ASX ANNOUNCEMENT

SAYONA MINING LIMITED

30 APRIL 2018

MARCH 2018 QUARTERLY REPORT

Highlights

- **Successful completion of the Phase 3 drilling program at Authier**
- **Authier JORC Mineral Resources upgraded**
- **Authier environmental studies advancing towards completion**
- **Authier pilot metallurgy program commenced with initial encouraging results**
- **$15 million capital raising announced**

Sayona Mining Limited (ASX: SYA) ("Sayona" or the "Company") is pleased to announce the activities report for the quarter, including:

- Authier, Canada – major focus on completion of the Definitive Feasibility Study and permitting activities required for the fast-track development of the project;
- Western Australian Lithium, Australia – rock chip and soil sampling programs completed at Mallina and Deep Well; and
- Capital raising – subsequent to the end of the quarter, a $15 million capital raising comprising an $11 million placement (which is completed) and $4 million rights issue were announced.

Authier

The Company's primary strategy is to focus on completing the studies required to commence the development of the project, including the Definitive Feasibility Study. Authier is a near-term development project and cash-flow generation opportunity. The Company believes it will create significant share value-uplift potential for shareholders as the project is advanced towards development.

Strengthening of the Canadian Technical Team

During the quarter, the Company announced the strengthening of the Authier technical team with the appointment of Jarrett Quinn and Jean-Pierre Landry as Authier Process Engineer and Project Director, respectively.

The appointments compliment the Authier development team at a time when the Company is rapidly progressing the DFS and engineering design activities for the project development.

The Company anticipates completing the DFS in the second quarter of 2018, and progressing to the detailed engineering and procurement phase, targeting the commencement of production in early 2020.

Jarrett Quinn, Process Engineer

Jarrett is a mineral processing engineer and hydro-metallurgist with extensive experience and expertise in the minerals industry, including spodumene processing in Canada. Jarrett has worked on flowsheet development for several hard-rock lithium projects in Quebec. Jarrett's qualifications include Bachelor, Master and Ph.D. degrees from McGill University, and he is a professional engineer in the province of Quebec. Jarrett's experience includes, pilot plant operations, process design, feasibility assessment, start-up and operations.

Jarrett will manage the pilot plant testing program at SGS Lakefield, the process plant design for the definitive feasibility study, and detailed engineering of the Authier lithium process plant.

Jean-Pierre Landry, Authier Project Director

Jean-Pierre Landry is a qualified civil engineer who has been involved in the construction industry for more than thirty years, seventeen of which have been in project management with mining companies. Jean-Pierre has been exposed to numerous aspects of project management including cost estimation, scheduling, value engineering, first nations relationship and construction management. His experience stems from a multitude of industrial projects, commercial, institutional and mining.

Jean-Pierre will be deeply involved in the on-going definitive feasibility study and will manage the project delivery schedule. Based in the Abitibi region, Jean-Pierre will be the local contact person for the Project and his knowledge of the area will be a major asset, especially during the construction phase.

Authier Definitive Feasibility Study

During the last quarter, the Company awarded the main components of Authier Definitive Feasibility Study ("DFS") including, the mining, processing and infrastructure to BBA.

BBA is an independent Canadian consulting engineering firm operating internationally. Its team is composed of highly-qualified experts in several engineering disciplines including electrical, civil, mechanical, industrial data processing, mining, metallurgical processes, automation, and construction management. BBA have extensive experience in the Canadian mining industry and have been actively involved in Feasibility Studies for Quebec lithium projects including, Nemaska and the North American Lithium project.

A number of other DFS work programs including geotechnical, transport and environmental have been outsourced to specialist contractors are underway.

The company is targeting completion of the DFS in the second quarter calendar 2018.

Authier Phase 3 Drilling Program

The Company completed the Phase 3 drilling program at Authier to collect a bulk sample for a pilot metallurgical program, and further expansion and optimisation of the resource.

Pilot Plant Sample

The initial phase of the program was aimed at collecting 5 tonnes of drill core for a pilot metallurgical testing program. The pilot program data will be used for inputs into the process plant design in the DFS. The sample was successfully collected by the end of December.

Drilling Results

The Phase 3 diamond drilling program at Authier has been completed including 19 NQ diameter holes for 2,170 metres and meeting the objectives of the program, including:

- Converting the Inferred Mineral Resources to Measured and Indicated, and upgrading Ore Reserves for the Definitive Feasibility Study which is underway; and
- Exploring for extensions to the existing mineral resources and other potential mineralisation within the tenement package.

A number of diamond drill holes have intercepted high-grade spodumene mineralisation with best drilling intercepts, including:

- Hole 18-09 – 25 metres @ 1.48 % Li_2O from 79 metres including, 6 metres @ 1.77 % Li_2O from 80 metres and 6 metres @ 1.78 % Li_2O from 94 metres;
- Hole 18-10 – 6 metres @ 1.26 % Li_2O from 97.4 metres including, 4 metres @ 1.52 % Li_2O from 98.4 metres;
- Hole 18-16 – 37 metres @ 1.03 % Li_2O from 255 metres including, 11 m @ 1.24 % Li_2O from 266 metres and 3 metres @ 1.67 % Li_2O from 281 metres; and
- Hole 18-17 – 33 metres @ 1.18 % Li_2O from 160 metres including, 10 metres @ 1.25% Li_2O from 166 metres and 3 metres @ 1.75 % Li_2O from 190 metres.

