



ASX ANNOUNCEMENT



29 APRIL 2016

MARCH 2016 QUARTERLY REPORT

Highlights

- Strategic entry into Western Australian lithium market with tenure acquired in the Pilbara, Pilgangoora district and Murchison Mt Edon areas totalling 843km² and securing rare metal pegmatites
- Acquisitions compliment graphite project and Company's objective of sourcing and developing the raw materials needed for lithium-ion batteries
- Drill assay results at Corkwood, East Kimberley delineate broad zones of shallow flake graphite, including 16m @ 5.03% TGC from 13m in SKRC006, with assays up to 12.2% TGC
- Itabela drilling program completed, results pending

Sayona Mining Limited (ASX: SYA) ("Sayona" or the "Company") is pleased to announce activities for the quarter including entry into the Western Australian lithium market, drill assay results from the East Kimberley graphite project and the completion of phase 1 drilling at Itabela in Brazil.

Strategic Entry into Western Australian Lithium Market

During the quarter, the Company secured a package of lithium prospective exploration tenements in Western Australia. The acquisition is complimentary to the Company's graphite development strategy and its objective of securing, exploring and developing the raw materials required for the production of lithium-ion batteries.

Lithium is a high-value product which is anticipated to be in tight supply as the demand for lithium-ion batteries continues to experience transformational growth due to use in the new green technology sectors.

The projects have excellent regional infrastructure, and are close to the Asian markets for downstream processing and battery manufacturing.

Western Australia is a premium lithium province with world-class, high-grade lithium deposits associated with rare metal pegmatites. The Company has secured two regional project areas covering a total 843 km² (see figure 1) as part of its strategic move into lithium exploration.

The projects host tantalum mineralisation within complex rare metal pegmatites. This class of fractionated pegmatite includes prospective lithium-cesium-tantalum ("LCT")

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pegmatites, and especially albite-spodumene pegmatites, the target for the Company's high grade lithium exploration strategy.

The projects have had little or no past lithium focussed exploration and the Company is encouraged that its initial reconnaissance work has been positive, identifying lithium minerals and geochemistry indicative of fractionated rare metal pegmatites.

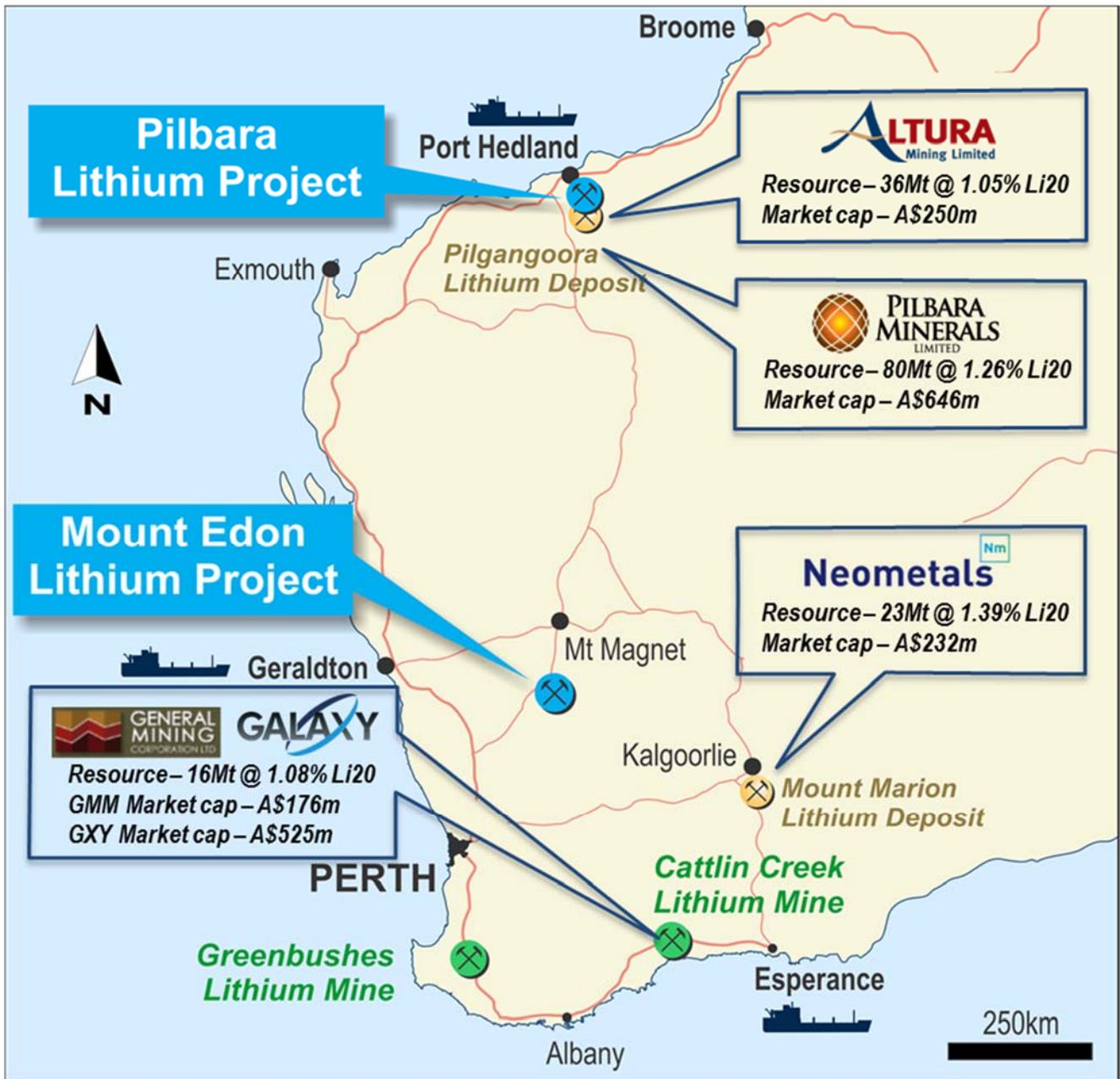


Figure 1: Project location and significant lithium mines and deposits in Western Australia

