

31 October 2019

#### **SEPTEMBER 2019 QUARTERLY ACTIVITIES REPORT**

## **Highlights**

- Sayona assembles world-class team to support bid for North American Lithium (NAL) mine in Québec,
  Canada
- Revised Definitive Feasibility Study (DFS) for Authier Lithium Project nears completion
- Earn-in agreement with leading lithium producer, Altura Mining to develop Western Australian exploration assets in world-class Pilgangoora lithium district
- Québec's government supports development of a complete lithium value chain
- Placement backed by Board and management, together with a Share Purchase Plan, raises \$1.9m
- Appointment of new Managing Director/Chief Executive Officer

Emerging lithium miner Sayona Mining Limited ASX: SYA) announced today its activities report for the September quarter 2019, as it continues to advance its lithium projects in Canada and Australia amid growing demand for the metal of the 21st century.

# **Authier Lithium Project**

The Company's primary focus is the development of the advanced stage Authier Lithium Project in Québec, Canada.

Authier is a hard rock spodumene lithium deposit scheduled for development as an open cut mine and concentrator, producing a 6% spodumene concentrate. The new mine could create 150 jobs in construction and up to 160 jobs in operation, with the Company giving priority to local employment and suppliers.



## **Permitting and DFS**

In early 2019, the Québec Environment Minister announced that the Authier project would be subject to the environmental impact assessment and review procedures under the BAPE (bureau d'audiences publiques en environnement). Under this new process Sayona will seek approval to process in the order of 2,600 tonnes per day, providing for an approximate mine life of 14 years and estimated annual average spodumene concentrate production of around 115,000 tonnes (at 6% Li2O).

In May, engineering consultancy BBA was appointed to review the original mine plan and the 2018 DFS in accordance with the new approval process, and based on the optimised production levels. The revised DFS is on track for release in November 2019.

In parallel with the DFS, Sayona has been progressing a revised Environment Impact Study (EIS) in accordance with BAPE requirements. This entailed further community engagement including the establishment of a project monitoring committee comprised of key stakeholders. The 14-member committee held its first meeting on 19 September and will remain active through to the completion of the Authier project and its eventual rehabilitation.

Additionally, following a public consultation process held from 19 June to 19 July (as per the *Ministère de l'Environnement et de la Lutte contre les changements climatiques*, or MELCC), Sayona has modified the EIS to reflect community feedback. This has included moving the planned waste rock and tailings pile and partitioning the planned spodumene loading area to further minimise any potential environmental impacts.

As a result, the revised EIS now likely will be submitted to the MELCC by year-end. Following this, it will be submitted to the Public Hearings Office for further public hearings and review, ultimately leading to expected project approval under the BAPE in 2020.

Sayona continues to engage closely with all stakeholders, including holding information sessions and consultations with local municipalities, landowners, First Nations communities, non-governmental organisations and other stakeholders, with the engagement effort led by its local team in Québec.

#### **Tansim Prospect**

Tansim is situated 82 kilometres south-west of the Authier project in Québec. The project comprises 141 mineral claims covering 8,500 hectares, and is prospective for lithium, tantalum, and beryllium.

Mineralisation is hosted within spodumene-bearing pegmatite intrusions striking east-west, dipping to the north and hosted by metasedimentary – metavolcanic rocks of the Pontiac sub-province. The main prospects are Viau-Dallaire, Viau and Vezina.

Sayona continues to evaluate Tansim's potential to add value to its lithium portfolio in Québec, either as a standalone project or in conjunction with the Company's other assets in the province.

#### Sayona to bid for NAL mine in Québec

During the quarter, Sayona announced its intention to participate in the bidding process for the NAL operation in Québec. NAL has a lithium mine and concentrator located in Abitibi, near the mining district of Val d'Or, in close proximity to the Authier project. Spodumene production was halted in February 2019 and in September 2019, the Québec Superior Court invited bids for the assets.



During 2018, NAL produced around 114,000 tonnes of spodumene. With the necessary investment the operation also has the potential to produce battery-grade lithium carbonate. There are synergies with the Authier project offering opportunities for the integration of both operations enhancing overall operational efficiencies and outputs.

