

31 JULY 2018

JUNE 2018 QUARTERLY ACTIVITIES REPORT

Highlights

- Definitive Feasibility Study nearing completion
- Major Authier environmental studies completed
- Authier pilot metallurgy program achieves target concentrate grades
- Drilling programs planned for Western Australian lithium projects, Mallina and Tabba Tabba
- \$12 million capital raising completed

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 development of the project;
- Western Australian Lithium, Australia advanced planning for drilling of the Mallina and Tabba Tabba lithium projects; and
- Capital raising completion of a \$12 million capital raising comprising a \$11 million placement and \$1 million rights issue.

The completion of the DFS will be a transformative event for Company as is evolves to the development-stage at Authier. The Company is well funded with cash resource of \$11 million, which enables it to complete Authier permitting activities and move into the Engineering, Procurement, Construction and Management phases, and drilling of two prospective Western Australian lithium projects.

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 nearterm 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.

Authier Definitive Feasibility Study

In November 2017, 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 were outsourced to specialist contractors.

BBA is making excellent progress on the DFS which is expected to be completed with capital and operating costs derived to a +/-10-15% level of accuracy. The new DFS will incorporate the new JORC Resource estimate and the results of the successful 5-tonne pilot metallurgy program. The company is targeting completion of the DFS in August 2018 which has taken longer than expected due to finalisation of design work on parts of the process plant following late completion of the pilot metallurgy program.

Authier Marketing and Finance

With DFS nearing completion, the Company is actively engaging with a number of potential production off-takers. Strong interest has been received from Chinese concentrate converters interested in purchasing Authier concentrates or value-adding in country. The Company will be undertaking a marketing roadshow in China in July/August to secure binding off-take contracts for the Authier production.

In addition, the Company is engaged with a number of parties interested in financing the Authier project. Potential financing strategies include royalties, concentrate pre-sales and convertible notes. The objective of the financing strategy it to minimise dilution to shareholders.

Pilot Metallurgy Program

During the quarter, the Company successfully completed the pilot metallurgy program at SGS Lakefield. Approximately 5.5 tonnes of mineralised pegmatite ore was collected during the Phase 3 drilling program in December 2017. The diamond drill core was assayed and stage-crushed to the appropriate particle size to feed the pilot plant. Two composite pilot plant feed samples have been prepared to represent Years 0 to 5 and Years 5+ of the operation.

The pilot plant operated for over 100 hours at a feed rate of 50 kg/hour and produced over 400 kg of spodumene concentrate. The pilot plant flowsheet included grinding, de-sliming, magnetic separation, mica and spodumene flotation (Figure 2). The optimised pilot flowsheet was able to achieve a concentrate grading 6.0% Li₂O at a 79% recovery. The pilot program has confirmed the final process flow sheet and operating parametres for the DFS.

In addition, prior to the pilot plant operation, a number of batch and locked-cycle testing programs were run to confirm the optimal conditions for the final pilot testing program. The results were similar to historical testing programs incorporated into the Pre-Feasibility Study, including:



- Batch flotation testing up to 6.0% Li₂0 concentrate grade at 82% recovery; and
- Locked cycle testing composite 1 achieved 5.85% Li₂0 concentrate grade at 84% recovery and composite 2 achieved 5.86% Li₂0 concentrate grade at 83% recovery.

Figure 1 compares the batch, locked-cycle and continuous pilot plant grade-recovery curves. Pilot plant results on the optimized flowsheet resulted in 71-76% lithium recovery for Composite 1 and 73-79% recovery for Composite 2.

The Company will continue process optimisation work through a collaboration with Professor Kristian Waters who specializes in mineral processing at the McGill University in Montréal, Québec. A research project has commenced at the University to further explore the key findings from the pilot plant.