Drilling has successfully demonstrated depth extensions of the mineralisation at the main Authier pegmatite. Infill drilling successfully targeted areas of low drilling density with the objective of upgrading the resource categories. A number of holes testing the eastern extensions of the main Authier pegmatite at shallow levels were stopped due to the presence of a fault zone but warrant further testing in a future drilling program.

A potential third deep pegmatite dyke was intercepted at a depth of 300 metres and returned low grade mineralisation due the replacement of spodumene by phengite. Further drilling will be required to test the potential of this system, especially at shallower levels.

Drilling has successfully extended the mineralisation at the Authier North pegmatite from 300 metres to 500 metres in strike length, and at depth. The system remains open in all directions.

The Company believes the new drilling has the potential to expand the size of the existing Mineral Resource and Ore Reserve, and the mineralisation remains open in all directions.

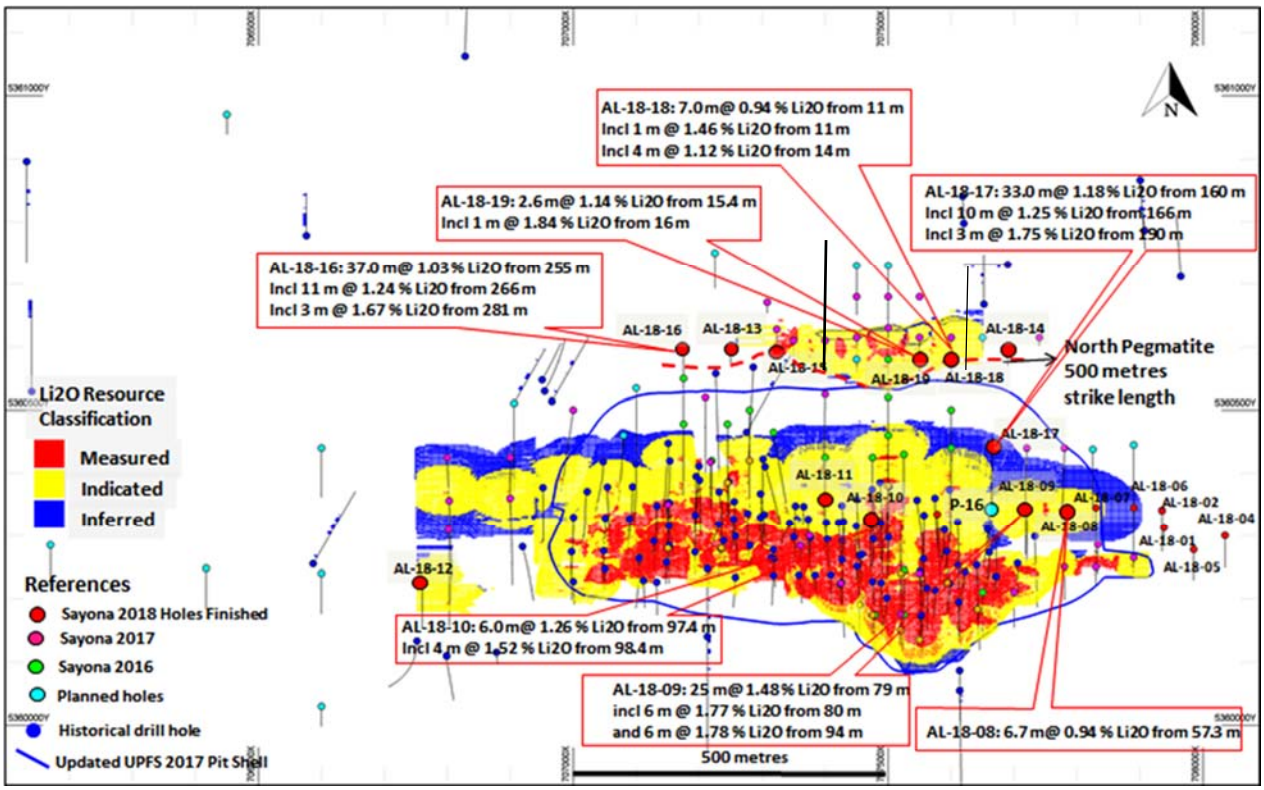

Figure 1: Drill hole collar location plan

Resource Upgrade

Subsequent to the end of the quarter, the Company reported an expanded, JORC 2012 compliant Mineral Resource estimate that has been increased from 186,939 tonnes to 209,476 tonnes of contained lithium oxide compared to the November 2017 estimate. The new resource includes in-pit, infill mineralisation in the eastern and central part of the Authier Main resource, and a depth extension of the Main Authier pegmatite in the west zone. In addition, The Northern Pegmatite resource has been expanded to include new mineralisation from the Phase 3 drilling program which extended the mineralised strike from 300 metres to 500 metres.