Pilbara Lithium Project, Pilgangoora district

The Pilbara tenure and target areas is shown on the figure below.

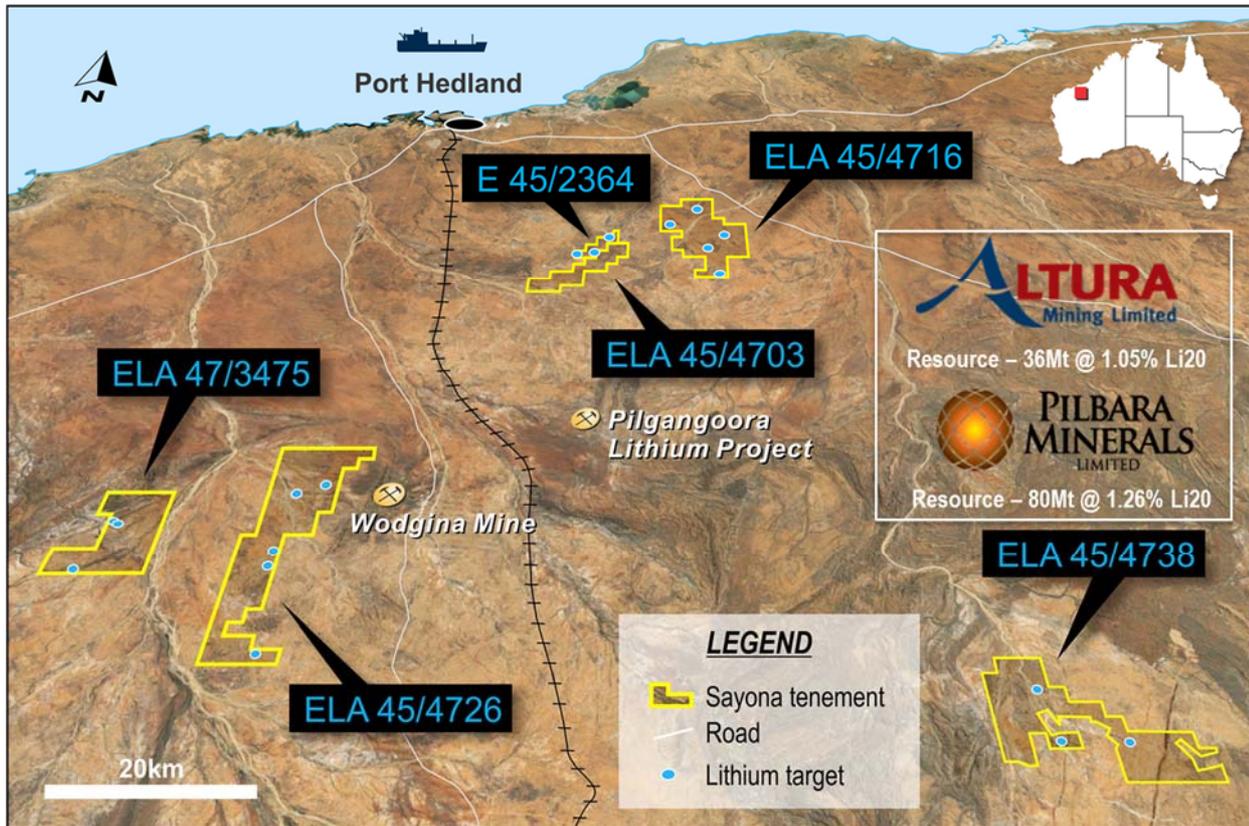


Figure 2: Pilbara lithium project location

Tabba Tabba Area (E45/2364, E45/4703 and Red Rock, E45/4716)

The Tabba Tabba tenements cover a 10 km strike extent of the greenstone stratigraphy to the south of the Tabba Tabba tantalum mine and are prospective for spodumene bearing pegmatites, similar to those located at Pilgangoora and Mount Cassiterite at Wodgina.

The Company has carried out an orientation stream geochemical survey of 13 samples, including follow up to a historic stream tin (1,700 ppm Sn) and tantalum (5,000 ppm Ta) anomaly reported by CSR in 1982. Results identify an area of elevated tantalum, with stream sample 7007 returning 24.7ppm Ta. The results suggest the presence of fractionated pegmatite within the stream samples drainage. Additionally, four rock samples were collected, with sample 10001 returning strongly anomalous tantalum (387 ppm), and anomalous rubidium, (1,390 ppm) and cesium, (171 ppm). Lithium was not significantly elevated but the Company is encouraged by this indication of previously unidentified target rare metal pegmatites within the project area.

The Company has applied for exploration licence ELA45/4703 to secure the area adjoining the anomalous stream results.