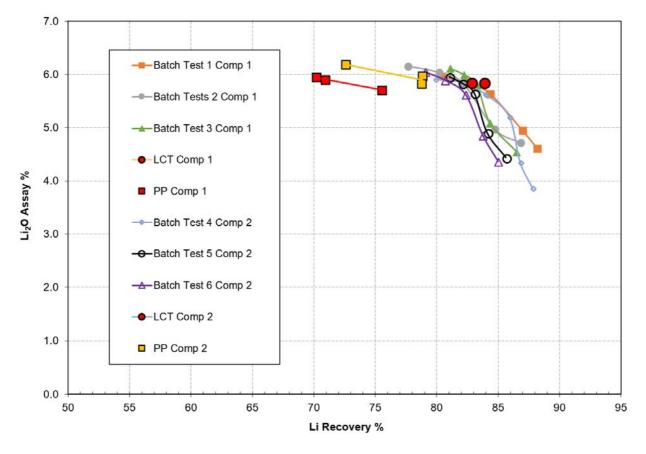


Figure 1: Grade-recovery curves for batch tests, locked-cycle tests (LCT) and pilot plant (PP) for composite 1 and 2

Environmental Work Programs

The Company commissioned a number of environmental studies to examine whether the Authier mine has any physical, biological or social impacts on the environment and communities. The studies were undertaken by highly reputable independent consultants with



extensive experience and expertise in the region, including SNC Lavalin, Lamont Inc, Hydrogeology Richelieu and Groupe DDM.

Authier has now been the subject of a number of detailed environmental studies. In 2010, a comprehensive base-line environmental study was completed by environmental consultancy group, Dessau. Since the Company's acquisition of the Authier project in late 2016, all of the environmental studies have been updated, including:

- 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 reports are available on the Company's website. In addition to these studies, a dust and noise analysis survey is underway and should be completed in September.

The studies have not identified any potential environmental issues at the Authier project or any major impact on the local communities. The Authier project is planned to be an operation processing 1,900 tonnes of ore per day which is significantly smaller than other operations in the district.

Permitting Process Update

The Company's strategy is to initially develop Authier and sell lithium concentrates whilst it completes the test work and feasibility study for a downstream processing facility producing lithium carbonate and/or hydroxide. The strategy is analogous to other lithium developers in Quebec including Nemaska and North American Lithium.

The Company is currently continuing its consultation process to comply with the permitting process required by both the Ministry of Energy and Natural Resources ("MERN") and the Ministry of Sustainable Development, Environment and the Fight against Climate Change ("MDDELCC").

MERN Authorisation

Mining lease applications are submitted to the MERN pursuant to Section V (articles 100 to 126) 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 July 2018);
- Completion of a scoping and marketing study for processing within Quebec (in progress);
- Rehabilitation and restoration plans have been submitted to the Government;
- The MDDELCC authorization required under the Environment Quality Act has been issued for the project (in progress);



- A consultation report (in progress); and
- A survey plan has been lodged for approval with the Office of the Surveyor-General of Québec.

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.

The Company has now facilitated 5 public consultation sessions and more than 40 information meetings with different stakeholders located near the Project including the La Motte and Amos municipalities, and the Pikogan First Nations. Further information sessions are planned during follow-up meetings in September 2018. The purpose of the meetings is to present the results of the environmental studies and address any stakeholder concerns about the project. Community concerns are being addressed and implemented in the ongoing development plans. Examples include:

- Assessing the potential for utilisation of waste rock as a construction material in the local district;
- Implementing strategies for minimising dust emissions during operation;
- Locating plant and infrastructure to avoid impacting on the wetlands, fish and fish habitat;
- Developing blasting practises that minimise noise; and
- Designing the waste rock storage areas to have minimum visual impact.

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.

The Company is aware that some members of the community (and from non-related different localities) do not support mining projects and have expressed their opposition at the consultation meetings, concerning in particular, that the project could impact the nearby Esker which is a source of potable water. This has been addressed through the environmental studies undertaken by highly-regarded water consultants in the district. The results showed that the Authier project is located downstream from the Esker and that no impact is anticipated on the groundwater quality in the Esker, under any conditions.

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 potential environmental impacts of the project and related monitoring and mitigation measures.

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 and no impact on the Esker. Studies to date showed that the project does not raise any major environmental issues. As such, it was planning to submit its application to obtain the MDDELCC project development authorisation in August 2018, with the objective of obtaining key project development authorisation in early 2019.

