ASX ANNOUNCEMENT

SAYONA MINING LIMITED

31 October 2018

PHASE 2 DRILLING COMPLETED AT MALLINA LITHIUM PROJECT, WA

Highlights

- **30 holes totalling 2,225m completed at Area C, Discovery, and Eastern Group Pegmatite prospects**
- **Drilling intercepts target pegmatites with anomalous lithium assay results including:**
    - **4m @ 2.18% Li_2O from surface, including a peak assay value of 3.18% Li_2O over 1m from 2m in hole SMRC040 (Area C prospect)**
    - **6m @ 1.64% Li_2O from 17m in hole SMRC044 (Discovery prospect) and**
    - **20m @ 1.12% Li2O in hole SMRC042 from 4m (drilling down-dip – Eastern group Pegmatite 2 prospect)**
- **Mineralisation open along strike to north at Area C and Discovery prospects.**

Emerging lithium miner **Sayona Mining Limited (ASX: SYA)** ("Sayona" or the "Company") announced today the results of recent drilling at its Mallina spodumene pegmatite project, highlighting its economic potential among the Company's projects located in Western Australia's world-class Pilgangoora district.

A total of 30 reverse circulation drill holes for 2,225 metres were completed over four spodumene pegmatite prospects within a 20 sq km area of the Mallina project. Drilling intersected a varied suite of pegmatite and aplite bodies of variable dip, strike and thickness.

The identification of spodumene pegmatite from surface and of good intensity (to a maximum 3.18% Li_2O) has provided encouraging evidence that the project can host economic grades of lithium mineralisation. The intercept, from northernmost portion of Area C prospect remains open at depth and to the east, south and north.

Further drilling is required to understand the morphology of the pegmatites in more detail and to target potentially thickened portions of the spodumene mineralisation. Lithium assay results are presented in Table 1 and displayed in cross sections overleaf.

Commenting on the results, Sayona's Managing Director, Dan O'Neill said: *"The Company is pleased that the drilling has identified spodumene pegmatite from surface, which remains open along strike to the north. This is only the second round of Sayona's drilling at the 100km^2 Mallina project, which has not previously been drilled for its lithium potential.*

"Mallina adds to our other prospective projects in Western Australia including Moolyella and Tabba Tabba, providing the potential for further upside while we progress our flagship Authier Lithium Project in Canada towards near-term production for the benefit of all shareholders."

Table 1 – Selected drill assay intercepts above 0.50% Li_2O

Hole ID	Prospect	Easting	Northing	From	To	Intercept
SMRC019	Area C	607274	7670731	9m	10m	1m @ 0.90% Li_2O
			and	14m	15m	1m @ 0.58% Li_2O
SMRC025	Area C	607215	7670362	17m	20m	3m @ 0.59% Li_2O
SMRC030	Area C	607264	7670303	49m	50m	1m @ 0.60% Li_2O
SMRC040	Area C	607365	7670852	0m	4m	4m @ 2.18% Li_2O
			including	2m	3m	1m @ 3.18% Li_2O
			and	12m	15m	3m @ 0.87% Li_2O
SMRC041	Pegmatite 2	610358	7670120	0m	4m	4m @ 0.93% Li_2O (abandoned)
SMRC042	Pegmatite 2	610358	7670117	4m	24m	20m @ 1.12% Li_2O
			and	28m	40m	12m @ 0.87% Li_2O
SMRC044	Discovery	605852	7671720	17m	23m	6m @ 1.64% Li_2O
SMRC046	Discovery	605780	7671572	24m	25m	1m @ 1.26% Li_2O
SMRC047	Discovery	605764	7671586	14m	15m	1m @ 0.96% Li_2O

Note: Datum is Australian Geodetic MGA Zone 50 (GDA94). Intercepts calculated using a 0.50% lower cut.

