



ASX ANNOUNCEMENT



17 FEBRUARY 2017

MALLINA SPODUMENE MINERALISATION EXTENDED AND NEW HIGH-GRADE ZONES IDENTIFIED

Highlights

- Assay results extends known lithium mineralisation; 5 spodumene pegmatites identified within 1km² area
- Rock results up to 3.47% Li₂O in newly identified pegmatite
- Orientation soils show strong anomaly to 1.12% Li₂O over discovery spodumene pegmatite
- Much of the Pegmatite swarm and general tenement area remains untested by any previous lithium exploration
- Statutory approvals to allow drill testing commencing

Sayona Mining Limited (ASX: SYA) ("Sayona" or the "Company") is pleased to report the assay results from its first phase of sampling at the Mallina project, located in the world-class Pilgangoora lithium district of Western Australia.

Sample and mapping results have:

- Identified five lithium mineralised spodumene bearing pegmatites up to 3.75% Li₂O located within a 1 km² zone (see Figure 1);
- These pegmatites form part of a larger pegmatite swarm and have elevated cesium-rubidium-tantalum, typical of fractionated LCT rare metal pegmatites;
- Pegmatites are typically poorly exposed and contacts with country rock are not visible and true thickness is not known. It is anticipated further detailed traversing will identify additional mineralisation;
- Orientation soil geochemistry over the Discovery pegmatite has returned up to 10,120ppm (1.01%) Li₂O in the coarse soil fraction. Results indicate soil geochemistry may be an effective exploration method to test the large areas of soil cover within the tenement; and

The 140 km² tenement forms part of the recently completed Option agreement with Great Sandy Pty Ltd, comprising 871 km² of tenure that complements Sayona's additional 1,047 km² lithium exploration portfolio in the Pilbara region.

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Corey Nolan, Chief Executive Officer, commented *"The Company is very encouraged by the new assay results from both the soil and rock chip programs. Exploration will continue with a focus on outlining potential drill targets as soon as possible on a number of the prospective targets identified from the current exploration program"*.

Soil and Rock Chip Sampling Program

Recent reconnaissance and mapping within the Mallina tenement area has focused around the Discovery pegmatite area, with 93 rock and 66 soil geochemical samples collected (see figure 1 below and Appendix 1).

The Discovery pegmatite is an albite-spodumene pegmatite mapped over 500 metres of strike extent with rock chip assays up to 2.13% Li_2O (see ASX release, 21 December, 2016).

The Company's recent work has identified four previously unknown lithium mineralised spodumene pegmatites, which form part of an extensive swarm of pegmatites. The eleven rock samples collected over the Discovery pegmatite returned an average of 1.48% Li_2O , with all of the samples collected to date in this 500 metres plus strike length target (21 rocks samples) averaging 1.35% Li_2O . The pegmatite is weathered, in part silicified and has poor outcrop, typically visible over widths of 3 to 5 metres and up to 8 metres, but without the contacts to adjacent greenstone rocks being observed. The true width of the structure is not yet known.

West of the Discovery pegmatite, two other areas of lithium mineralised pegmatites have been identified, with rock samples returning up to 2.65% Li_2O . These pegmatites are also poorly outcropping, but can be traced intermittently over several hundred metres of strike extent. Additional traversing in this area is planned to more fully understand the extents of the mineralisation.

Significantly, a single pegmatite outcrop, located 900 metres to the south of the Discovery pegmatite was identified and sampled, returning an assay of 3.47% Li_2O . This area has very poor outcrop and further reconnaissance and sampling will be undertaken to try to define the extents to the mineralisation. The results do however, indicate the potential of the area to host additional mineralised pegmatites. These targets may lie under shallow soil cover.

An orientation soil geochemical programme was undertaken over the known discovery pegmatite. Results to 5,230ppm Li (1.12% Li_2O) were returned from the coarse soil fraction, indication further sampling could be an effective test of the covered portions of the tenement.