Table 1– Authier JORC Mineral Resources Estimate (0.45% Li_2O cut-off grade)

Category	Tonnes (Mt)	Grades %Li_2O	Contained Li_2O
Measured	6.09	1.01%	61,509
Indicated	11.55	1.04%	120,120
Inferred	2.82	0.98%	27,636
Total	**20.46**	**1.02%**	**209,265**

Mineralisation is hosted within spodumene-bearing pegmatite intrusions. The Authier project hosts two separate mineralised pegmatite systems, including:

- Authier Main - 1,100 metres long striking east-west, with an average thickness of 25 metres (ranging from 4 metres to 55 metres), dipping at 40 degrees to the north. The deposit outcrops in the eastern sector and then extends up to 10 metres under cover in the western sector. Drilling in the main Authier pegmatite resource totals 22,000 metres in 157 diamond holes; and
- Authier North - 500 metres long striking east-west, with an average thickness of 7 metres (ranging from 6 metres to 8 metres), dipping at 15 degrees to the north. Drilling in Authier North total 19 holes for 910 metres.

Authier Main Deposit

Approximately 98 % of the resource is formed by the Authier Deposit (main Authier pegmatite). The resource has been updated to include in-pit, infill mineralisation in the eastern and central part of the Authier Main resource, and a deep extension of the pegmatite in the west zone

Table 3 – Authier Main JORC Mineral Resources Estimate (0.45% Li_2O cut-off grade)

Category	Tonnes (Mt)	Grades %Li_2O	Contained Li_2O
Measured	6.03	1.02%	61,506
Indicated	11.19	1.04%	116,376
Inferred	2.81	0.98%	27,538
Total	**20.03**	**1.02%**	**205,420**

Authier North Deposit

The remaining 2 % of the global resource is contained within the Authier North pegmatite where the Phase 3 drilling program has extended the strike length of the mineralised envelope from 300 metres to 500 metres.

Table 4– Authier North JORC Mineral Resources Estimate (0.45% Li_2O cut-off grade)

Category	Tonnes (Mt)	Grades %Li_2O	Contained Li_2O
Measured	0.06	0.91%	546
Indicated	0.36	0.95%	3,420
Inferred	0.013	0.69%	90
Total	**0.43**	**0.94%**	**4,056**

This updated Mineral Resource will be incorporated into the DFS underway and a new Ore Reserve will be published at the time DFS is finalised.

Pilot Metallurgy Program

The Company has completed the batch and locked cycle phase of the pilot program which had the aim of establishing the optimal conditions for the continuous pilot plant program. The pilot plant operations have now commenced and completion was scheduled for the end of April.

During batch and locked cycle testing, the Company has been able to achieve concentrate grades of 6% at metallurgical recoveries of 80%.

Approximately five tonnes of mineralised pegmatite will be processed through the pilot plant. The plant will operate for a minimum of 100 hours at a feed rate of 50 kilogram per hour. The pilot program involved stage-crushing the ore to -3.35mm. The crushed ore then passes through a grinding mill, cyclones for de-sliming, magnetic separation for iron removal, mica and spodumene flotation.

The objectives of the pilot plant program include:

- Confirm the flowsheet and process parameters for concentrate production;
- Produce engineering data for equipment sizing and plant design; and
- Generate ~500 kg of spodumene concentrate for downstream testing and marketing purposes.

The results of the pilot program are expected to be available by the end of April and will be incorporated into the DFS which will be completed during Q2 2018. On completion of the pilot program, optimisation work will continue with the objective of maximising metallurgical recoveries and de-risking the metallurgical performance of the full-scale operations.

Environmental and Permitting Work Programs

Community Engagement Programs

Two presentation evenings, including one in the La Motte Municipality where Authier is located, and a second in Pikogan to present the project to the members of the Abitibiwinni First Nation, where undertaken in accordance with the Mining Act guidelines. The objective of these meetings was to present the Authier project development plan, strategies for protecting the environment, employment and contract opportunities, and to outline the potential economic benefits to the community. Community concerns are being addressed and implemented in the ongoing development plans.

In addition, the Company has an active communication strategy and has been engaging with the broader community outside the immediate project area. Meetings have been held with regional councils, other mining companies successfully operating in the region, government organisations, and other key business stakeholders in the region.

A high level focus in the meeting was outlining the Company's plans for the protection of the environment. The Company has commissioned a number of studies to examine whether the Authier mine has any physical, biological or social impacts on the environment and

communities. The studies are being undertaken by highly reputable independent consultants with extensive experience and expertise in the region.

A comprehensive base-line environmental study was completed at Authier in 2010 by environmental consultancy, Dessau. Since the Company's acquisition of the project in late 2016, all of the environmental studies have been updated, including:

- Creating a vegetation inventory, including wetlands and species with special status;
- Inventory of fish and fish habitats;
- Inventories of wildlife species with special status;
- Assessment of surface and ground water quality; and
- Hydrogeological and hydrological baseline conditions.