Subsequent to period end, Sayona announced it had assembled a world-class team to support the bid. The team includes established lithium producer Altura Mining, engineers BBA and Hatch, financial advisers Jett Capital Advisors and PwC, and other leading consultants to provide the necessary technical skills, managerial expertise and financial capacity to develop NAL into a sustainable and profitable operation.

On 7 October, Sayona received documentation from Raymond Chabot Inc, the court-appointed monitor of NAL, confirming that binding bids are required to be lodged by 5pm (Montréal time) on 21 January, 2020.

Sayona is confident of its team's ability to turn around the NAL operation, drawing upon established operational, engineering and environmental expertise together with the necessary financial backing.

## Québec poised to be the new lithium province

In early October, Propulsion Québec released an independent study into the potential of the province's lithium-ion battery sector, amid strong growth in demand from the electric vehicle and energy sectors across North America. The study confirmed the economic potential of the lithium industry for Québec.

The study conducted by consultancy KPMG was supported by the Québec Government and other partners including la Société de développement de Shawinigan, Call2Recycle®, the Northern Plan Society, Hydro-Québec's Center for Excellence in Electrification of Transportation and Energy Storage, Nemaska Lithium, Mason Graphite and North American Lithium, Nouveau Monde Graphite, Lithion Recycling, RNC Minerals and Sayona Québec. A copy of the study is available at Sayona's website (see "Research Reports").

The study further supports recent comments by the Québec Premier that lithium is a 'jewel' for the province (Montréal Gazette, 19 August 2019). The Premier said the province's advantages including low-cost hydroelectric power, would reduce emissions and facilitate the development of a complete lithium value chain.

### **Western Australian Projects**

Sayona's leases in Western Australia cover 1,849 sq km and comprise lithium tenure in the Pilbara and Yilgarn areas and graphite tenements in the East Kimberley.

The Pilbara regional project covers 1,679 sq km and is centred in the world class Pilgangoora lithium district. The Company is exploring this area for hard rock spodumene mineralisation, associated with fractionated albite – spodumene pegmatite systems.

#### **Altura Earn-in**

In August 2019 Sayona announced an Earn-in Agreement with leading listed lithium producer, Altura Mining Limited (Altura). This will enable the Company to maximise the value of its Western Australia exploration assets.



Under the agreement, Altura with spend AUD\$1.5 million on exploration across the Pilgangoora project portfolio over a three-year period, earning a 51% interest. Sayona will retain the remaining project interest and the right to contribute to project evaluation and development in the future to participate in the upside potential.

Altura is a key player in the global lithium market. The company owns and operates the world-class Altura Lithium Project at Pilgangoora which commenced production in 2018. It also holds an extensive portfolio of exploration assets and is focussed on advancing exploration activity to realise value from those assets. The addition of the Sayona tenement package will provide upside for both companies.

The Earn-in Agreement includes the Pilbara lithium project tenure, the Mt Edon lithium project in the south Murchison and the Corkwood graphite project in the Kimberley.

During the quarter Altura commenced a desktop review of the project data for all the Western Australian tenements prior to commencing fieldwork.

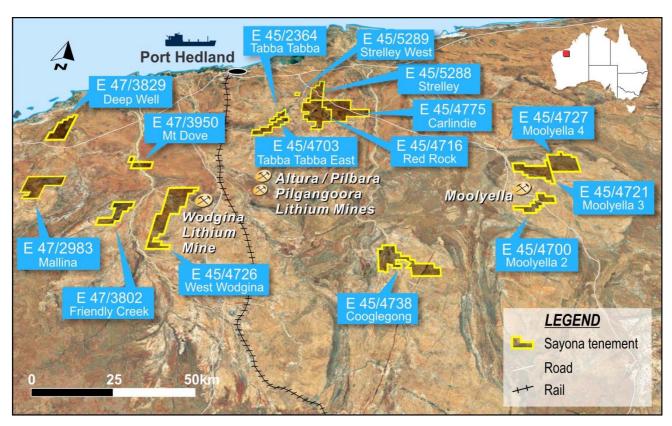


Figure 1: Sayona Lithium Tenements in Western Australia

# **Mallina Project**

Of the Pilbara tenements, the Mallina Project is the most advanced with multiple zones of spodumene pegmatite identified within a 25km2 zone.

There is considerable scope for further drill testing, especially at the Area C prospect where shallow mineralisation is open at depth and along strike to the north and south.