However, on 29th June 2018, the MDDELCC issued a press release indicating that the Department intended to recommend to the Government that the Company's Authier mining project be submitted to the environmental impact assessment and review procedure, unless the Company undertakes to file an application to be submitted to the environmental impact assessment and review procedure and to the Public Hearings (Bureau d'audiences publiques sur l'environment –BAPE). As per current legislation, Authier was being developed outside of the environmental impact assessment and review procedure developed assessment and review procedure of the environmental impact assessment and review procedure Authier was being developed outside of the environmental impact assessment and review procedure process due its planned production rate of less than 2,000 tonnes of ore per day as defined by the Mines Act.

The BAPE is a public and neutral body reporting to the Minister of MDDELCC. It allows citizens to learn about and exercise their right to speak about projects that could have an impact on the environment, their quality of life and any question relating to the environment. More specifically, the BAPE's mission is to inform government decision-making by transmitting to the Minister of MDDELCC analyses and opinions that take into account the sixteen principles of the Sustainable Development Act.

The Company attended a meeting with representatives of MDDELCC on 10 July 2018 to address this request and to assess the most optimal path forward for the project development. The meeting was highly constructive and the consultation process with various Government agencies is ongoing. The Company will make further releases regarding the permitting process in due course.

Downstream Testing Program on Authier Concentrates

During the quarter, the Company initiated a testing program to produce lithium carbonate and lithium hydroxide from the Authier pilot plant lithium concentrate.

The Company recently completed a pilot plant program which processed five tonnes of Authier drill core into over 400 kilograms of spodumene concentrate. The program demonstrated that a 6% Li₂0 concentrate could be produced at a metallurgical recovery of 79% (see ASX release, Completion of the Authier Pilot Program, 22 May 2018).

The downstream testing program is being performed by SGS Canada Inc. at Lakefield, Ontario. SGS have extensive experience and expertise in downstream testing and have performed programs for a number of Canadian lithium projects. The program will be comprised of two phases including the initial production of aqueous lithium sulphate followed by purification to lithium carbonate and lithium hydroxide.



Data produced from the testing program will be incorporated into a downstream Pre-Feasibility Study and samples produced will be used for potential customers.

The Company has previously demonstrated the successful conversion of Authier concentrate into extractable beta spodumene (a form of spodumene amenable to further processing). Flotation concentrate samples were transformed from alpha to beta spodumene in a decrepitation kiln. The lithium was extracted to form lithium sulphate through sulphuric acid roasting followed by water leaching. The previous results demonstrated that up to 96.8% of the lithium was extractable from Authier spodumene concentrates (see ASX release, Successful Thermal Conversion of Authier Concentrates, 3 July 2017).

The results compare favourably with benchmark data generated from other hard-rock spodumene projects in Canada with similar testing conditions (i.e. decrepitation temperature and time). The results provided confidence that battery grade lithium carbonate can be produced from Authier lithium concentrate.

Tansim Geophysics Program

During the quarter, the Company's geologist visited the site to undertake an initial reconnaissance to confirm the access arrangements into the main pegmatite zones identified by the previous project owners. Figure 22 shows some of the spodumene crystals observed at the Viau Dallaire pegmatite system.



Figure 2: Spodumene crystals at the Viau Dallaire pegmatite

The priority focus of the exploration program is to define drilling targets at the following priority 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% Li₂0, 11.15 metres @ 0.84% Li₂0 & 18.95 metres @ 0.94% Li₂0 (including 7.3 metres at 1.77% Li₂0); 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% Li₂0 and 1.37% Li₂0 over 3.2 metres, respectively.

A recent airborne geophysics survey confirmed a strong east-west magnetic anomaly coincident with historical surface mapping of pegmatites over an area of 9 kilometres long and up to 700 metres wide – see Figure 33. 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. The conjunction of eastwest trending pegmatite dykes dipping to the north and hosted by metamorphic ultramafic and schist rocks is a similar geological setting observed at Authier.

Mapping and sampling programs are planned to define the geometry of the pegmatites for future drilling. Exploration is being closely coordinated with the local First Nations group, Long Point First Nation, who will provide support services for the future work programs.