The work to-date hasn't identified any material environmental issues and finalisation of the environmental studies will be completed in the second quarter of 2018.

The Company's development strategy is aimed at minimizing Authier's impact on the community and environment, and includes the following activities:

- Reagents used in the process plant will all be contained within the process plant compound and not discharged into the environment;
- All process plant, mine run-off and dewatering water will be contained within ponds and recycled through the process plant to minimise new water requirements. Process water will be 100% reused in the plant;
- The tailings produced from the processing operations will be filtered and dry stacked with waste rock from the mine, eliminating the need for a tailings dam, and keeping the project footprint small;
- The tailings and waste rock material are not acid generating and do not leach any heavy metals. The Company has been contacted requesting a construction materials for road base surrounding municipalities;
- Water in process ponds will be treated, if required, before any discharge into the environment;
- The scale of the mining operations are relatively small at around 1,900 tons per day which minimizes the impact on the community and environment; and
- Progressive site reclamation and remediation planning during operation and at the end of mine activities.

The public consultation is ongoing and a second series of presentations will be held in June 2018 to present the outcomes of the environmental base-line and definitive feasibility studies, as well as strategies that will be adopted to protect the environment and minimise the projects impact on the local community. During the public consultation, all relevant reports will be made available to the public and the Company will be available to respond to questions about the Authier Project. Feedback will be used to ensure the Authier delivers positive impacts to the local community.

Permitting Update

The Company is progressing through all the activities required for permitting by both the Ministry of Energy and Natural Resources ("MERN") and the Ministry of Sustainable Development, Environment and the Fight against Climate Change ("MDDELCC"). The Company is targeting to have obtained all material permits required for the project by mid-2019.

Mining Lease

Mining lease applications are submitted to the MERN pursuant to Section 100 and the following of the Mining Act (Québec). A mining lease can only be granted after the following conditions are fulfilled:

- Completion of a feasibility study (in progress and due for completion 2Q2018);
- Completion of a scoping and marketing study for processing within Quebec (in progress);
- Rehabilitation and restoration plans have been approved (nearly complete);
- The MDDELCC authorization required under the Environment Quality Act has been issued for the project (in progress); and
- A survey plan has been approved by the Office of the Surveyor-General of Québec (complete).

The initial term of the lease is 20 years. The lease may then be renewed no more than three times for a period of 10 years each time. After the third renewal, the MERN may renew the lease for periods of five years. Within 30 days after the lease is issued, the lessee must establish a monitoring committee to foster the involvement of the local community in the project as a whole.

Before a mining lease can be granted for a mine that has a production capacity of less than 2,000 metric tons per day, a public consultation initiated by the proponent must be held in the region in which the mine will be located.

MDDELCC Authorisation

The project is subject to various environmental laws and must be authorized by the MDDELCC pursuant to the Environment Quality Act. This permitting process involves the filing of various documents and environmental studies, including with respect to the site condition, potential environmental impacts of the project and related monitoring and mitigation measures. The Company is targeting to submit its application to obtain the MDDELCC authorization in the summer of 2018, with the objective of obtaining this key authorization by mid-2019.

In March 2018, amendments to the Environmental Quality Act came into force allowing the Government, in exceptional circumstances, on the recommendation of the Minister of MDDELCC, to submit a project to the environmental impact assessment and review procedure if in the Government's opinion the project may raise major environmental issues and public concern warrants it. The Company believes its environmental studies have demonstrated that Authier will have minimal impact on the environment and community.

Tansim Geophysics Program

During the quarter, an airborne geophysics survey at the Tansim lithium project in Quebec, Canada was completed. The survey has confirmed a strong east-west magnetic anomaly coincident with surface mapping of pegmatites over an area 9 kilometres long and up to 700 metres wide – see Figure 2. The host intermediate/mafic magnetic rocks confirmed through the survey have been intruded by discrete outcrops of sub-parallel lithium, beryllium, and tantalum-bearing, granitic pegmatite dykes. Mapping, sampling and drilling will be required to define the geometry of the pegmatites.

The priority focus of the next exploration program planned in April to define drilling targets at the following prospects:

- Viau Dallaire – a 300 metre long dyke, dipping 40 degrees north, and 12-20 metres in thickness. Three channel samples include 10.3 metres @ 1.40% Li_2O, 11.15 metres @ 0.84% Li_2O & 18.95 metres @ 0.94% Li_2O (including 7.3 metres at 1.77% Li_2O); and
- Viau – pegmatites have been mapped up to 200 metres long and 30 metres wide. Two separate channel samples returned grades of up to 2.77% Li_2O and 1.37% Li_2O over 3.2 metres, respectively.

The helicopter airborne survey totalled 553 line kilometres and each of the lines was spaced 75 metres apart in a north-south direction.