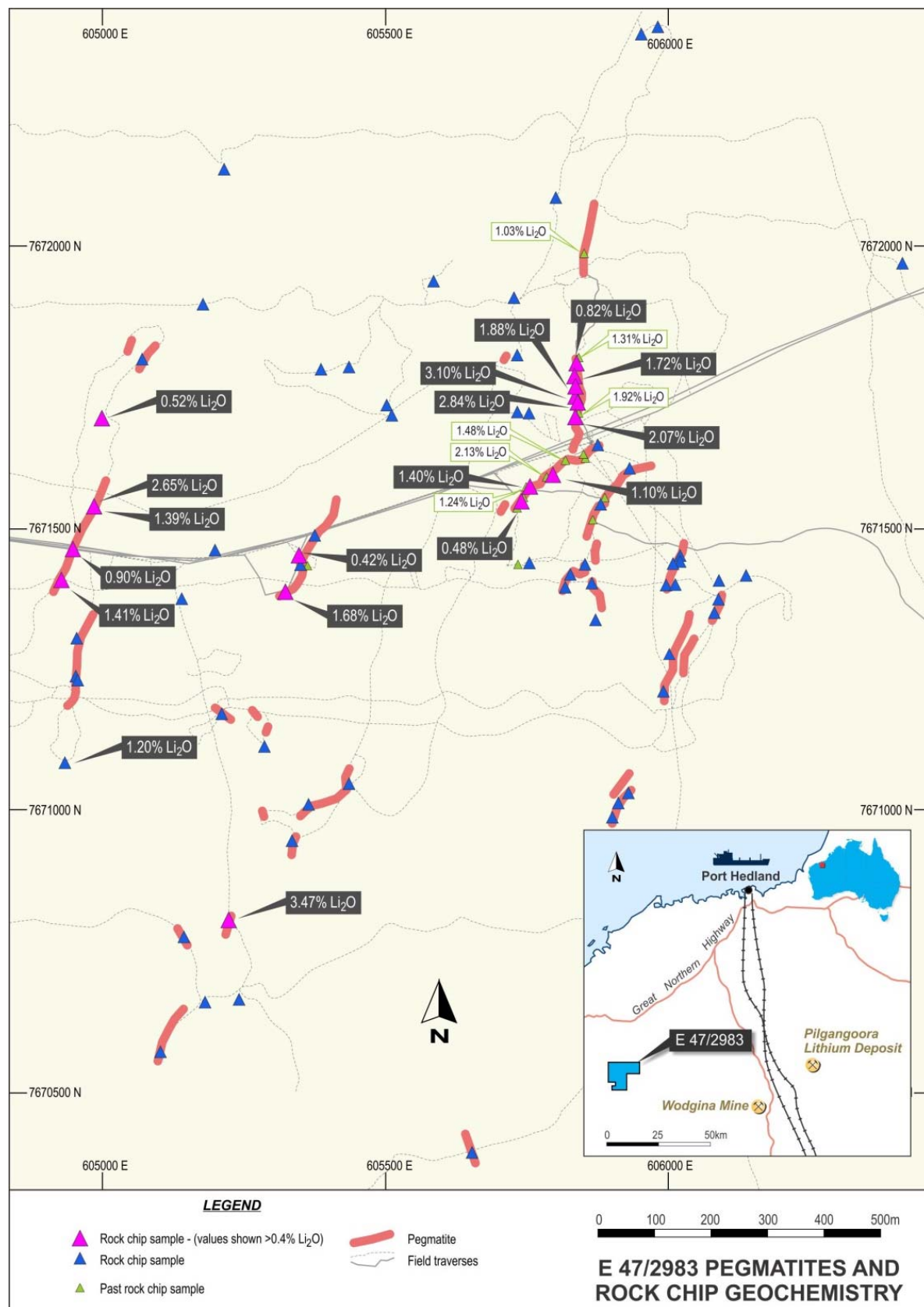


Figure 1: Discovery Pegmatite Area, Mallina Project

Next steps

Further reconnaissance, mapping and rock sampling is planned in follow up to the strong mineralisation identified to date. Work will focus in the area of newly discovered spodumene pegmatites as well as traversing the unexplored remainder of the tenement area. This work will be complemented by systematic soil geochemistry, to be carried out with the aim of identifying targets under shallow cover. Work will commence as soon as possible, once access after the recent flooding is possible. Work to progress statutory approval to allow drill testing of the targets has commenced.

For more information, please contact:

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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

Reference to Previous ASX Releases

This presentation refers to the following previous ASX releases:

"Option to Acquire New Pilbara Spodumene Discovery, 21 December 2016

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.

