

NEWS RELEASE
 June 25, 2017

Symbol: TSX-V: MMS
 For Immediate Dissemination

MACARTHUR MINERALS REPORTS SURFACE GRADES UP TO 405 PPM LITHIUM IN RAILROAD VALLEY, NEVADA

MacArthur Minerals Limited (TSX-V: MMS) (the “Company” or “MacArthur Minerals”) is pleased to announce the results of a geochemical soil sampling program at its new Reynolds Springs Lithium Brine Project (“Reynolds Springs”) in the Railroad Valley, Nevada of up to 405 parts per million (“ppm”) lithium (“Li”).

David Taplin, President, CEO and Director of MacArthur commented:

“MacArthur Minerals is excited about the results of the recent soil sampling program at its Reynolds Springs project in the Railroad Valley, Nevada of up to 405 ppm lithium. The results confirm data from historical USGS surveys that report anomalous lithium values in the Railroad Valley. Given the majority of samples contain lithium in higher concentrations than are typically found in playa sediments, we consider the Reynolds Springs project to be highly prospective for lithium brines.”

Soil Sampling Program

A total of 206 soil samples were collected across the full extent of the placer claims located on the Railroad Valley playa (dry Salt Lake bed). Soil samples were collected from a depth of approximately 1.5 feet (45.7 cm) every 660 feet (201 m) from 12 lines spaced 1,320 feet (402 m) (Figure 1).

Lithium values in the soil samples ranged from a low of 39.3 ppm to a high of 405 ppm Li. Samples were consistently high averaging 168.3 ppm Li with 85% of samples recording over 100 ppm Li and 19% greater than 200 ppm Li. These results are considered high in comparison to the majority of non-lithium producing playas and amongst the highest we have seen outside of the Clayton Valley.

The fact that 19% of the samples returned values above 200 ppm Li and that 66.5% of samples returned values between 100 and 200 ppm Li (Table 1), shows that the prospect is highly anomalous for lithium. Geologic evidence suggests that clays at the prospect were hydrothermally altered by geothermal spring waters to the Li rich clay Hectorite in the vicinity of Reynolds Springs. Hot lithium-rich geothermal water, leaking into the clays located along the frontal fault of the Pancake Range, partially altered the clays to Hectorite and is the likely source of the anomaly.

Table 1. Distribution of soil samples results

Li Content	+ 400 ppm	350 – 400 ppm	300 – 350 ppm	200 – 300 ppm	100 – 200 ppm
# samples	1	5	7	26	137

Two large area, multi-point anomalies, reporting greater than 200 ppm Li were defined at the Reynolds Springs project (Figure 1). The anomaly near the southern boundary of the prospect extends over 1.75 miles East-West and 0.5 miles North-South (0.88 miles² – 2.3 km²). This anomaly continues to the south into a wildlife management area where claim staking is prohibited. At the northern boundary of the prospect, a similar sized anomaly reporting greater than 200 ppm Li has been defined.

Reynolds Springs Project

The Reynolds Springs project consists of 210 new unpatented placer mining claims located in Railroad Valley, near the town of Currant, in Nye County, Nevada (Figure 2). The Reynolds Springs project is located approximately 180 miles (300 km) North of Las Vegas, Nevada, and 330 miles (531 km) South East of Tesla's new Gigafactory (Figure 1).

Railroad Valley is a large topographically closed playa basin located in East-Central Nevada. The basin is fault bounded with numerous active thermal springs (anomalous in lithium) emerging along the faults. The fault sets have strike lengths of 25–30 miles (42–50 km) and are parallel to each other, about 8-12 miles apart (13-19 km). The faults that bound the basin form an elongate rectangular shaped basin of about 300 square miles (830 km²) in size.

Numerous thermal springs emerge along the basin bounding fault systems which form the North-West and South-East flanks of the playa basin. Thermal waters which discharge from the springs carry moderately anomalous values of Lithium. Water samples collected from Reynolds Springs by Macarthur Minerals' consulting geologists averaged 230 parts per billion ("ppb") Li and 445 ppb boron. This is about twice the concentration for these elements detected from water samples collected at other springs that were sampled in the Railroad Valley.

The mountains that surround the basin contain outcropping rock units also anomalous in lithium. This closely matches the geologic criteria for the United State Geological Survey ("USGS") ore deposit model for Clayton Valley type lithium brine deposits. Macarthur Minerals believes that the combination of anomalous lithium in soils (+250 ppm) and anomalous lithium in thermal spring waters (230 ppb Li) indicates that the Reynolds Springs area is favourable for further exploration.