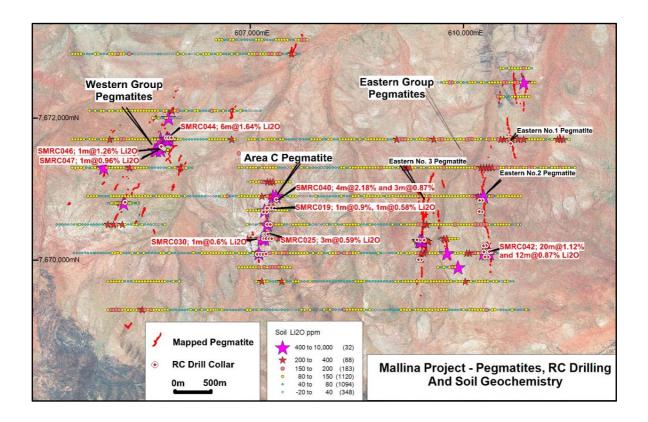


Figure 2 Mallina Project Geochemistry and Selected Drill Intercepts

## **Tabba Tabba Project**

The Tabba Tabba Project comprises six tenements covering 588km2, located 40km to the north of the Pilgangoora in an emerging lithium province. The main Tabba Tabba tenement, E45/2364, is centred in an area of historic tin and tantalum mining.

Within Sayona's lease, seven main targets have been identified based on geochemistry, with three containing outcropping pegmatites displaying elevated tantalum and LCT type signatures.

## **Moolyella Project**

The Moolyella Project is located to the east of Marble Bar in an area of historic tin and tantalum mining. Mineralisation is associated with the nearby Moolyella monzogranite, and spodumene pegmatites have also been identified.

Mapping and minor follow up rock geochemistry was carried out during the quarter in the northern area of E45/4700, where pegmatite with up to 1.40% Li2O, was first identified in December.

Rock samples are mica rich and no spodumene has been observed in pegmatites to date, but results are encouraging evidence of a lithium anomalous portion to the pegmatite system.



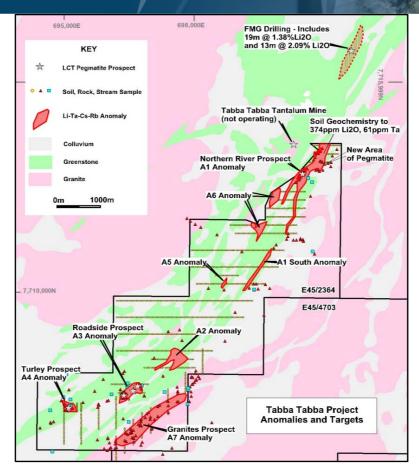


Figure 3 Tabba Tabba Project Anomalies and Targets

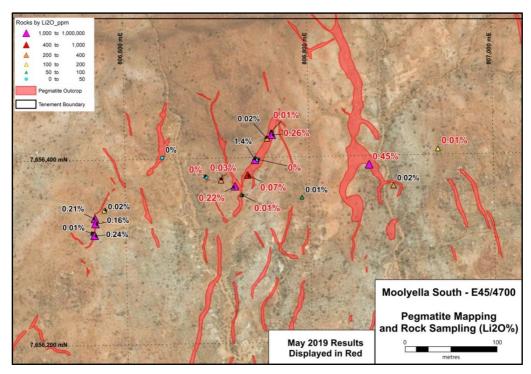


Figure 4 Moolyella South Pegmatite Mapping and Rock Sampling

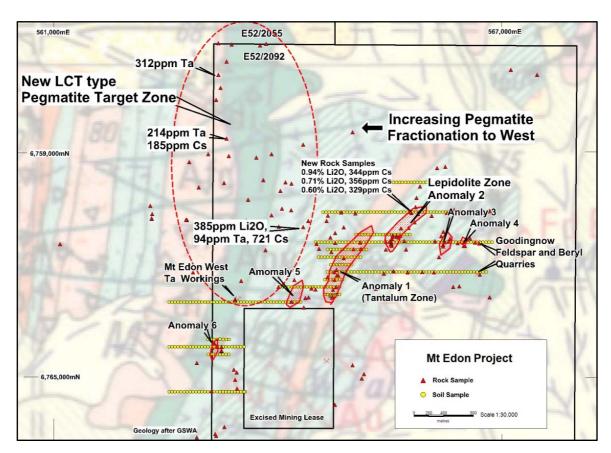


#### **Other Pilbara Tenure**

No exploration was carried out over the other Pilbara project tenements for the period.