Appendix 1 Rock Geochemistry

SampleID	North	East	Li2O_ppm	Li2O_pct	Cs_ppm	Rb_ppm	Ta_ppm
SP555305	7671398	605817	28	0.00	61	1290	27
SP555306	7671545	605878	54	0.01	85	1580	32
SP555307	7671543	605881	78	0.01	115	1250	44
SP555308	7671607	605933	27	0.00	89	1410	39
SP555309	7671447	606019	29	0.00	126	2260	89
SP555310	7671439	606009	16	0.00	53	990	72
SP555311	7671792	605838	8181	0.82	129	2310	34
SP555312	7671770	605833	17159	1.72	245	3050	49
SP555313	7671750	605834	18817	1.88	139	2130	60
SP555314	7671735	605837	31003	3.10	48	770	24
SP555315	7671721	605839	28420	2.84	64	1150	20
SP555316	7671697	605835	20690	2.07	84	1350	25
SP555317	7671706	605753	190	0.02	67	1980	73
SP555318	7671814	606770	98	0.01	4	117.5	2
SP555319	7671409	604360	106	0.01	79	1720	43
SP555320	7671452	606021	46	0.00	79	1480	90
SP555321	7671970	606415	25	0.00	3	123	2
SP555322	7671896	606955	32	0.00	7	189	2
SP555323	7671650	605876	72	0.01	73	1540	68
SP555324	7671938	605585	35	0.00	74	890	27
SP555325	7671899	605175	42	0.00	41	530	83
SP555326	7672136	605213	22	0.00	5	180	2
SP555327	7671048	605433	177	0.02	62	1340	33
SP555328	7671007	605364	205	0.02	88	1320	31
SP555329	7670948	605336	374	0.04	338	2700	44
SP555330	7671404	605864	15	0.00	32	540	50
SP555331	7671339	605871	15	0.00	31	780	30
SP555332	7671400	606013	31	0.00	53	540	100
SP555333	7671170	605210	83	0.01	135	2560	69
SP555334	7670799	604449	34	0.00	78	1000	110
SP555335	7670794	604464	34	0.00	17	168.5	129
SP555336	7670775	605141	11	0.00	2	14.6	160
SP555337	7670661	605182	19	0.00	4	144	3
SP555338	7670575	605101	11	0.00	2	25.3	36
SP555339	7670397	605654	10	0.00	40	640	33
SP555340	7672390	605981	16	0.00	31	500	67
SP555341	7672377	605952	17	0.00	90	980	168
SP555342	7672087	605802	23	0.00	11	196.5	2
SP555343	7671910	605727	87	0.01	30	460	89
SP555344	7671810	605732	16	0.00	47	690	58
SP555345	7671709	605733	19	0.00	4	104	85
SP555346	7671466	604948	8956	0.90	137	2400	71
SP555347	7671409	604926	14124	1.41	175	2680	45
SP555348	7671234	604953	265	0.03	112	2530	52
SP555349	7671240	604954	990	0.10	135	2250	126
SP555350	7671305	604954	174	0.02	70	1700	89
SP555351	7671304	604952	172	0.02	47	960	64
SP555352	7671538	604985	13908	1.39	102	1830	40
SP555353	7671540	604985	26482	2.65	74	1190	40
SP555354	7671697	605000	5189	0.52	227	3240	76
SP555355	7671801	605071	61	0.01	5	20.1	361
SP555356	7671489	605375	629	0.06	95	1690	21
SP555357	7671450	605345	4177	0.42	500	3410	1
SP555358	7671434	605352	523	0.05	114	1990	58
SP555359	7671388	605322	16815	1.68	163	2390	118
SP555360	7671377	605140	142	0.01	50	1180	45
SP555361	7670805	605222	34663	3.47	57	470	73
SP555362	7670665	605240	119	0.01	4	117	3
SP555363	7669415	605424	36	0.00	2	39	1
SP555364	7669403	605391	143	0.01	5	71.5	1
SP555365	7669080	605246	42	0.00	53	376	7
SP555366	7668580	605381	82	0.01	9	184.5	2
SP555367	7668662	605496	618	0.06	76	990	32

SampleID	North	East	Li2O_ppm	Li2O_pct	Cs_ppm	Rb_ppm	Ta_ppm
SP555368	7668610	605526	49	0.00	10	145	2
SP555369	7668498	606153	14	0.00	47	410	43
SP555370	7668484	606161	17	0.00	2	10.7	2
SP555371	7671596	605795	11045	1.10	197	3350	90
SP555372	7671573	605755	13995	1.40	105	2080	65
SP555373	7672101	606755	18	0.00	4	139	2
SP555374	7672010	606726	43	0.00	2	49.2	2
SP555375	7671703	605511	140	0.01	117	1620	47
SP555376	7671718	605503	22	0.00	54	820	56
SP555377	7671787	605437	13	0.00	4	40.7	82
SP555378	7671783	605385	25	0.00	2	9.4	208
SP555379	7671461	605197	20	0.00	7	188.5	3
SP555380	7671466	604992	42	0.00	2	60.1	3
SP555381	7671083	604932	12014	1.20	102	2080	43
SP555382	7671115	605285	146	0.01	63	1460	34
SP555383	7671212	605991	86	0.01	140	2310	85
SP555384	7671277	606003	147	0.01	138	1780	75
SP555385	7671373	606091	22	0.00	35	620	69
SP555386	7671350	606083	16	0.00	34	710	34
SP555387	7670988	605902	23	0.00	43	860	73
SP555388	7671015	605914	22	0.00	129	2030	97
SP555389	7671033	605929	28	0.00	68	980	111
SP555390	7671408	606091	37	0.00	81	610	109
SP555391	7671416	606137	16	0.00	64	530	150
SP555392	7671400	605998	33	0.00	165	2180	68
SP555393	7671548	605741	510	0.05	106	1640	70
SP555394	7671549	605741	4801	0.48	61	1890	36
SP555395	7671441	605754	27	0.00	8	235	2
SP555396	7671435	605851	19	0.00	85	1950	37
SP555397	7671420	605826	34	0.00	56	1260	30

