate for resource estimation purposes.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• 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. • For Phase 2 and 3 programs, hole spacing was reduced to 80m spaced sections and 40m hole spacings orientated at 300° or 310°, while the Abonko, Kaampakrom and Ewoyaa NE trends were drilled at 220°, with dips of -50°. • Samples were composited to 1m intervals prior to estimation.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The 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	• *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 Takoradi.
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. • 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.

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JORC Table 1, Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *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.*	• Part of the Project is a joint-venture, with the license in the name of the joint-venture party (Barari DV Ghana). • The southern portion of the deposit occurs within a 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% ALL) licence was renewed for three years and expires on 18th February 2023. • Mankessim - (Barari DV Ghana Ltd – 80% ALL) was renewed for three years and expires on the 26th July 2024. • The licenses are 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.

Drill hole information	• *A summary of all information material to the under-standing of the exploration results including a tabulation of the following information for all Material drill holes:*
	  • *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.*
		• Exploration results are not being reported.
		• All information has been included in the appendices. No drill hole information has been excluded.

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Criteria	JORC Code explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• 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	• *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').*	• 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	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Relevant diagrams have been included within the Mineral Resource report main body of text.
Balanced Reporting	• *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.*	• 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	• *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.*	• 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	• *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.*	• Follow up RC and DD drilling will 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.

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APPENDIX 2

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

Criteria	JORC Code explanation	Commentary
Database integrity	• *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.*	• The database has been systematically audited by ALL 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 ALL geologist and any corrections are completed by the database manager.
Site visits	• *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.*	• 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	• *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.*	• 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. • 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

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Criteria	JORC Code explanation	Commentary
		mineralisation. • Infill drilling has confirmed geological and grade continuity.
Dimensions	• *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.*	• 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	• *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.* • *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.*	• 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. • It is assumed that there are no by-products or deleterious elements as shown by metallurgical test work. • Li_2O (%), Ta (ppm), Fe (%), Nb (ppm), Sn (ppm), Cs (ppm), K (%), Al (%), Si (%), P (%) and S (ppm) were interpolated into the 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. It is evident that Li_2O has little correlation with any of the

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Criteria	JORC Code explanation	Commentary
		other elements presented in the table, apart from weak negative correlations with caesium and potassium. • The mineralisation was constrained by pegmatite geology wireframes and internal lithium bearing mineralisation wireframes prepared using a nominal 0.4% Li_2O 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 87 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 northing and elevation and a nearest neighbour check estimate. Validation plots showed good correlation between the composite grades and the block model grades.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages and grades were estimated on a dry in situ basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The Statement of Mineral Resources has been constrained by the mineralisation solids and reported a cut-off grade of 0.5% Li_2O. Whittle optimisations demonstrate reasonable prospects for eventual economic extraction. Further geological, geotechnical, engineering and metallurgical studies are recommended to further define the lithium mineralisation and marketable products.
Mining factors or assumptions	• *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.*	• 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.
Metallurgical factors or assumptions	• *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*	• Scoping and Pre-Feasibility level metallurgical test work has been conducted on the Ewoyaa material types. • Metallurgical test work indicates that there are four main geometallurgical domains; weathered and fresh coarse grained spodumene bearing pegmatite (P1); and

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Criteria	JORC Code explanation	Commentary
	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.	weathered and fresh medium grained spodumene bearing pegmatite (P2). From test work completed at a 6.3mm crush, the P1 material produces a 6 to 6.6% Li_2O concentrate at approximately 70 to 85% recovery (average 75% recovery), whilst P2 material produces 5.5 to 6% Li_2O concentrate at approximately 35 to 65% recovery (average 47% recovery). • From HLS metallurgical test work done at a 10mm crush, P1 material produces a 6% Li_2O concentrate at 50-80% recovery with an average 68% recovery for weathered and 70% for the fresh. P2 material produces a 5.5% and 6% Li_2O concentrate at 7-30% and averaged 20% recovery. The P2 middlings contained ~60% of the lithium and it is expected that after finer crushing at least 50% of this will be recovered giving an overall recovery of 50% for P2. • Recoveries selected for the DMS Plant process design criteria were interpreted from laboratory results discounted by 4% to simulate the typical loss of recoveries from laboratory conditions to on-site, large-scale operations resulting in 66% recovery for P1 fresh, 64% recovery for P1 weathered and 46% for P2 weathered and fresh materials. **Weathered** Geomet / Tonnage Mt / Li_2O % / Rec % / Conc. Li_2O (%) P1 / 1.7 / 1.13 / 68 / 6.0 P2 / 0.3 / 1.05 / 50 / 6.0 **Total / 2.0 / 1.12** **Primary** Geomet / Tonnage Mt / Li_2O % / Rec % / Conc. Li_2O (%) P1 / 23.5 / 1.30 / 70 / 6.0 P2 / 4.7 / 1.11 / 50 / 5.5 **Total / 28.1 / 1.27**
Environmental factors or assumptions	• *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.*	• No assumptions have been made regarding environmental factors. ALL will work to mitigate environmental impacts as a result of any future mining or mineral processing.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or*	• Bulk density measurements were completed on selected intervals of diamond core drilled at the deposit. The