Drill collars are displayed in the figure below:

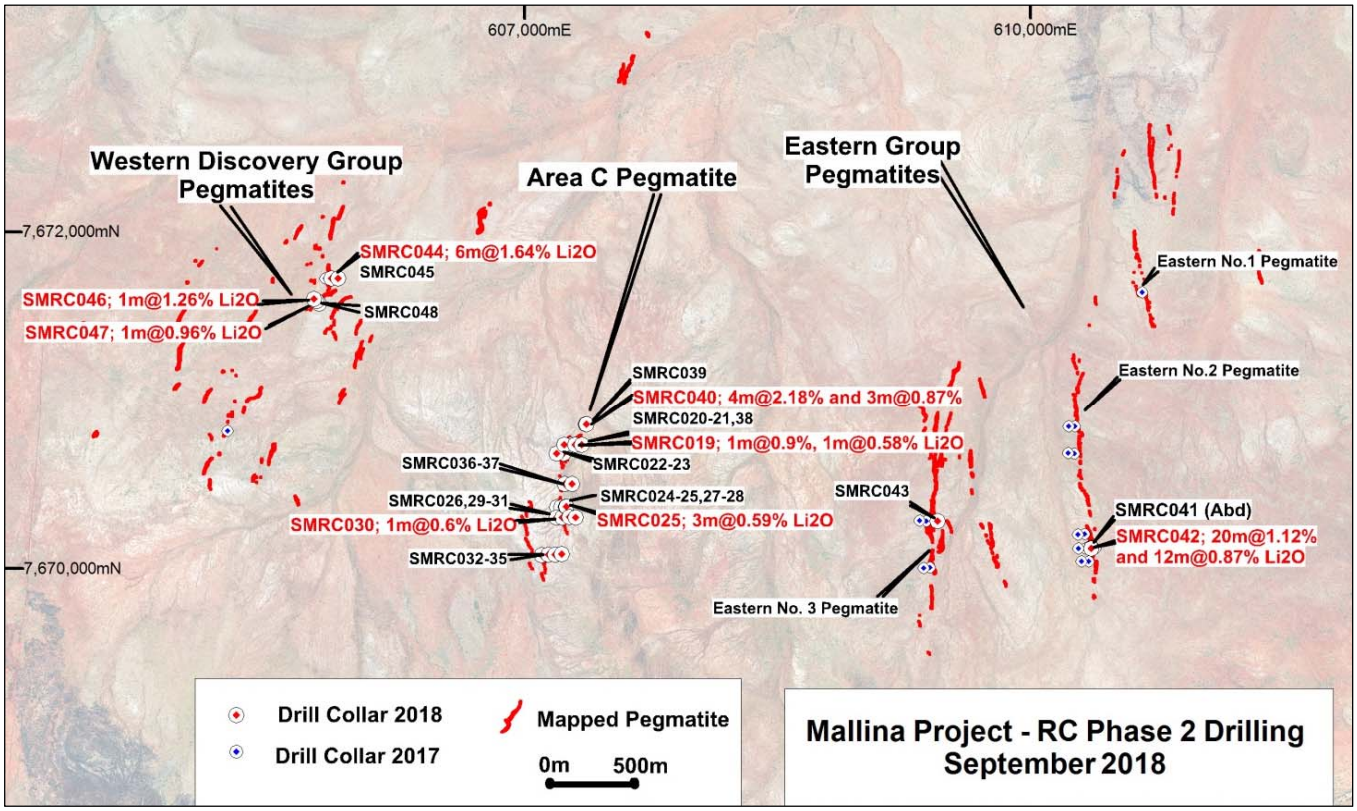

Figure 1: Mallina Drill Plan and Lithium Intercepts Above 0.5% Li_2O

Twenty-one drill holes were completed at the Area C prospect. Drilling targeted the peak lithium soil anomalism and identified a complex series of narrow, east dipping pegmatite lenses. The northern drill line however, completed over an area of thin transported cover, intersected multiple thicker pegmatites with a best intercept in hole SMRC040 of 4m @ 2.18% Li_2O from surface, including 1m @ 3.18% Li_2O between 1-2m.

The pegmatite, intersected from 0-22m also returned 3m @ 0.87% Li_2O from 12m (see cross section, 7670850N below). The true thickness of the pegmatite units is not known. The drilling remains open at depth and to the east and north. The central and southern portions of Area C returned only narrow mineralisation with a best intercept of 1m @ 0.90% Li_2O.

Of the four holes targeting the Discovery prospect, hole SMRC044 returned a best intercept of 6m @ 1.64% Li_2O from 17m (see cross section below). Mineralisation in this east dipping pegmatite remains open to the north.

At the Eastern Group pegmatites, a down-dip drillhole was completed at Pegmatite 2, sited to test for vertical variations in grade and to highlight any possible weathering effects at depth. SMRC042 intersected pegmatite from 0m-125m with two zones of lithium mineralisation of 20m @ 1.12% Li_2O from 4m and 12m @ 0.87% Li_2O from 28m.