The Red Rock exploration license (ELA45/4716) is located to the east of Tabba Tabba and covers the northern extension of the Pilgangoora belt, securing the Red Rock pegmatite as well as greenstone remnants and several old dredging claim areas, indicative of past

tin – tantalum prospecting. These display a potential for undiscovered pegmatites in the area.

Further mapping, geochemistry and analysis of pegmatites is planned over the tenement areas in order to identify prospective lithium targets for drilling.

Wodgina Project (Friendly Creek, ELA47/3475 and West Wodgina ELA45/4726)

The project areas at Friendly Creek (ELA47/3475) and West Wodgina (ELA45/4726) cover 339km², and secure areas of past tin and tantalum prospecting activity. The bedrock rare metal pegmatite hosts have not been subject to modern exploration or assessment for their lithium potential. The project areas show similarities with the tin pegmatites at Mt Cassiterite in the Wodgina field which host spodumene bearing albite pegmatites, the Company's target exploration focus.

Cooglegong Project (ELA45/4738)

The Cooglegong application of 140 km² covers the northern part of the Shaw River tin field, an area of historic tin mining which is host to numerous pegmatites of albite composition. Tantalum is also reported from the area, indicating the potential presence of rare metal, lithium prospective pegmatite systems.

Mineralisation is hosted in pegmatite related to a 'younger' granite, the Spearhill Adamellite. The Cooglegong application secures part of this intrusion and the surrounding Shaw River batholith, and greenstone remnants.

The area has never been explored for its lithium potential, but the presence of rare metal pegmatites, an evolved albite composition and presence of suitable host rocks indicates an elevated prospectivity.

Mount Edon Project

Mount Edon covers an extensive swarm of pegmatites within the southern portion of the Paynes Find greenstone belt, South Murchison. These pegmatites have not previously been assessed for their lithium potential but have been variably prospected and mined for tantalum, mainly within an excised mining lease (see Figure 3).

The Mt Edon pegmatite system is located within greenstone rocks close to the contact with the Coolagee Hill granite. An 11 km strike extent of the prospective greenstone horizon is present within the project area with much of it remaining unexplored.

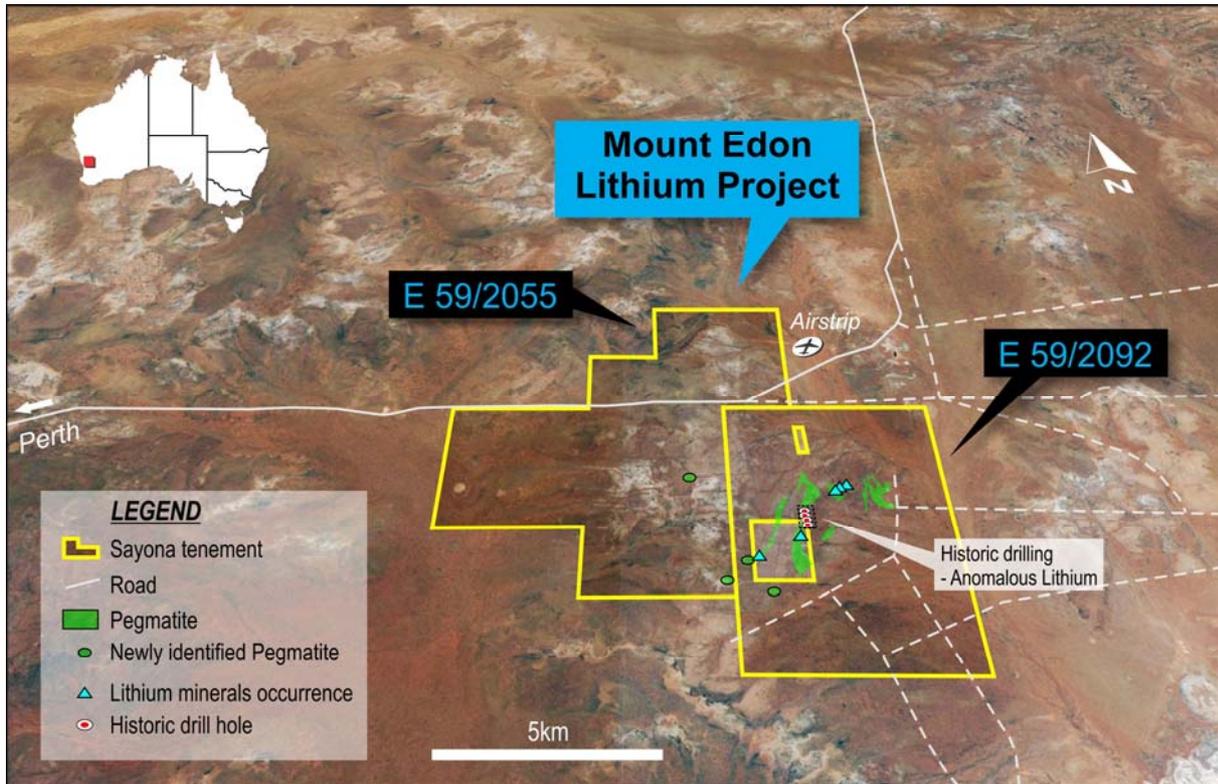


Figure 3: Mt Edon project location

The known Mt Edon pegmatites show a general mineral zonation, with microcline feldspar occurrences in the east, and more complex and evolved albite bearing differentiated pegmatites containing tantalum niobium and lithium in the west.