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Criteria	JORC Code explanation	Commentary
	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.*	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 13,901 measurements were conducted on the Cape Coast mineralisation, with samples obtained from oxide, transitional and fresh material. • Bulk densities ranging between 1.7t/m^3 and 2.78t/m^3 were assigned in the block model dependent on lithology, mineralisation and weathering.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. 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.*	• 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' by the Joint Ore Reserves Committee (JORC). The Cape Coast Mineral Resource was classified as Measured, Indicated and Inferred Mineral Resource based on data quality, sample spacing, and lode continuity. 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 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	• *The results of any audits or reviews of Mineral Resource estimates.*	• Internal audits have been completed by Ashmore which verified the technical inputs, methodology, parameters and results of the estimate.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	• *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.*	• The geometry and continuity have been adequately interpreted to reflect the applied level of 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.

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APPENDIX 3

Glossary of Terms and Abbreviations

AC	Air core
Assay	Measure of valuable mineral content.
Block Model	A three-dimensional structure into which parameters are interpolated during the resource estimation process.
Competent Person 'CP'	Competent Person, as defined by the JORC Code. A 'Competent Person' is a minerals industry professional who is a Member or Fellow of The Australasian Institute of Mining and Metallurgy, or of the Australian Institute of Geoscientists, or of a 'Recognised Professional Organisation' (RPO), as included in a list available on the JORC and ASX websites. These organisations have enforceable disciplinary processes including the powers to suspend or expel a member. A Competent Person must have a minimum of five years relevant experience in the style of mineralisation or type of deposit under consideration and in the activity which that person is undertaking. If the Competent Person is preparing documentation on Exploration Results, the relevant experience must be in exploration. If the Competent Person is estimating, or supervising the estimation of Mineral Resources, the relevant experience must be in the estimation, assessment and evaluation of Mineral Resources. If the Competent Person is estimating, or supervising the estimation of Ore Reserves, the relevant experience must be in the estimation, assessment, evaluation and economic extraction of Ore Reserves.
Core	A solid, cylindrical sample of rock typically produced by a rotating drill bit, but sometimes cut by percussive methods.
Cut - off grade	The lowest grade of mineralized material that qualifies as ore in a given deposit; rock of the lowest assay included in an ore estimate.
DD	Diamond core drilling
Deposit	An occurrence of economically interesting minerals.
Dip	The angle at which a bed, stratum, or vein is inclined from the horizontal, measured perpendicular to the strike and in the vertical plane.
DMS	Dense medium separation
Drillhole	Technically, a circular hole drilled by forces applied percussively and/or by rotation; loosely and commonly, the name applies to a circular hole drilled in any manner.
Drilling	The operation of making deep holes with a drill for prospecting, exploration, or valuation.
Grade	The relative quantity or the percentage of ore-mineral or metal content in an orebody.
Exploration	The act of investigation for the location of undiscovered mineral deposits.
Indicated Mineral Resource	That part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to assume geological and grade (or quality) continuity between points of observation where data and samples are gathered. An Indicated Mineral Resource has a lower

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level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Ore Reserve.

Inferred Mineral Resource That part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to an Ore Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

JORC Code The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition, Prepared by the Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia ("JORC").

Measured Mineral Resource That part of a Mineral Resource for which quantity, grade (or quality), densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to confirm geological and grade (or quality) continuity between points of observation where data and samples are gathered. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Ore Reserve or under certain circumstances to a Probable Ore Reserve.

Mineral Resource A concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories

Mineralisation The process by which minerals are introduced into a rock. More generally, a term applied to accumulations of economic or related minerals in quantities ranging from weakly anomalous to economically recoverable.

Modifying Factors Considerations used to convert Mineral Resources to Ore Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.

MRE Mineral Resource Estimate

Mt Million tonnes

Ore The naturally occurring material from which a mineral or minerals of economic value can be extracted profitably or to satisfy social or political objectives. The term is generally but not always used to refer to metalliferous material, and is often modified by the names of the valuable constituent.

Ore Reserves Is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.

RC	Reverse circulation
Strike	The course or bearing of the outcrop of an inclined bed, vein, or fault plane on a level surface; the direction of a horizontal line perpendicular to the direction of the dip.
Whittle Optimisation	The Four-X Whittle Optimisation process uses the Lerchs-Grossmann algorithm to determine the optimal shape for an open pit in three dimensions. Based on the economic input parameters selected it can define a pit outline that has the highest possible total value, subject to the required pit slopes.
Wireframe	Three dimensional solids representing geological/mineralogical domains.

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