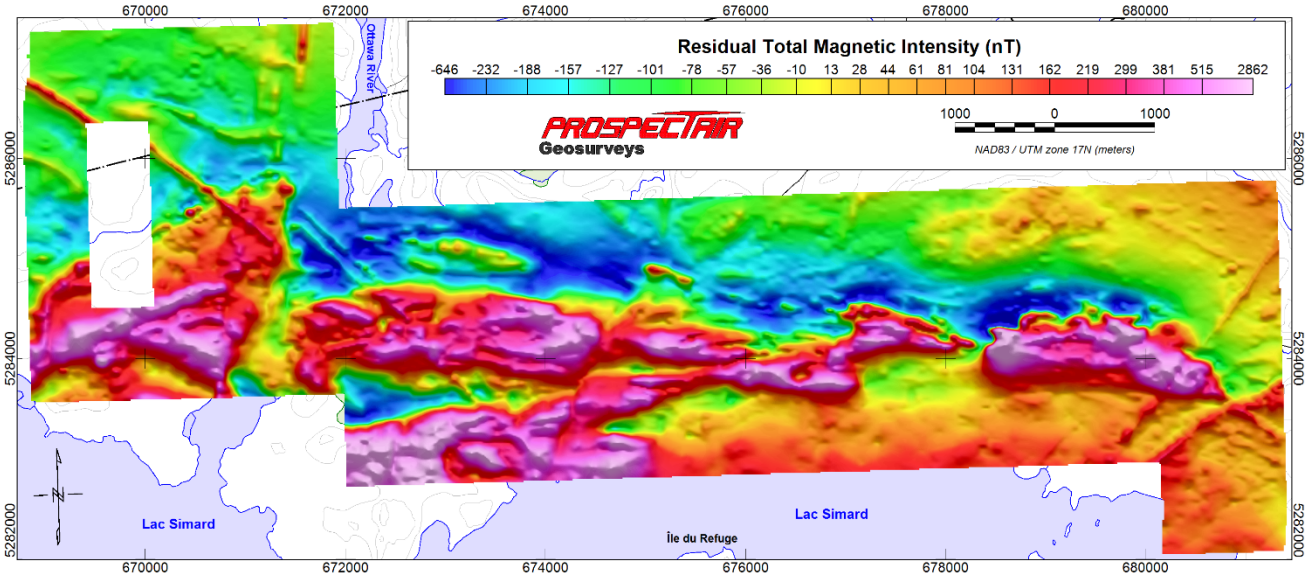

Figure 2: Residual Total Magnetic Intensity showing the east-west structural trending controlling pegmatite placement.

Western Australian Projects

Exploration tenure in Western Australia includes leases covering some 1,780km2 in the world class Pilgangoora lithium district. The 141km2 Mallina project, E47/2983, is the most advanced with three zones of spodumene pegmatite identified by the Company's exploration so far. Pilbara tenure is displayed in the figure below.