Within the project area the only recorded drilling of pegmatite was a tantalite target in 2002 which intersected an anomalous zone of lithium mineralisation to 0.19% Li with anomalous rubidium and cesium.

The Company is exploring the project for highly evolved, albite-spodumene type pegmatites, initially targeting the western project area. To advance its lithium exploration program at Mt Edon, the Company recently acquired high resolution magnetic-radiometric data identifying three prospective radiogenic pegmatite systems (Figure 4 below).

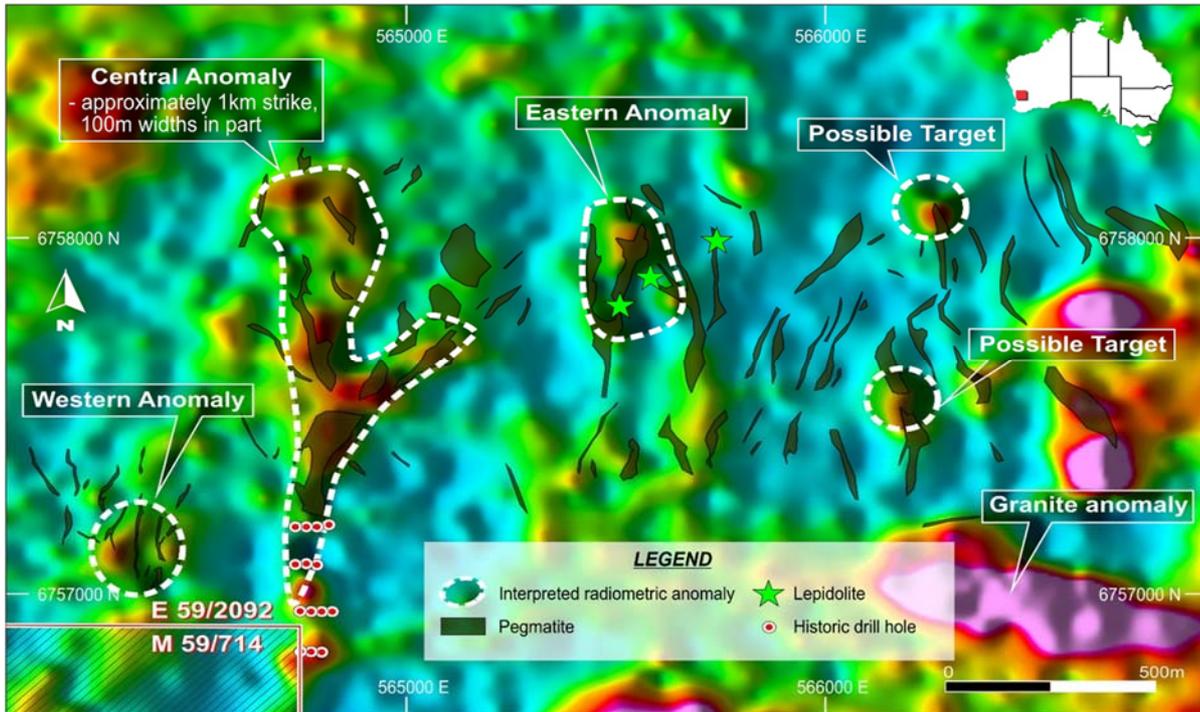


Figure 4: Mt Edon project radiometrics

Recent mapping has identified a large number of pegmatite intrusions, ranging from five metres to over 100 metres in surface width, arranged in swarms of up to 1 kilometre in strike extent. The pegmatites have variable outcrop and are in part obscured by colluvium and remain to be fully defined. Radiometric data identifies one of the largest pegmatites as being the most prospective, with a 900 metre strike extent comprising multiple pegmatites which are up to 100 metres width on surface (true width is not known).

The Company is exploring the project for its potential to host the albite – spodumene class of rare metal pegmatite. The use of high-quality airborne radiometrics data, which detects radiogenic minerals associated with lithium mineralisation, is being used as an attractive low-cost exploration methodology to cover the large project area.

A total of 58 rock and 18 soil geochemical orientation samples from the project area have been submitted for assay to help rank the most prospective areas for further work.

East Kimberley Graphite Project, Western Australia

During the quarter, the company received all assay results from its maiden Corkwood prospect drilling program completed in December 2015.

Highlights from the drilling program, included:

- Delineation of broad zones of shallow flake graphite mineralisation, including;

- 16m @ 5.03% TGC¹ from 13m in SKRC006, Windrush,
- 22m @ 3.8% TGC from 9m in SKRC008, Windrush,
- 36m @ 3.39% TGC from 7m in SKRC015, Snowbird,
- 54m @ 3.05% TGC from 14m in SKRC016, Snowbird,
- 109m @ 1.84% TGC from 22m in SKRC017, Flying Ant,
- Mineralisation is open at depth and along strike;
- Assays up to 12.2% TGC;
- Mineralisation from surface, with shallow dip and good geometry, characteristics amenable to low cost open-cut mining; and
- Visible coarse graphite - graphite study underway to help characterise the quality of the mineralisation.

The 33 reverse circulation drill holes totalling 2,949 metres were located at six prospect areas along a 7km strike extent (see Figure 5). Every hole intersected graphite mineralisation. An individual metre assay of 12.2% provides encouragement that further drilling will identify high grade zones within the remaining 20km+ strike extent of the target horizon.