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

JORC Code, 2012 edition – Table 1 (section 1; Sampling Techniques and Data)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <i>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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>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.</i> 	<ul style="list-style-type: none"> Geochemical samples have been collected as a first pass assessment and orientation of project areas, as described in the main body text of this announcement. The samples have an irregular spacing reflecting the reconnaissance nature of the assessment. Samples are grab samples. The presence or absence of mineralisation was initially determined visually by the field geologist. The type of geochemical sampling is a standard approach during the initial style reconnaissance.

Criteria	JORC Code explanation	Commentary
<i>Drilling techniques</i>	<ul style="list-style-type: none"> • <i>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).</i> 	<ul style="list-style-type: none"> • Not applicable, no drilling has been carried out
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Not applicable, no drilling has been carried out
<i>Logging</i>	<ul style="list-style-type: none"> • <i>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.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • Not applicable, no drilling has been carried out. This information is of insufficient detail to support any Mineral Resource Estimation.
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>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.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • Not applicable, no drilling has been carried out • • No measures have been taken to ensure sampling is statistically representative of the in situ sampled material. The collection methodology is considered appropriate for this early stage assessment of the project. • The sample size is considered appropriate to the early stage of exploration carried out.
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>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.</i> • <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie</i> 	<ul style="list-style-type: none"> • Analysis was carried out by ALS, Brisbane 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. 85 fusion. Four samples which reported high Li values by this method were re-assayed by peroxide fusion, method ME-ICP89, to give a high precision result. This is considered a total digest appropriate to the samples submitted. • Not used • No additional quality control measures beyond that

Criteria	JORC Code explanation	Commentary
	<i>lack of bias) and precision have been established.</i>	of the Laboratory QA/QC were implemented.
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> The results are considered acceptable and have been reviewed by multiple geologists. The company conducts internal data verification protocols which have been followed. Li has been converted to Li₂O for the purposes of reporting. The conversion used was Li₂O = Li x 2.153. No other adjustments to assay data has been undertaken
<i>Location of data points</i>	<ul style="list-style-type: none"> <i>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.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> Samples were located during collection by handheld GPS 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
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <i>Data spacing for reporting of Exploration Results.</i> <i>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.</i> <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> There was no predetermined grid spacing to the rock sampling program. Soil geochemistry was carried out on MGA grid. . 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.
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>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.</i> 	<ul style="list-style-type: none"> Sampling was carried out over small areas of the project and it is not known if they are representative. Not applicable, no drilling has been carried out
<i>Sample security</i>	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> Industry standard sample collection and storage have been reported by the vendor geologist.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> 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
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <i>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</i> 	<ul style="list-style-type: none"> The Option terms and tenement details have been previously reported which is referenced within the main text of this ASX release. There are no impediments that have been identified

Criteria	JORC Code explanation	Commentary
	<p><i>settings.</i></p> <ul style="list-style-type: none"> <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i> 	for operating in the project areas
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> 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 projects potential.
<i>Geology</i>	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> 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.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <i>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:</i> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <i>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.</i> 	<ul style="list-style-type: none"> Drilling has not been carried out.
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> No variation to laboratory reported assays has been made.
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>If it is not known and only the down hole lengths are</i> 	<ul style="list-style-type: none"> Exploration is at an early stage and information contains insufficient data points to allow these relationships to be reported

Criteria	JORC Code explanation	Commentary
	<i>reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i>	
<i>Diagrams</i>	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Sample plans are attached
<i>Balanced reporting</i>	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • All relevant assay results are reported herein.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • The exploration reported herein is at a very early stage but results are consistent with geological and geophysical data
<i>Further work</i>	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> • Further more detailed mapping and follow up sampling is required to identify lithium targets and mineralisation