This mineralisation, when combined with 2017 drill data (see section 7670120N below) identifies a near surface zone of mineralisation extending to some 50m depth. Structural studies indicate the spodumene pegmatites have a moderate plunge and this remains untested by drilling. Drill hole cross section, 7670850N is displayed below.

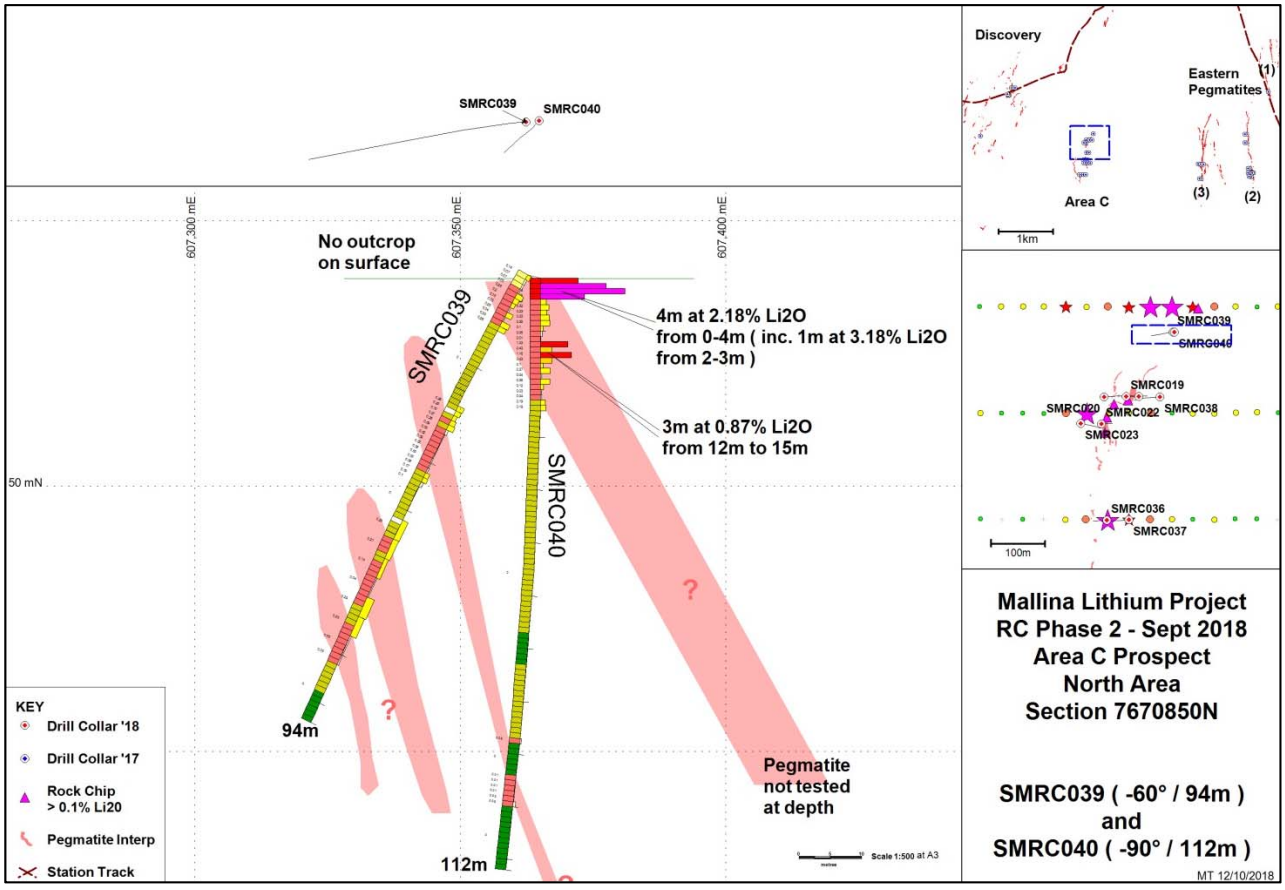

Figure 2 Area C Prospect Drill hole cross section, 7670850N

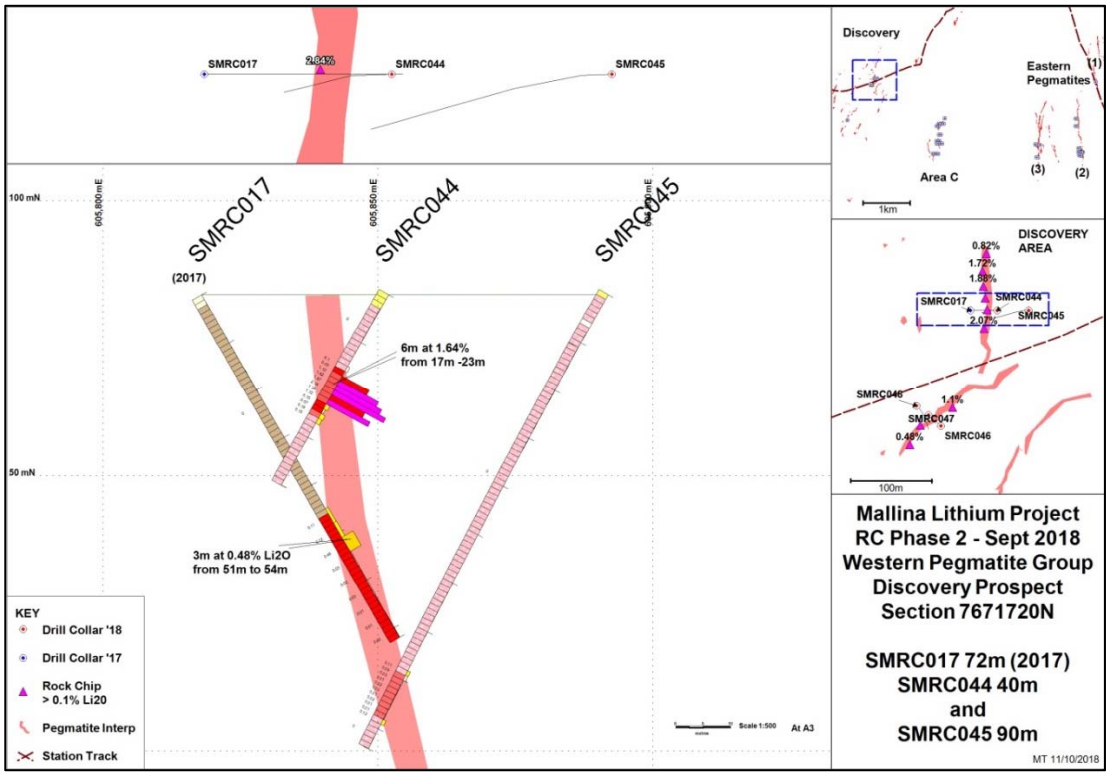

Figure 3 Discovery Prospect Drill hole cross section, 7671720N

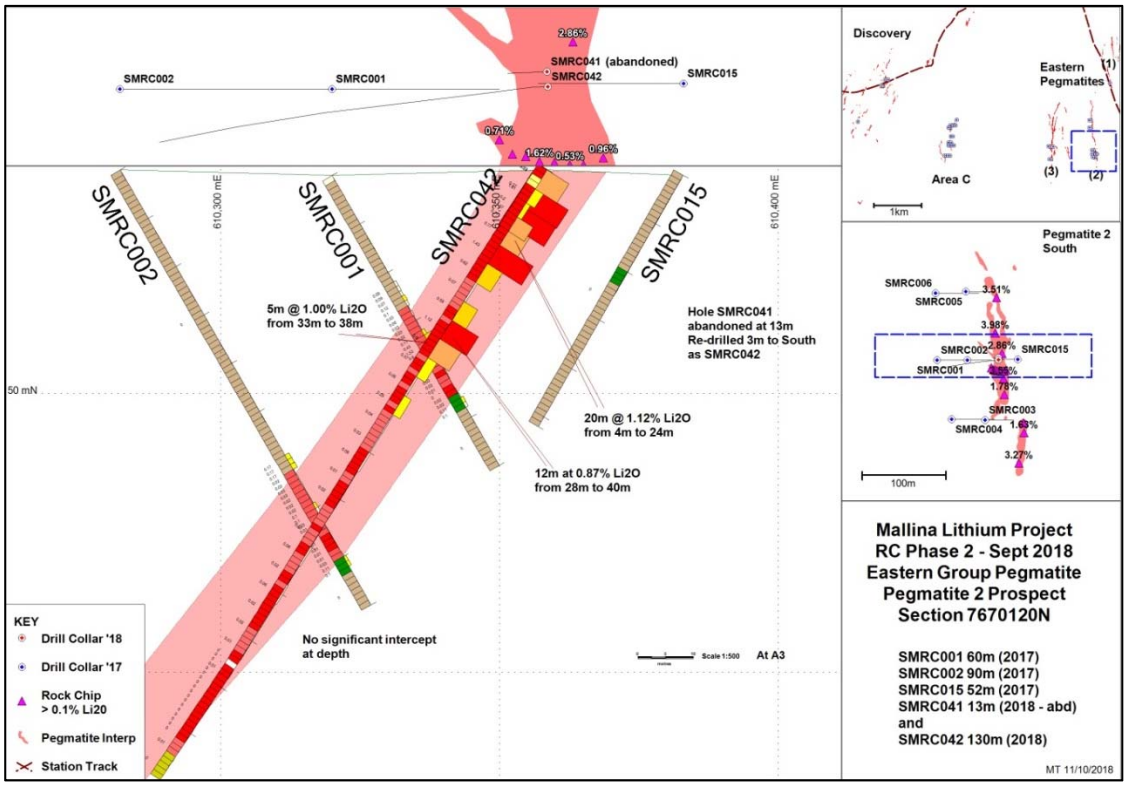

Figure 4 Pegmatite 2 Prospect Drill hole cross section, 7670120N

Drill hole details are tabulated in Table 2 below:

Hole_ID	Prospect	Easting	Northing	RL (m)	EOH	Azi	Dip
SMRC019	Area C	607274	7670731	89	80	090	-60
SMRC020	Area C	607233	7670731	91	112	090	-60
SMRC021	Area C	607298	7670731	90	34	270	-60
SMRC022	Area C	607228	7670680	93	40	090	-60