QA/QC of Sampling Program

After collection in the field, the samples were submitted to the ALS Minerals laboratory in Reno, Nevada for analysis by four-acid digestion and inductively coupled plasma-atomic emission spectrometry (ICP-AES) and inductively coupled plasma-mass spectrometry (ICP-MS) multi-element analysis. ALS Minerals laboratory of Reno, Nevada maintains ISO/IEC 17025:2005 accreditation and operates under a mature Quality Management System. Internal laboratory quality control includes both control standards and replicate sample analysis.

Next Steps for the Reynolds Springs Project

The Reynolds Springs project is located only 110 miles (183kms) from the Company's Stonewall project in the Lida Valley, Nevada. The close location of the Reynolds Springs and Stonewall projects will allow sharing of resources and expertise for exploration of both projects. The Company is considering entering into joint ventures to assist in the exploration of both projects.

ALPHA GIANT LIMITED PLACEMENT

The Company terminated the private placement to Alpha Giant Limited announced on June 7, 2017 for non-performance by Alpha Giant Limited. No shares were issued to Alpha Giant Limited.

QUALIFIED PERSON

Mr Randy Henkle, a Registered Member of the Society of Mining and Exploration and a Professional Geologist licensed in British Columbia, Canada, is a Qualified Person as defined in National Instrument 43-101. Mr Henkle has reviewed and approved the technical information contained in this news release.

ABOUT MACARTHUR MINERALS LIMITED (TSX-V: MMS)

Macarthur Minerals Limited is an exploration and development company that is focused on developing its lithium exploration interests in Australia and Nevada. Macarthur Minerals is the majority shareholder of Macarthur Australia Limited, which owns significant iron ore and lithium projects in Western Australia.

On behalf of the Board of Directors,

MACARTHUR MINERALS LIMITED

"Cameron McCall"

Cameron McCall, Chairman

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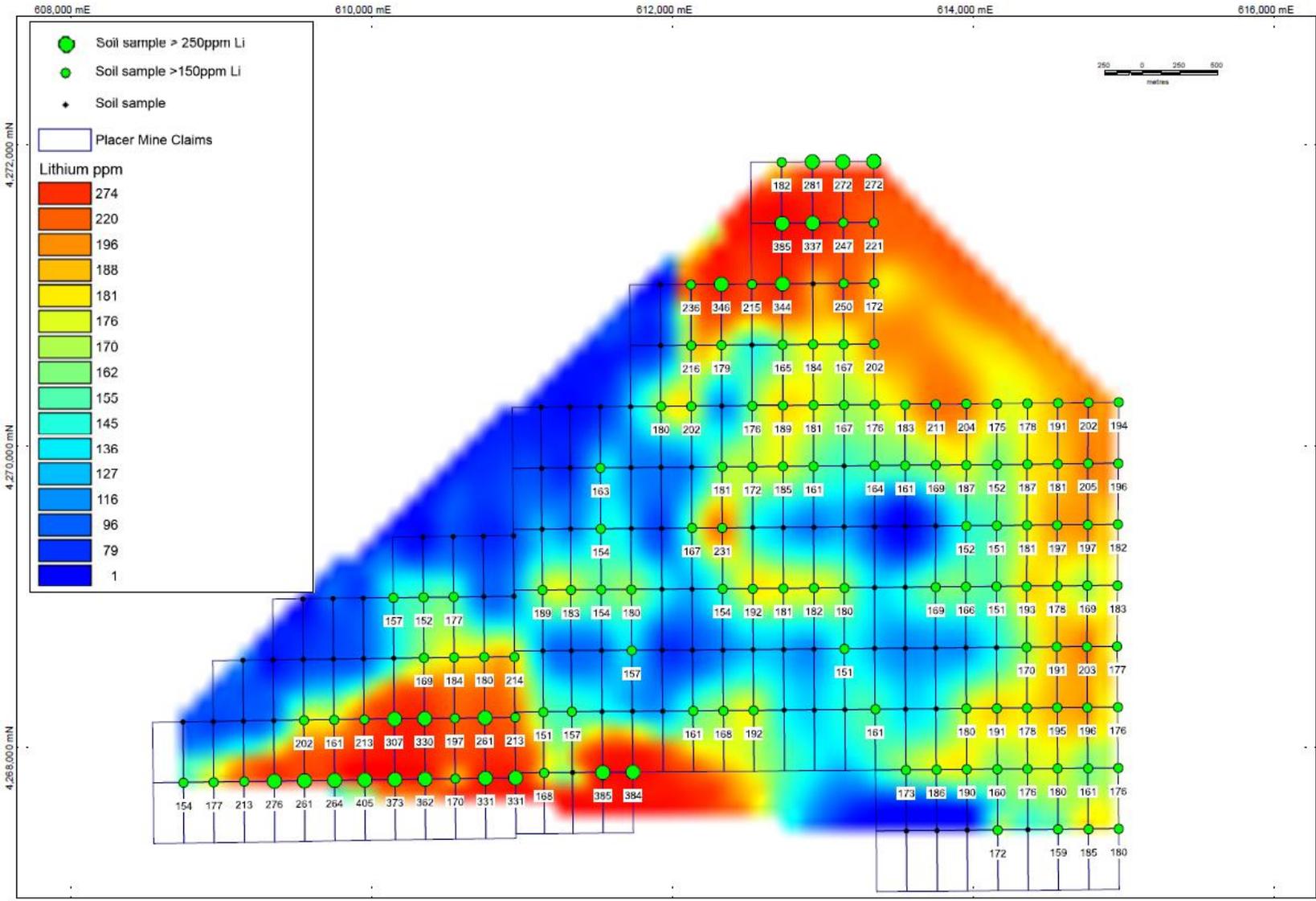