Mineralisation is from surface and the broad widths and shallow dip of the mineralisation has favourable geometry for open cut mining. Work is underway to evaluate the flake size and graphite quality of the intersected mineralization. Diamond drilling is being planned to gain metallurgical information and to provide graphite concentrate for off take evaluation.

¹ TGC – Total Graphitic Carbon

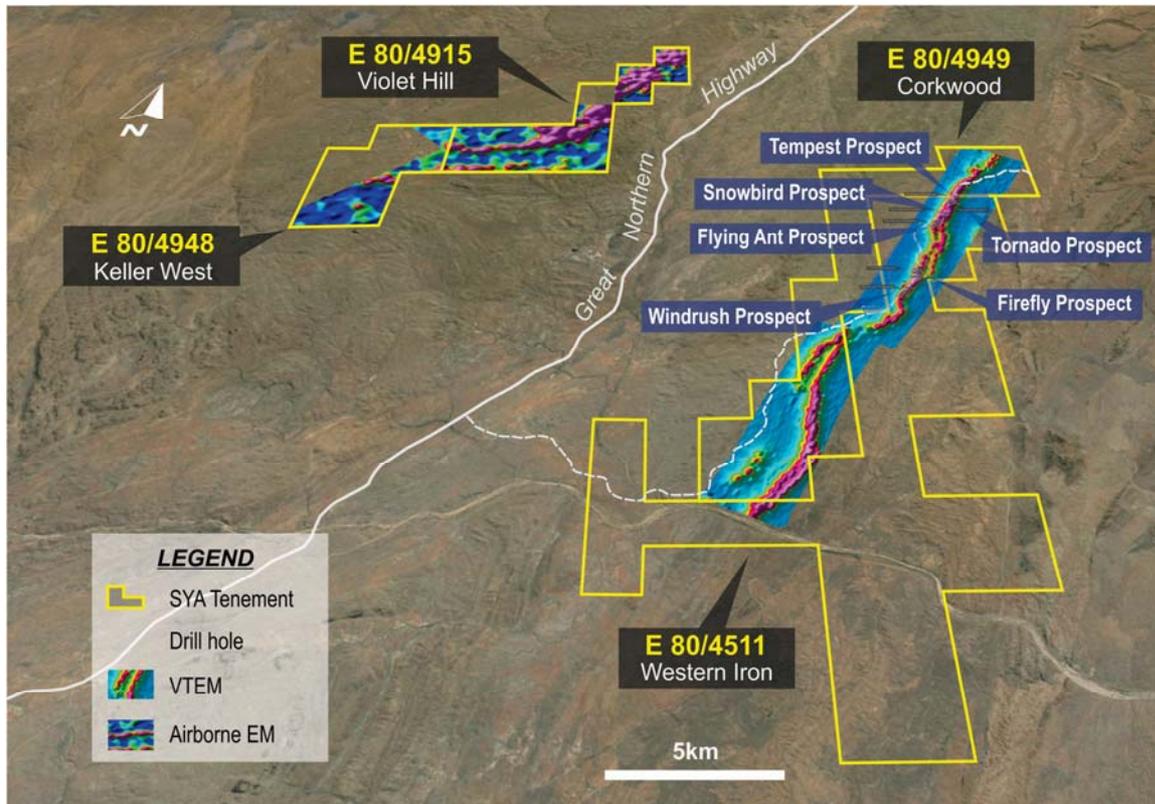


Figure 5: Prospect areas over VTEM)

The Windrush prospect intersected the highest grade of graphite mineralisation, with 12.2% TGC recorded from 17-18m in SKRC006. The 8 drill holes were situated on four sections over a strong to moderate versatile domain electro-magnetic (“VTEM”) geophysical anomaly and outcropping graphite mineralisation which had been exposed along a pastoral track. The best intercepts are from SKRC006-7, the southernmost holes, and the mineralisation remains open at depth and totally untested along strike to the south. A cross section of the drill fence is displayed below in Figure 6.