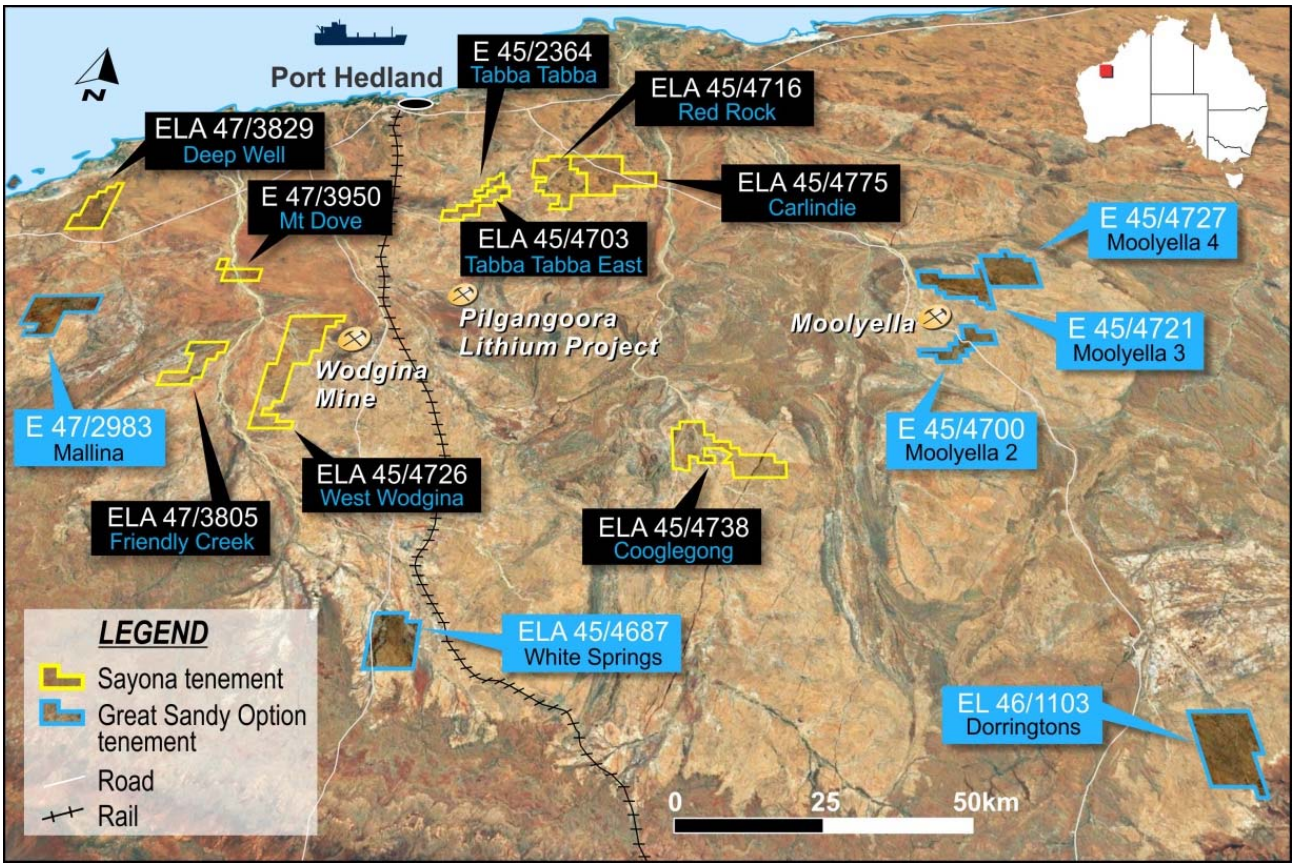

Figure 3: Sayona Lithium Tenements in Western Australia

Mallina Project

Exploration at Mallina focussed within a 25km2 zone in the north east of the project where three groups of spodumene pegmatites have been identified so far. Work included additional mapping at the Area C prospect in preparation for drill testing and soil geochemistry between the Eastern No.2 and No.3 pegmatites. Investigation of lithium geochemical anomalies has identified further pegmatite, indicating this is an effective technique at Mallina where outcrop is typically poor. Results of pegmatite mapping and geochemistry completed to date are displayed in the figure below.