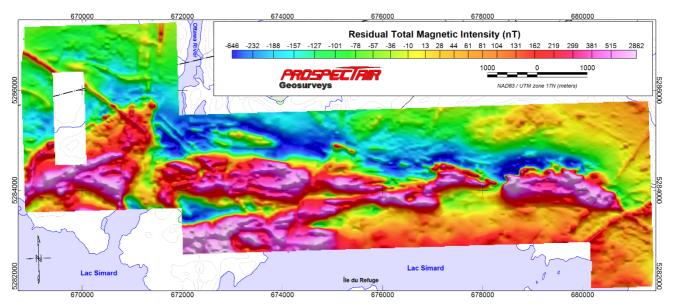


Figure 3: Residual Total Magnetic Intensity showing the east-west structural trending controlling pegmatite placement.



Western Australian Projects

Exploration tenure in Western Australia includes leases covering some 1,780 km2 in the world class Pilgangoora lithium district – see Figure 44. The 141 km2 Mallina project, E47/2983, is the most advanced with three zones of spodumene pegmatite identified by the Company's exploration to date. Other advancing projects include Tabba Tabba where three drill targets have been outlined and lithium anomalous albite pegmatites at the Moolyella project. Pilbara lithium tenure is displayed in the figure below.

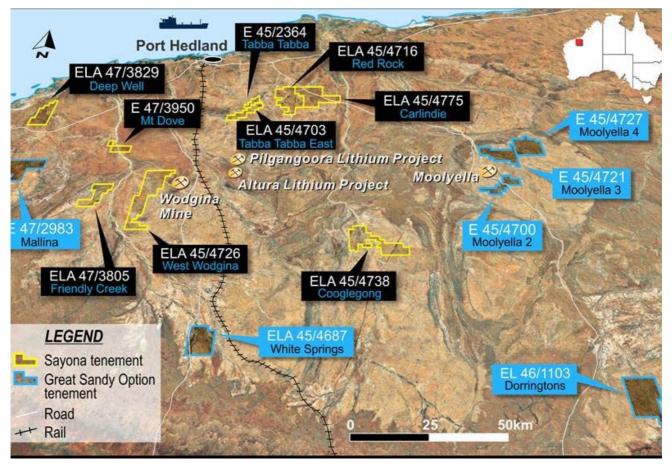


Figure 4: Sayona Lithium Tenements in Western Australia

Mallina Project

Permitting at Mallina is now complete and a 20 hole, 2,500m RC drilling programme is planned to commence in August. The programme is principally designed as a first pass test of the Area C prospect and other spodumene pegmatites, where rock chip sampling has returned spodumene mineralisation up to 4.6% LiO₂. The pegmatite has a generally poor outcrop but is geochemically defined by a strong lithium soil anomaly extending over 1,400m in extent (see Figure 56).

The project has been successful awarded a co-funded Government grant. This incentive scheme grant, funded by the Government of Western Australia, allows for a 50% rebate on



direct drilling costs, up to a maximum of \$150,000. The planned work includes RC and diamond drilling.

The Mallina project now includes multiple areas of spodumene bearing pegmatites in three broad groups, within a 20 km² zone (see figure below). During the quarter soil geochemistry and geological mapping were carried out. These identified new geochemical anomalies and pegmatite occurrences, enhancing the projects prospectivity and calibre of the drill targets identified so far. Results to date are displayed in the figure below.

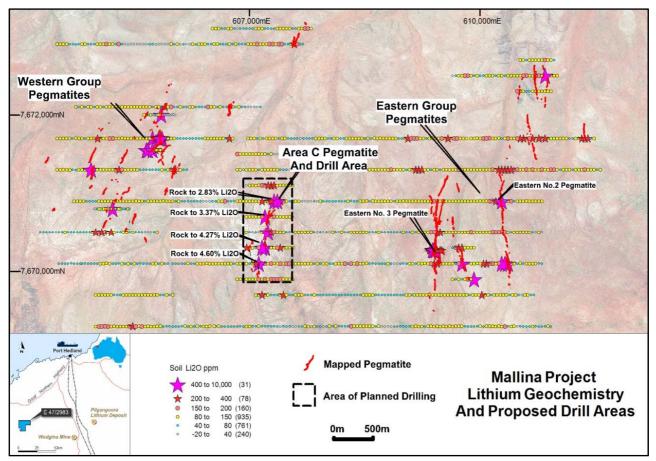


Figure 5 Mallina Pegmatites and Lithium Geochemistry

Tabba Tabba Project

The Tabba Tabba project, located 40km north of Pilgangoora, is an area of historic tin and tantalum mining, currently being re-evaluated for its lithium potential. Within the Company's tenure first pass drilling is planned at three pegmatite targets following receipt of statutory approvals for drill testing. Prospects include previously undrilled pegmatites at the Northern River, Roadside and Turley areas. Orientation soil geochemistry, carried out in the northern part of the lease during the quarter, returned elevated lithium results to 396ppm Li₂O. A more comprehensive programme of 450 samples collected along the northern 5km extent of the tenement has now been completed. Results of this work are pending.