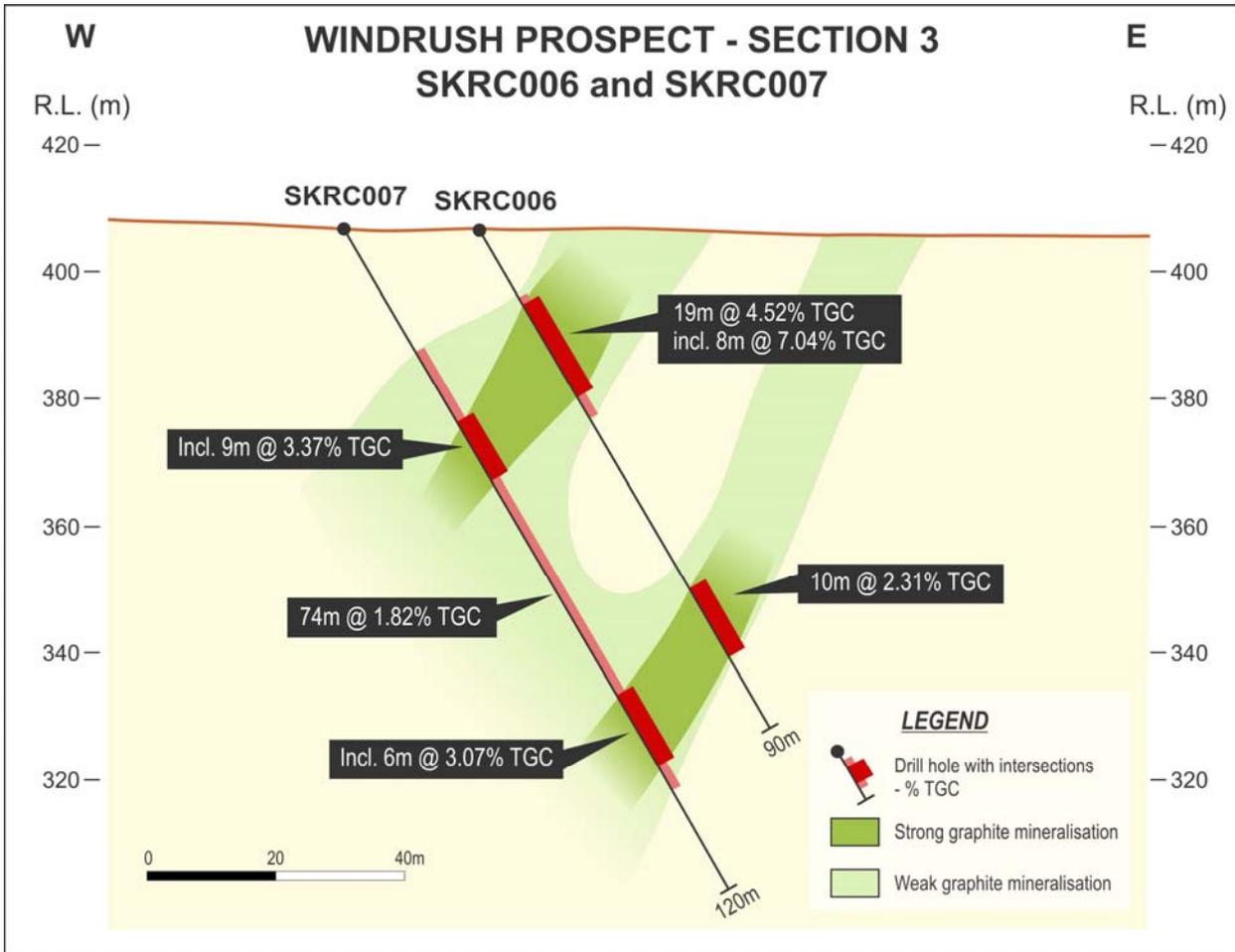


Figure 6: Cross-section, Windrush SKRC006-7

The Snowbird prospect also returned encouraging mineralisation. At this location, a single fence of three drillholes was completed to test a conductive VTEM geophysical anomaly coincident with outcropping graphite mineralisation. A cross section of the drill traverse is displayed below, together with a cross section from the Firefly prospect which displays broad thickness to the graphite mineralisation.