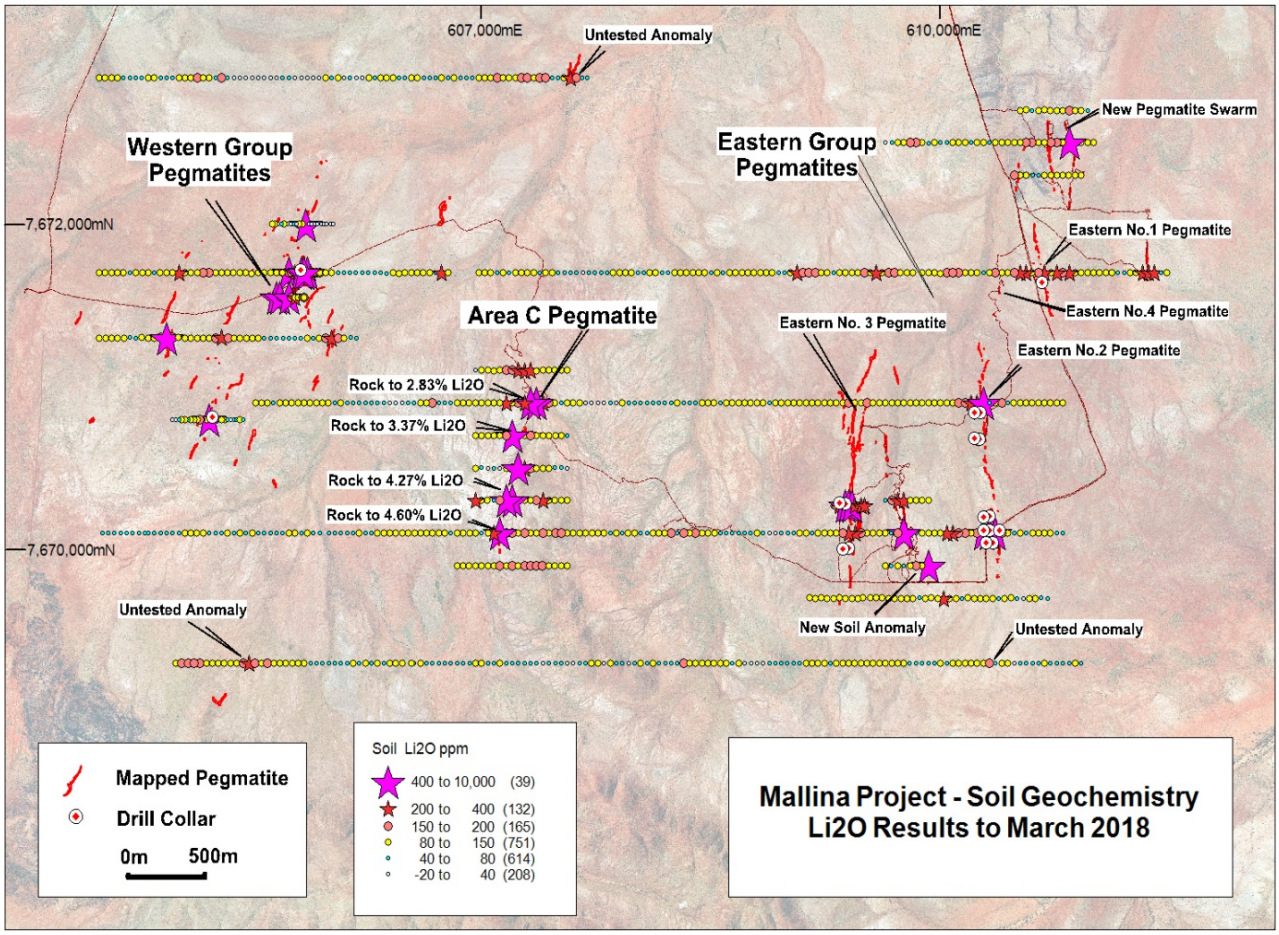

Figure 4: Mallina Pegmatites and Lithium Geochemistry

Work has been restricted by the northern wet season but geochemical programme re-commenced in April. Plans for drill testing the Area C prospect and other target areas within the Mallina tenement are well advanced.

Tabba Tabba Project

Plans to drill test three pegmatite bodies at Tabba Tabba were accelerated during the month following recognition of spodumene mineralisation along strike to the south of the project area at De Grey Mining's King Col prospect.

The Tabba Tabba project hosts three poorly outcropping pegmatites at the Northern River, Roadside and Turley prospects, none of which have been previously drilled. Pegmatites in the Tabba Tabba area are typically zoned, tantalum rich pegmatites and the drill programme is designed to give a first pass assessment of geometry, zonation trends as well as the presence of spodumene and tantalum mineralisation. Statutory approval has been sought for the drilling to proceed.

Deep Well Project

The Deep Well gold project covers 119km2 of poorly outcropping Mallina Formation sediments intruded to the east by nested plutons of the Portree granite. Areas of volcanic rock of the Fortescue aged Mt Roe Basalt crop out in the in the western tenement region (see figure below). Petrology has identified bedrock includes pyritic dolomite, siltstone and fine grained quartzite with quartzite clasts. This finer grained, basin margin package is part of the Upper Mallina Succession, the youngest part of the basin and closet in age to the Central Rand Group which hosts the majority of the gold in the Witwatersrand.

In some areas of the project iron rich oxidised pyrite cubes (metamorphosed authigenic pyrite) are present on surface. Sampling of this material indicates they contain elevated gold (to a maximum 120ppb Au) as well as elevated bismuth, molybdenum, antimony, nickel, tellurium, uranium and other pathfinder elements. Further sampling of the pyrite material, where exposed as well as panned concentrate samples and scintillometer readings for Wits style Au-U is underway. The geological setting of the tenement is shown in the map below.

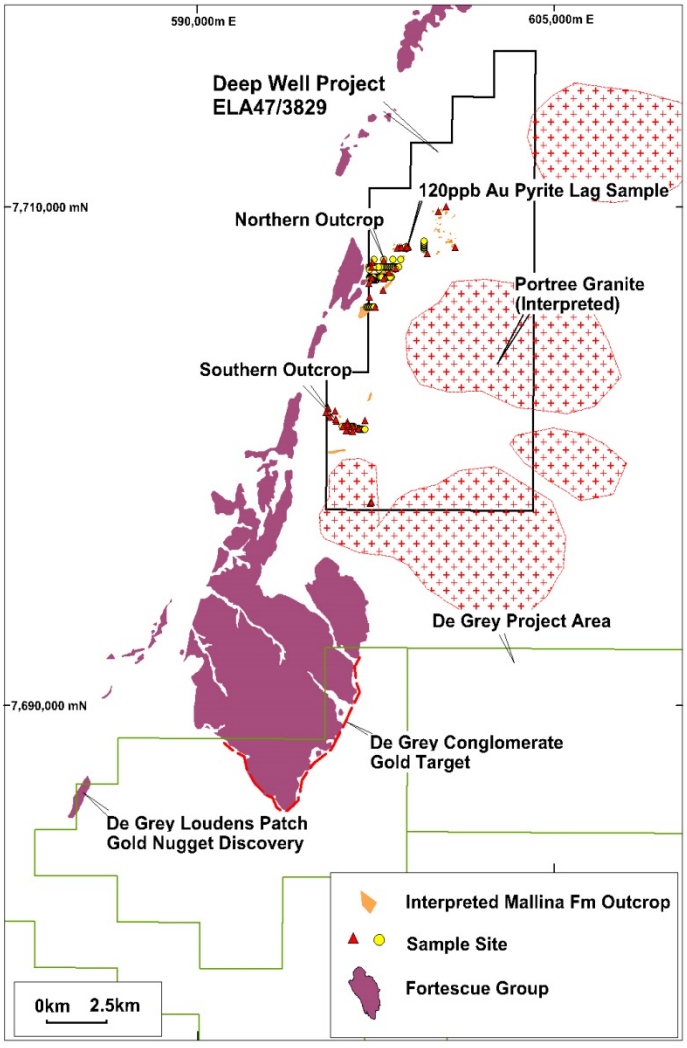

Figure 5: Deep Well Tenement, Fortescue Group and Nearby Gold Prospects

Other Project Areas

No exploration was carried out at either the Mt Edon Lithium project or the East Kimberley Graphite project during the quarter.