SMRC023	Area C	607188	7670680	91	106	090	-60
SMRC024	Area C	607191	7670362	93	34	090	-60
SMRC025	Area C	607215	7670362	93	34	090	-60
SMRC026	Area C	607188	7670302	95	52	090	-60
SMRC027	Area C	607244	7670363	94	82	270	-60
SMRC028	Area C	607245	7670363	94	106	270	-80
SMRC029	Area C	607223	7670301	95	52	270	-60
SMRC030	Area C	607264	7670303	95	100	270	-60
SMRC031	Area C	607302	7670302	93	130	270	-60
SMRC032	Area C	607100	7670080	96	58	090	-60
SMRC033	Area C	607140	7670081	92	58	270	-60
SMRC034	Area C	607179	7670082	95	70	270	-60
SMRC035	Area C	607219	7670084	97	140	270	-60
SMRC036	Area C	607238	7670499	88	52	270	-60
SMRC037	Area C	607279	7670499	85	94	270	-60
SMRC038	Area C	607338	7670730	89	112	270	-60
SMRC039	Area C	607362	7670852	89	94	270	-60
SMRC040	Area C	607365	7670852	89	112	N/A	-90
SMRC041	Pegmatite 2	610358	7670120	90	13	270	-57
SMRC042	Pegmatite 2	610358	7670117	90	130	270	-57
SMRC043	Discovery	609445	7670280	90	70	270	-60
SMRC044	Discovery	605852	7671720	90	40	270	-60
SMRC045	Discovery	605892	7671720	90	94	270	-60
SMRC046	Discovery	605780	7671572	90	34	310	-60
SMRC047	Discovery	605764	7671586	90	28	130	-60
SMRC048	Discovery	605749	7671598	90	64	130	-60

Note: Datum is Australian Geodetic MGA Zone 50 (GDA94)

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Sayona Mining Limited is an Australian, ASX-listed (SYA), company focused on sourcing and developing the raw materials required to construct lithium-ion batteries for use in the rapidly growing new and green technology sectors. Please visit us as at www.sayonamining.com.au

Competent Person Statement

The information in this report is based on information compiled by Mr. Simon Attwell, a Competent Person, and who is a Member of The Australasian Institute of Mining and Metallurgy. Mr. Attwell is an employee of Attgold Pty Ltd ("Attgold") which provides geological services to Sayona.