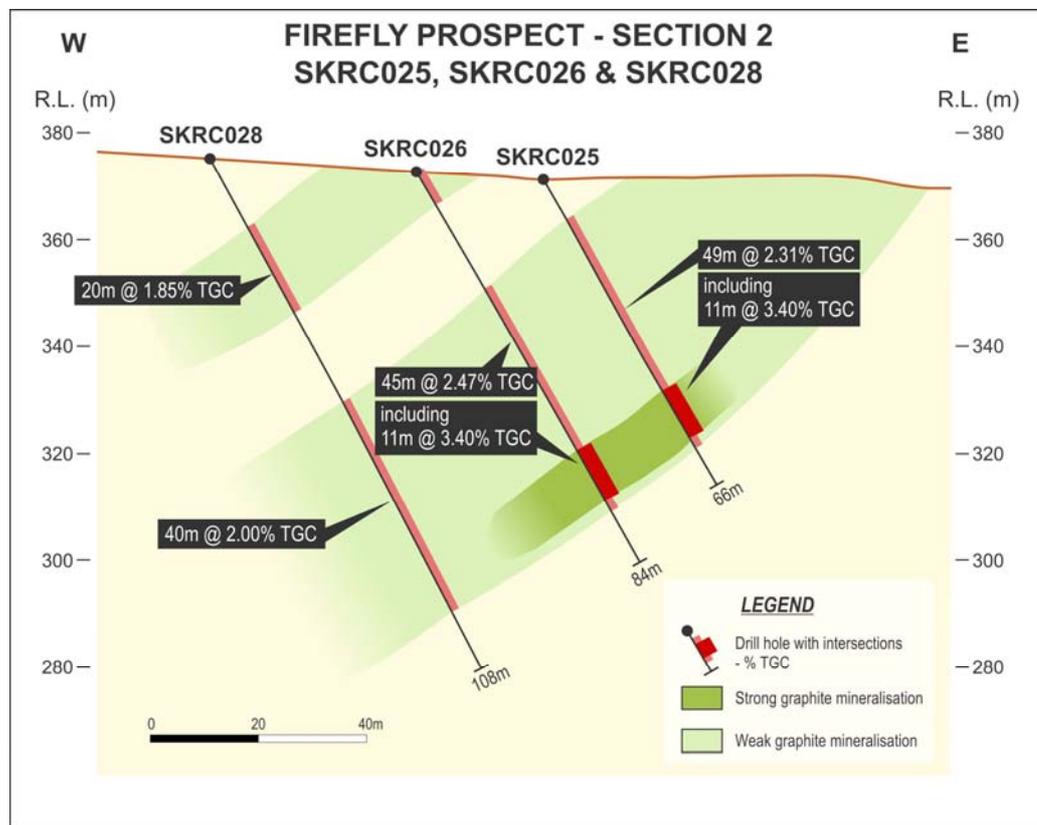
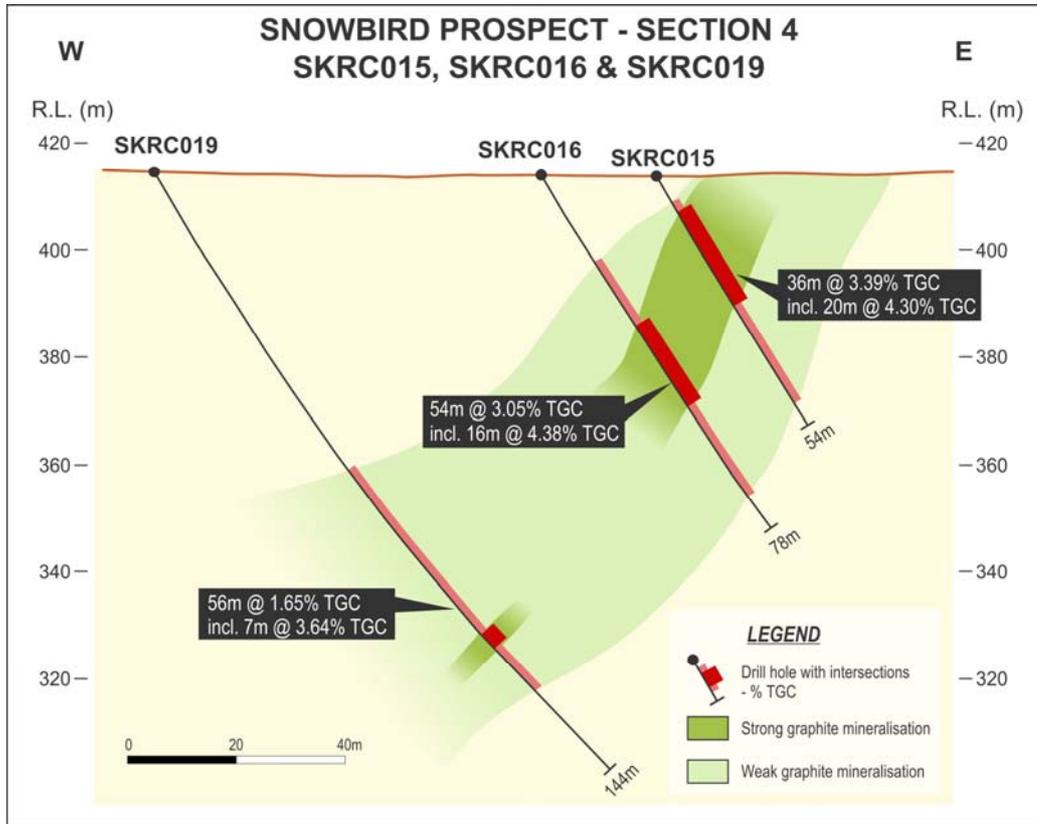
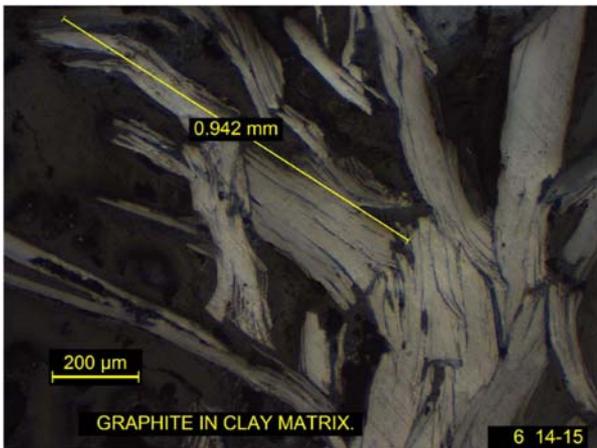


Figure 7: Cross-section, Snowbird and Firefly Prospects

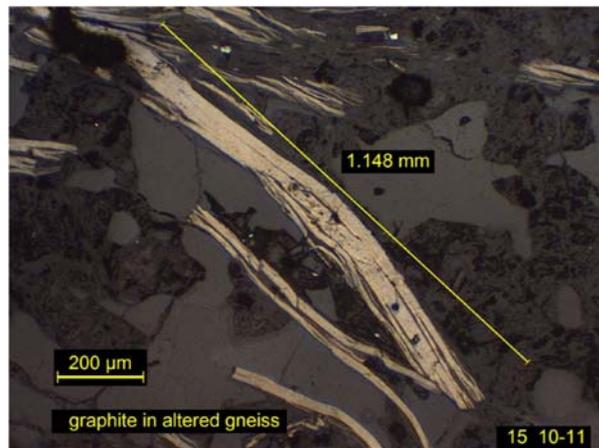
Petrographic Study

Petrographic study has been undertaken on drill material from the Snowbird, Windrush and Firefly prospects. Rock fragments, sieved from the drill cuttings were examined as well as the finer powdered rock which comprises the bulk of the drill sample.