Corporate Activities

Capital Raising

Subsequent to the end of the quarter, the company announced pleased to announce that it has received firm commitments from international and domestic institutional, and sophisticated investors for an A$11 million Placement, and intends to undertake a pro rata renounceable Rights Issue to raise a further A$4 million. Jett Capital Advisors, LLC and Patersons Securities Limited acted as Joint Lead Managers to the Placement.

The proceeds from the capital raising and the Company's existing cash will be applied as follows:

- Advancing the Authier lithium project towards production, including:
  - Finalisation of the Definitive Feasibility Study, engineering and design;
  - Completion of the permitting activities including public consultation;
  - Purchasing of certain long-lead capital items;
  - Commencement of a downstream processing feasibility study;
- Exploration activities at the Tansim and Mallina lithium properties;
- General working capital and administration expenses; and
- Costs of the capital raising.

For more information, please contact:
Corey Nolan
Chief Executive Officer
Phone: +61 (7) 3369 7058
Email: info@sayonamining.com.au

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:

- Authier JORC Resource Expanded , 12 April 2018
- Authier Phase 3 Drilling Results, 10 April 2018
- Authier Maiden JORC Ore Reserve, 11 December 2017
- Authier Pilot Metallurgy Program, 13 April 2018
- Tansim Geophysics Program, 21 March 2018

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and all material assumptions and technical parameters continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

Tenement Schedule

Australian Tenement Schedule

Tenement	Name	Status	Interest Beginning of Quarter	Interest at end of Quarter
E59/2092	Mt Edon	Granted	80%, with rights to 100% of pegmatite minerals*	80%, with rights to 100% of pegmatite minerals*
E59/2055	Mt Edon West	Granted	100% (pegmatite minerals)	100% (pegmatite minerals)
E45/2364	Tabba Tabba	Granted	Rights to 100% of pegmatite minerals*	Rights to 100% of pegmatite minerals*
E45/4703	Tabba Tabba East	Granted	100%	100%
E45/4716	Red Rock	Granted	100%	100%
E45/4726	West Wodgina	Granted	100%	100%
E45/4738	Cooglegong	Granted	100%	100%
E45/4775	Carlindie	Granted	100%	100%
E80/4511	Western Iron	Granted	100%	100%
E80/4949	Corkwood	Granted	100%	100%
ELA80/4968	Keller	Application	100%	100%
ELA47/3802	Friendly Creek	Application	100%	100%
ELA47/3829	Deep Well	Application	100%	100%
Great Sandy Pty Ltd Option				
E47/2983	Mallina	Granted	Option Rights to 80%	Option Rights to 80%
E46/1103	Dorringtons	Granted	Option Rights to 80%	Option Rights to 80%
E45/4687	White Springs	Granted	Option Rights to 80%	Option Rights to 80%
E45/4721	Mt Edgar	Granted	Option Rights to 80%	Option Rights to 80%
E45/4727	Mt Edgar	Granted	Option Rights to 80%	Option Rights to 80%
E45/4700	Mt Edgar	Granted	Option Rights to 80%	Option Rights to 80%

Canadian Tenement Schedule

Claim Number	Registered holder	Registration Date	Expiration Date	Area (hect)
2116146	Sayona Mining Limited	8/8/2007	7/8/2019	43.24

Claim Number	Registered holder	Registration Date	Expiration Date	Area (hect)
2116154	Sayona Mining Limited	8/8/2007	7/8/2019	42.88
2116155	Sayona Mining Limited	8/8/2007	7/8/2019	42.87
2116156	Sayona Mining Limited	8/8/2007	7/8/2019	42.86
2183454	Sayona Mining Limited	2/6/2009	1/6/2019	42.85
2183455	Sayona Mining Limited	2/6/2009	1/6/2019	42.84
2187651	Sayona Mining Limited	2/9/2009	1/9/2019	21.39
2187652	Sayona Mining Limited	39853	43474	21.29
2192470	Sayona Mining Limited	22/10/2009	21/10/2019	21.08
2192471	Sayona Mining Limited	22/10/2009	21/10/2019	21.39
2194819	Sayona Mining Limited	19/11/2009	18/11/2019	42.82
2195725	Sayona Mining Limited	27/11/2009	26/11/2019	29.03
2219206	Sayona Mining Limited	22/04/2010	21/04/2018	5.51
2219207	Sayona Mining Limited	22/04/2010	21/04/2018	17.06
2219208	Sayona Mining Limited	22/04/2010	21/04/2018	55.96
2219209	Sayona Mining Limited	22/04/2010	21/04/2018	42.71
2240226	Sayona Mining Limited	9/7/2010	8/7/2018	42.71
2240227	Sayona Mining Limited	40428	43319	42.71
2247100	Sayona Mining Limited	23/08/2010	22/08/2018	42.75
2247101	Sayona Mining Limited	23/08/2010	22/08/2018	53.77