Additional exploration has also recently commenced over the Company's tenements around the Tabba Tabba area. Work in this large 508 km² area is being expedited following the discovery of spodumene pegmatite within adjacent tenure.

Subsequent to the end of the quarter two exploration licenses were applied for to the north and along strike to the Tabba Tabba project. Exploration and geological data on these areas is being compiled and it is anticipated they will provide the company with additional exposure to the areas emerging lithium prospectivity.

Moolyella and Other Pilbara Project Areas

The Moolyella project is located east of Marble Bar in an area of lithium, tin and tantalum mineralisation, including spodumene pegmatite associated with the intrusion of the Moolyella monzogranite. Within the Company's tenure (three tenements covering 334 km²) a number of lithium-cesium-tantalum (LCT) albite pegmatites have been identified. Orientation soil sampling has been completed and results are awaited.

Deep Well Project (Gold)

The Deep Well gold project covers poorly outcropping upper Mallina Formation sediments and volcanic rock of the Fortescue aged Mt Roe Basalt in a geological setting broadly analogous to the Witwatersrand basin of South Africa. The western tenement area, where bedrock crops out includes pyritic dolomite, siltstone and fine grained quartzite with quartzite clasts. The shallow water sequence is part of the Upper Mallina Succession, the basin edge and youngest part of the basin and closet in age to the Central Rand Group which hosts the majority of the gold in the Witwatersrand. Work continued to sample ironstone lag (weathered primary pyrite), which displays an elevated gold geochemistry and is being used as a pathfinder to potential Wits style Au-U mineralisation.

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

During the quarter, the Company completed a capital raising to international and domestic institutional, and sophisticated investors raising A\$11 million. Jett Capital Advisors, LLC and Patersons Securities Limited acted as Joint Lead Managers to the Placement. In addition, the Company raised a further \$1 million through a rights issue.

The placement price was 5.1 cents, with one (1) free attaching Option exercisable at 7.8 cents on or before 30 April 2020 for every two (2) Placement Shares subscribed. The rights issue comprising an offer on the basis of one (1) Rights Share for every twenty-two (22) existing Shares held at an issue price of 5.1 cents per Rights Share, together with one (1) free



attaching Rights Option exercisable at 7.8 cents or before 30 April 2020 for every two (2) Rights Shares subscribed.

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;
 - o Completion of the permitting activities including public consultation;
 - Purchasing of certain long-lead capital items;
 - o 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:

Dan O'Neill Managing Director 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 Pilot Metallurgy Program, 13 April 2018
- Tansim Geophysics Program, 21 March 2018
- Tansim

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

Tenement	Name	Status	Interest at Beginning of Quarter	Interest at end o Quarter
E59/2092	Mt Edon	Granted	80%, with rights to 100% of pegmatite minerals*	80%, with rights to 100 of pegmatite mineral
E59/2055	Mt Edon West	Granted	100% (pegmatite minerals)	100% (pegmatite minerals)
E45/2364	Tabba Tabba	Granted	Rights to 100% of 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%
ELA80/4968	Keller	Application	100%	100%
ELA47/3802	Friendly Creek	Application	100%	0
ELA47/3829	Deep Well	Application	100%	100%
ELA47/3950	Mt Dove	Application	100%	100%
eat Sandy Pty Ltd	Option			1
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	Moolyella	Granted	Option Rights to 80%	Option Rights to 80%
E45/4727	Moolyella	Granted	Option Rights to 80%	Option Rights to 80%
E45/4700	Moolyella	Granted	Option Rights to 80%	Option Rights to 80%

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



Canadian Tenement Schedule							
Claim Number	Registered holder	Registration	Expiration	Area			
		Date	Date	(hect)			
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			