

10 November 2016

ASX ANNOUNCEMENT

Lithium Australia and SciAps break new ground with portable assay technology

HIGHLIGHTS

- **Lithium Australia becomes the first company in the world to perfect portable laser technology for real-time, in-field soil geochemistry assays for lithium**
- **Laser Induced Breakdown Spectroscopy (LIBS) to be adapted for rapid process control in laboratory conditions**
- **Real-time lithium assays to be extended to other Lithium Australia projects**

WORLD FIRST

Lithium Australia NL (ASX: LIT) first announced its collaborative agreement, to develop LIBS technology for geochemical applications, with US based SciAps Inc (SciAps), in December 2014. Since that time LIT and SciAps have worked together to develop a practical means of achieving real-time lithium geochemical assays with equipment designed and manufactured by SciAps. The first results were reported to the market on 4 November 2016 with LIT demonstrating good correlation in field trials, when compared with other field techniques.

LIT will now extend its LIBS technology research, with SciAps, to process control applications. Adaption of LIBS technology to this function may provide a significant edge in laboratory testing, pilot plant studies and ultimately in the production environment.

LIBS process control applications will be evaluated during the course of pre-feasibility process studies, soon to be commenced by LIT as part of the commercialisation of its proprietary Sileach™ process technology. More extensive soil geochemical applications will be implemented in the near future.

TWO YEARS OF PAINSTAKING RESEARCH

The importance of the recent breakthrough was pre-empted in 2014 when Adrian Griffin, managing director, made the following comments:

“Any breakthrough for a hand-held product would reduce exploration costs and time and potentially lift discovery rates and turnaround times on analysing potential new deposits.”



“Such an outcome will deliver the first ever practical means of locating lithium pegmatites using real-time and hand-held systems able to generate geochemical analysis out in the field. This approach will enable high-resolution geochemical programmes to be undertaken rapidly, reduce reliance on more expensive and time-consuming exploration techniques and significantly reduce our exploration costs for the discovery of lithium pegmatites.”

Following LIT’s demonstrable success of LIBS for soil geochemistry, SciAps Global Business Development Director for Geochemistry, Andrew Somers commented:

“[SciAps] believes partnerships with innovative industry partners such as Lithium Australia NL are critical to the success of developing new products for the mining industry. Until now, the only way to get in-field data for lithium exploration and mining was to use handheld XRF for pathfinder elements and/or indices based upon these elements. This approach has primarily employed Handheld XRF, a technique that cannot measure important elements for this application like Li, Be, B and Na. Field portable LIBS presents new opportunities to complement and build upon conventional techniques such as field portable XRF.”

“This work is important in proving the suitability of this new technique to geochemical applications such as this and we look forward to exploring the many possibilities that the unique capabilities of LIBS and particularly hand held LIBS offers going forward”.

Despite taking two years to generate an effective result, the development work has not ceased for LIT, which recently announced LIBS would be used for operation control of exploration drilling at Sonora County, in Mexico, with Toronto listed partner, Alix Resources Corporation n (AIX-TSX:V) (37N–Frankfurt). LIT believes real-time control on drilling will have a substantial effect on exploration cost optimisation.

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ABOUT LITHIUM AUSTRALIA NL

LIT is a dedicated developer of disruptive lithium extraction technologies. LIT has strategic alliances with a number of companies, potentially providing access to a diversified lithium mineral inventory. LIT aspires to create the union between resources and the best available technology and to establish a global lithium processing business.

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