### Mt Edon Project, South Murchison

The Mt Edon Project secures a large number of pegmatites which invade the Paynes Find greenstone belt. Historically, two small quarries have been developed to exploit feldspar and beryl pegmatites, and small scale eluvial and colluvial tantalum mining operations have developed close to LCT type pegmatites. Sayona's work at the Mt Edon pegmatite field has identified six geochemical anomalies. The Anomaly 2 area hosts lepidolite mineralisation with rock samples returning up to 1.57% Li2O.



**Figure 3 Mt Edon Project Anomalies and Targets** 

#### **East Kimberley Graphite Exploration**

The Corkwood Project secures a 24km strike length of graphitic sediments of the Tickalara Metamorphics, a known host to high purity, coarse flake graphite deposits in the region.



## **Corporate**

In July, Sayona announced the appointment of experienced international mining executive Brett Lynch as the Company's new Managing Director/CEO. With a strong background in mining and mining-related businesses across Australia, Asia and North America, Mr Lynch has a proven track record in advancing shareholder value through converting opportunities to outcomes.

A senior mining engineer and manager, Mr Lynch has more than 30 years' experience in the global industry, including posts with leading resources companies MIM Holdings, New Hope Corporation, VLI Pty Ltd and Orica Limited, during which time he was responsible for multi-million dollar international operations.

His professional qualifications include a Bachelor of Engineering (Mining) (Honours) at the University of Melbourne, a Graduate Diploma of Business (Accounting) at Monash University and a Company Director Diploma from the Australian Institute of Company Directors.

Mr Lynch's appointment comes on the back of the recent engagement of two senior executives in Québec, Chief Executive Officer, Guy Laliberté and Serge Rouillier, Manager, Sustainable Development and has further strengthened the Company's leadership team.

In August, Sayona completed a Share Purchase Plan and separate placement to Directors, management and a major shareholder, securing AUD\$1.9 million to advance the Company's projects. The funds raised will support the development of the Company's flagship Authier Lithium Project, together with providing essential working capital.

Subsequent to the end of the quarter, the Company announced that it entered into a Controlled Placement Agreement (CPA) with Acuity Capital. The CPA provides Sayona with up to \$3 million of standby equity capital over the period to 31 January 2022.

For more information, please contact:

### **Brett Lynch**

Managing Director Phone: +61 (7) 3369 7058

Email: info@sayonamining.com.au



#### **Reference to Previous ASX Releases**

This report refers to the following previous ASX releases:

- Appointment of new Managing Director/CEO to advance Sayona projects 1 July 2019
- Altura Earn-in Agreement boosts Sayona's Australian lithium assets 8 August 2019
- SPP & Placement secure \$1.9m to advance Sayona projects 23 August 2019
- Sayona expresses interest to bid for North American Lithium 17 September 2019
- Authier Definitive Feasibility Study and permitting update- 4 October 2019
- World-class team to support SYA North American Lithium bid 10 October 2019
- Controlled Placement Agreement 29 October 2019

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.

## **About Sayona Mining**

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. The Company has lithium projects in Québec, Canada, and in Western Australia.

Please visit us as at www.sayonamining.com.au



# **Tenement Schedules**

Australian Tenement Schedule				
Tenement	Name	Status	Interest at Beginning of Quarter	Interest at end of Quarter
E59/2092	Mt Edon	Granted	80% of pegmatite minerals*	80% of pegmatite minerals*
E59/2055	Mt Edon West	Granted	100% (pegmatite minerals)	100% (pegmatite minerals)*
E45/2364	Tabba Tabba	Granted	100% (pegmatite minerals)	100% (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%*
E47/3802	Friendly Creek	Granted	100%	100%*
E47/3829	Deep Well	Granted	100%	100%*
E47/3950	Mt Dove	Granted	100%	100%*
E45/5288	Strelley	Application	100%	100%*
E45/5289	Strelley West	Application	100%	100%*
E47/2983	Mallina	Granted	100% (pegmatite minerals)	100%* (pegmatite minerals)
E46/1103	Dorringtons	Surrendered	100%	0%
E45/4721	Moolyella	Granted	100%	100%*
E45/4727	Moolyella	Granted	100%	100%*
E45/4700	Moolyella	Granted	100%	100%*