Figure 1: Soil sampling locations and results from the Reynolds Springs Lithium Project

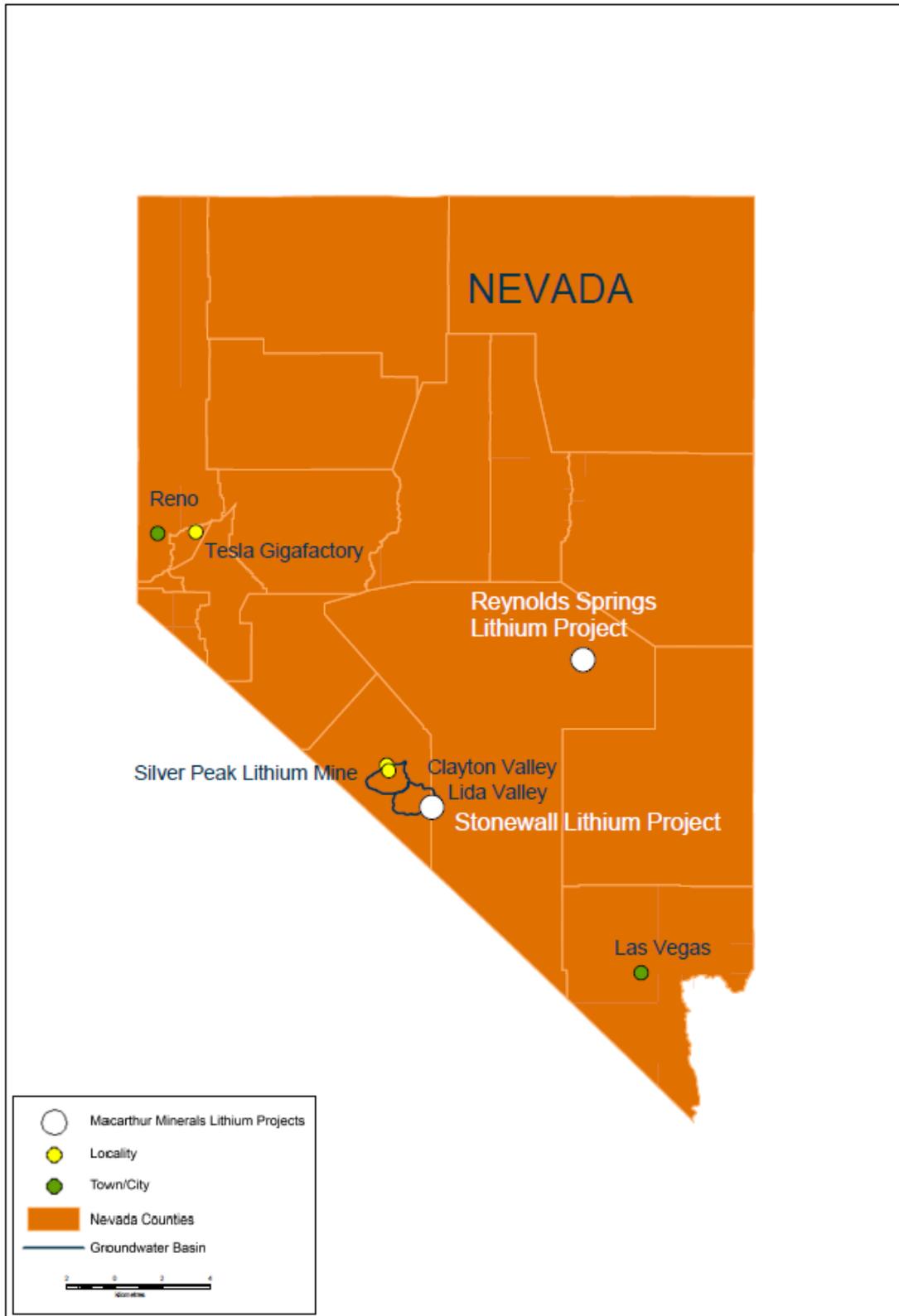


Figure 2: Regional location of Macarthur Mineral's Reynolds Springs Project and Stonewall Lithium Project