Mr. Attwell 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. Attwell consents to the inclusion in the report of the matters based on his information in the form and context in which it appears

JORC Code, 2012 edition – 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.*	• Reverse circulation drilling collected 1m drill spoil which was geologically logged and a 1m cone split sample collected. These 1m split samples approximate to a 3kg representative of the metre drilled. This work is considered industry standard. • Drillholes SMRC040-42 included samples composited over 4m of drill cutting, with sample material collected by pvc spear in equal quantity between the drill cutting piles. • Samples for assay submission were collected following geological logging, with all pegmatite material (the host for lithium mineralisation) being sampled.
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).*	• Drilling was carried out by reverse circulation methods.
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.*	• No loss of sample recovery or quality was noted during drilling. Appropriate use of downhole air pressure kept cuttings dry. They are considered representative of the zone being drilled. It is not believed a bias has been introduced into the

Criteria	JORC Code explanation	Commentary
	• *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.*	sampling system.
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.*	• Logging information is of insufficient detail to support any Mineral Resource Estimation. • All drill cuttings have been geologically logged.
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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• No core drilling has been undertaken. • Drill samples have been collected at the time of drilling by cone splitter. The vast majority of the samples collected were dry. • Sampling of cuttings has been carried out in an industry standard way. • Field duplicates of 1m drill samples have been collected from selected intervals to help QA/QC assessment. It is believed the sampling is representative of the drilled material. The collection methodology is considered appropriate for this RC drilling method.
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 was carried out by ALS, Perth which is a certified laboratory in compliance with AS/NZS-9001:2000. Analysis, of a 48 element suite, was determined by mixed acid digest followed by ICP-MS61. This is considered a total digest appropriate to the samples submitted. • Certified Reference Material (approximately 1 in 25 samples), blanks and duplicates, (together approximately 1 in 25 samples) have been inserted into the sampling submitted to the Laboratory. Results confirm acceptable accuracy and precision.
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*	• The results have been reviewed by multiple geologists. The company conducts internal data verification protocols which have been followed. • Li has been converted to Li_20 for the purposes of reporting. The conversion used was Li_20 = Li x

Criteria	JORC Code explanation	Commentary
	procedures, data verification, data storage (physical and electronic) protocols. • *Discuss any adjustment to assay data.*	2.153. No other adjustments to assay data has been undertaken
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.*	• Drill collars have been located by handheld GPS with an error of approximately +/-5m. • The grid system used is Australian Geodetic MGA Zone 50 (GDA94). • The level of topographic control offered by the handheld GPS is considered sufficient for the work undertaken
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.*	• There was no predetermined grid spacing to drilling. Locations are provided. • The data spacing and distribution is not sufficient to establish the degree of geological and grade continuity appropriate for Mineral Resource estimation procedures. • Samples have not been composited.
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.*	• Drilling has been carried out over small areas of the project and it is not known if results are representative. • Drilling has been sited orthogonal to pegmatite targets. There is not enough information to determine if the target has been fully tested by the drillholes which have been completed. • Drillhole SMRC042 was planned to be drilled down dip to provide information on Li distribution within the pegmatite and possible weathering effects.
Sample security	• *The measures taken to ensure sample security.*	• Industry standard sample security and storage were undertaken.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews of the data have been conducted at this stage

JORC Code, 2012 edition – Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to*	• The Mallina project, E47/2983 is part of a larger tenement portfolio held under Option Agreement with Great Sandy Pty Ltd. The Option terms and tenement details have been previously reported, for example in 21st December 2016 ASX release titled 'Option to Acquire New Pilbara Spodumene Discovery'. • There are no impediments that have been

Criteria	JORC Code explanation	Commentary
	obtaining a licence to operate in the area.	identified for operating in the project areas
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• At Mallina past exploration has focused on the gold and base metal potential of the area. • Together with government data provided by GSWA past information has allowed recognition of the project's potential.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Lithium is being targeted within rare metal pegmatites which represent the most fractionated and evolved pegmatite type. Sayona's main focus is in discovery of albite-spodumene pegmatite types which host high grade lithium mineralisation. Rare metal pegmatites are uncommon, typically hosted in greenstone rocks near to granite intrusion.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Drill information is contained in the main body of this report
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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.*	• No variation to laboratory reported assays has been made.
Relationship between mineralisation widths and	• *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*	• Exploration is at an early stage and information contains insufficient data points to allow these relationships to be reported

Criteria	JORC Code explanation	Commentary
intercept lengths	*reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	
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.*	• No significant discovery is reported. Collar plan figures and cross sections displaying geology are included in the main body of this release.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All relevant assay results are reported herein.
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.*	• The exploration reported herein is at a very early stage but results are consistent with geological and other data
Further work	• *The nature and scale of planned further work (eg 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.*	• Further work includes studies to determine the nature of observed silicification and if a zonation (at depth or along strike) is present within the target pegmatites and offer scope for further drill testing of the targets.