Note; \*tenement subject to Altura Farm-In Agreement



Canadian Tenement Schedule			
Tenement	Location	Interest in Tenement	
2116146	Authier, Québec	100%	
2116154	Authier, Québec	100%	
2116155	Authier, Québec	100%	
2116156	Authier, Québec	100%	
2183454	Authier, Québec	100%	
2183455	Authier, Québec	100%	
2187651	Authier, Québec	100%	
2187652	Authier, Québec	100%	
2192470	Authier, Québec	100%	
2192471	Authier, Québec	100%	
2194819	Authier, Québec	100%	
2195725	Authier, Québec	100%	
2219206	Authier, Québec	100%	
2219207	Authier, Québec	100%	
2219208	Authier, Québec	100%	
2219209	Authier, Québec	100%	
2240226	Authier, Québec	100%	
2240227	Authier, Québec	100%	
2247100	Authier, Québec	100%	
2247101	Authier, Québec	100%	
2472424	Authier, Québec	100%	
2472425	Authier, Québec	100%	
2480180	Authier, Québec	100%	
2507910	Authier, Québec	100%	



Tenement	Location	Interest in Tenement
1133877	Tansim, Québec	50%
2415443	Tansim, Québec	50%
2415444	Tansim, Québec	50%
2436732	Tansim, Québec	50%
2436733	Tansim, Québec	50%
2436734	Tansim, Québec	50%
2438472	Tansim, Québec	50%
2438473	Tansim, Québec	50%
2438474	Tansim, Québec	50%
2438475	Tansim, Québec	50%
2438476	Tansim, Québec	50%
2438477	Tansim, Québec	50%
2438478	Tansim, Québec	50%
2438723	Tansim, Québec	50%
2440836	Tansim, Québec	50%
2440837	Tansim, Québec	50%
2440838	Tansim, Québec	50%
2440839	Tansim, Québec	50%
2440840	Tansim, Québec	50%
2440841	Tansim, Québec	50%
2440842	Tansim, Québec	50%
2440843	Tansim, Québec	50%
2440844	Tansim, Québec	50%
2440845	Tansim, Québec	50%
2440846	Tansim, Québec	50%
2440847	Tansim, Québec	50%
2440848	Tansim, Québec	50%
2440849	Tansim, Québec	50%



Tenement	Location	Interest in Tenement
2440850	Tansim, Québec	50%
2440851	Tansim, Québec	50%
2440852	Tansim, Québec	50%
2440853	Tansim, Québec	50%
2440854	Tansim, Québec	50%
2440855	Tansim, Québec	50%
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2440900	Tansim, Québec	50%
2440901	Tansim, Québec	50%
2440902	Tansim, Québec	50%
2440903	Tansim, Québec	50%
2440907	Tansim, Québec	50%
2440908	Tansim, Québec	50%
2440909	Tansim, Québec	50%
2440919	Tansim, Québec	50%
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Tenement	Location	Interest in Tenement
2440920	Tansim, Québec	50%
2440925	Tansim, Québec	50%
2440930	Tansim, Québec	50%
2440935	Tansim, Québec	50%
2440936	Tansim, Québec	50%
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2440992	Tansim, Québec	100%
2440993	Tansim, Québec	50%
2440994	Tansim, Québec	50%
2450758	Tansim, Québec	50%
2519251	Tansim, Québec	100%
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2519268	Tansim, Québec	100%
2519269	Tansim, Québec	100%



Tenement	Location	Interest in Tenement
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2519296	Tansim, Québec	100%
2519297	Tansim, Québec	100%
2519298	Tansim, Québec	100%
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Tenement	Location	Interest in Tenement
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2519301	Tansim, Québec	100%
2519302	Tansim, Québec	100%
2519303	Tansim, Québec	100%
2519304	Tansim, Québec	100%
2519305	Tansim, Québec	100%
2519306	Tansim, Québec	100%
2519307	Tansim, Québec	100%
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2519322	Tansim, Québec	100%
2519323	Tansim, Québec	100%
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