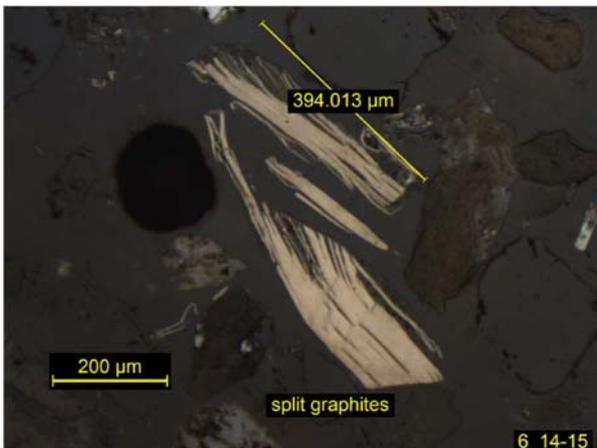
The RC drilling method has resulted in many of the graphite flakes being broken into smaller pieces (see images overleaf) and diamond drilling will be required to finalise the actual flake size distribution. Observations give encouragement that the project is host to high value coarse flake graphite.



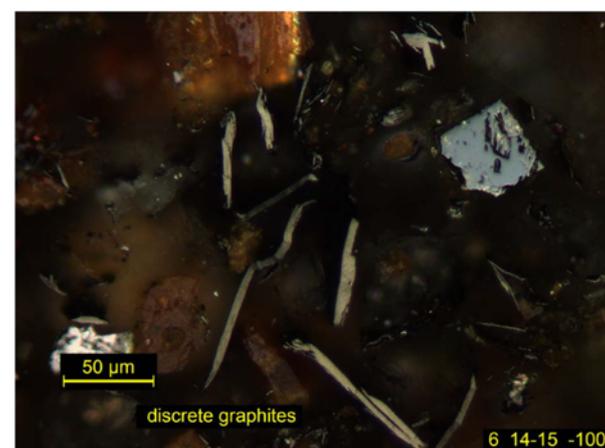
SKRC006, 14-15m drill chip photomicrograph



SKRC015, 10-11m drill chip photomicrograph



SKRC006, 14-15m +100 mesh (left) and -100 mesh (right) sieved RC drill sample (set in resin).



A program of diamond core drilling is being planned so that core material can be used for metallurgical testwork and flotation testing, and flake graphite concentrate can be used for offtake evaluation.

In the interim, a geophysical study, modelling VTEM conductivity and the known graphite mineralisation is being planned. This work, combined with geological data will help highlight the exploration potential of the remaining 18km strike extent of the graphite prospective anomaly within the project area and help frame the priority exploration for 2016.

Itabela Graphite Project, Brazil

During the quarter, the Company completed its maiden drilling program at the Itabela graphite project in Brazil.

Forty-nine air-core and reverse circulation drill holes totalling 2,440 metres have been completed at the San Manuel and San Ruben prospects. The aim of the program, included:

- Testing the grade, strike and lateral extensions of known mineralisation at San Manuel and San Ruben;
- Testing depth extensions to know mineralisation where the limit of drilling is generally between 10 and 20 metres from surface; and
- Validating assays from historical drilling programs.

Samples are being dispatched for analysis, and the results and analysis are expected to be completed by the end of the April, and full interpretation and reporting in early May.

Lithium Acquisition Opportunities

The Company is pursuing other lithium opportunities, including due diligence on a number of prospective lithium properties in both North and South America.

Tenement Schedule

Table 1: Tenement Schedule				
Tenement	Name	Status	Interest at Beginning of Quarter	Interest at end of Quarter
E59/2092	Mt Edon	Granted	0%	80%, with rights to 100% of pegmatite minerals*
E59/2055	Mt Edon West	Granted	0%	100% Sayona (pegmatite minerals)
E45/2364	Tabba Tabba	Granted	0%	Rights to 100% of pegmatite minerals*
ELA45/4703	Tabba Tabba East	Application	0%	100%
E45/4716	Red Rock	Application	0%0%	100%
ELA45/4726	West Wodgina	Application	0%	100%
ELA47/3475	Friendly Creek	Application	0%	100%
ELA45/4738	Cooglegong**	Application	0%	100%
E80/4511	Western Iron	Granted	0%	100% (Graphite)
ELA80/4949	Corkwood	Application	100%	100%
ELA80/4959	Killarney	Application	100%	100%
ELA80/4968	Keller	Application	100%	100%

*Option-to-Purchase pegmatite rights subject to Attagold and Bruce Legendre agreements
 **Tenement applied for post quarter reporting period.

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

Competent Person Statement

The information in this report that relates to Exploration Results 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 Attagold Pty Ltd ("Attagold") which provides geological services to Sayona. Mr Attwell is a financial beneficiary, being a director and shareholder of Attagold if Sayona exercises its option to purchase the East Kimberley Graphite project or Tappa Tappa lithium project.

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.

Previous Disclosure - 2012 JORC Code

Certain Information relating to Mineral Resources, Exploration Targets and Exploration Data associated with the Company's projects in this March 2016 Quarterly Report has been extracted from the following ASX Announcements:

- 17/2/16 – Corkwood Drilling – Broad Zones of Graphite Mineralisation Encountered;
- 17/3/16 – Strategic Entry Into Western Australian Lithium Market;
- 8/4/16 – Mt Edon Lithium Project Exploration Commences; and
- 12/4/16 – Pilbara Lithium Enhanced by New Acquisition.

Copies of these reports are available to view on the Sayona Mining Limited website www.sayonamining.com.au. These reports were issued in accordance with the 2012 Edition of the JORC Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. 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. 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 announcement.