

NEWS RELEASE
May 23, 2017

Symbol: TSX-V: MMS
For Immediate Dissemination

**MACARTHUR MINERALS
LOCATES FURTHER LITHIUM IN NEVADA IN THE BASIN
ADJACENT TO CLAYTON VALLEY WITH SURFACE GRADES UP TO
187 PPM LITHIUM
AND PROVIDES AN UPDATE ON ASX IPO OFFER
FOR MACARTHUR AUSTRALIA LIMITED**

Macarthur Minerals Limited (TSX-V: MMS) (the “Company” or “Macarthur Minerals”) is pleased to announce that it has conducted an extensive near surface geochemical sediment sampling program at the Company’s Stonewall Lithium Project (“Stonewall Project”), located in Lida Valley, Nevada. The Lida Valley is the basin adjacent to the Clayton Valley, which hosts North America’s only producing lithium mine, Albemarle’s Silver Peak Lithium Mine. All 380 samples contained lithium with sediment assays ranging from 14.6 parts per million (“ppm”) lithium (“Li”) and up to 187 ppm Li, with 19 samples over 100 ppm. This sampling program confirms last year’s first pass sediment sampling program, that anomalous concentrations of lithium are present in the playa surface sediments of Lida Valley.

David Taplin, President, CEO and Director of Macarthur Minerals commented:

“Further confirmation of lithium at surface at the Stonewall Project, in the Lida Valley, a basin located very near to North America’s only producing lithium mine, is potentially significant; not only for Macarthur Minerals but it also emphasises the lithium potential of the Lida Valley. Deeper drilling into the basin and the brines is a priority to ascertain if the same lithium brine potential exists in the Lida Valley as has been discovered and extracted in the adjacent Clayton Valley.”

Results of Extensive Sampling Program

A United States mineral exploration company performed the extensive lithium sampling program for the Stonewall Project. The sampling program on the Stonewall Project for the purposes of collecting sediment samples for lithium was conducted during late April 2017.

The sampling program returned 380 sediment samples collected from depths of ~ 1.5 ft. (~ 45 cm) with grades ranging from 14.6 to 187 ppm Li. Samples were collected from a grid pattern on the playa (dry lake bed) surface, with a sample spacing of 200 meters (656 ft.) and from N – S oriented lines with a spacing of 500 meters (1640 ft.) between sampling lines (refer to Figure 1). All holes contained lithium with sediment assays ranging from 14.6 ppm Li and up to 187 ppm Li.

The highest value analytical results were from sample ‘21-3’ at 187 ppm Li and from sample ‘12-16’ at 159.5 ppm Li. The sediment samples were taken under chain of custody to the ALS Chemex lab in Reno, Nevada. The samples were analysed for 51 individual elements by Method ME – MS 41, which is an ultra trace level analysis using Inductively Coupled Plasma – Mass Spectrometry (ICP – MS) methods, with an Aqua Regia digestion. Figure 1 shows the location of the Stonewall Project claims over the majority of the playa, sample locations and lithium results.

Stonewall Project

The Stonewall Project covers an area of approximately 12,019 acres (48.64 square kilometers) and most of the playa in Nevada’s Lida Valley Basin. The Lida Valley is located 32 miles (53 km) to the SE of the Clayton Valley Basin, which hosts the United States’ only producing lithium mine.

The Stonewall Project is located in an intermontane basin and is surrounded by tertiary volcanic rhyolitic rock units, which are anomalously high in lithium. These rhyolitic units are thought to act as a potential source rock for lithium in the Clayton Valley brines. The potential lithium source rock includes flows and

tuffs that likely extend below the alluvial cover.

There are two clusters of anomalous sediments; one in the north and one in the south of the Stonewall Project playa. The higher Li values in the sediments are proximal to fault intersections revealed by bedrock outcrop patterns. The foot prints of the anomalous sediments defined by our sampling are on the order of 1.5 km (~ 5000 ft.) long by 0.5 km (~ 1600 ft.) wide.

The fault intersections comprise the bounding structural framework of the moat sediment zone of the Stonewall Volcanic Caldera (rhyolitic – now extinct). The Company's preliminary interpretation is that leakage of Li rich geothermal solutions at these fault intersections probably enriched the moat sediments which were deposited alongside the faults when the volcano was active (~ 5 million years BP).

The Stonewall Project is located in the mining friendly Nye and Esmeralda Counties of Nevada and is serviced by excellent infrastructure with access to power, water, labour and is bisected by the Veterans Memorial Highway Number 95. The regional climate also favours natural and inexpensive evaporation for brine concentration and allows year-round work.

Next Steps for the Stonewall Project

Extensive sediment sampling program is now complete and the next step of exploration will be carried out by geophysical methods. A detailed gravity survey may be conducted. Once the results of the sediment sampling survey and potentially, a gravity survey are integrated and analysed, drill sites will be selected for detailed subsurface investigation of the project.

At present, the exact depth and composition of the sediments in the basin are unknown. Macarthur Mineral's geological team expects sediments to be at least approximately 92 meters (300 feet) deep. A stock watering well located approximately 400 meters (a quarter mile) to the south of the claim block was drilled to a depth of approximately 92 meters (300 feet).

It is also expected, that potential aquifers similar in composition and thickness to the upper and lower ash aquifers in the nearby Clayton Valley will be encountered at depth. The ash aquifers in the Clayton Valley are thought to have been deposited by continental scale volcanic eruptions from calderas located 150 kilometers to the West (90 miles) and 790 kilometers North West (475 miles) of the Stonewall Project area. Ash fall from these volcanoes was deposited in the nearby Clayton Valley 52 kilometers to the North West (31 miles) and most likely also in the basins of the Lida Valley, where the Stonewall Project is located. The Stonewall Caldera (located at the prospect), may have also contributed similar ash fall sediments to both Clayton Valley and in particular to the Stonewall Caldera moat feature. The ash aquifers are both a host for and a possible source for lithium brines in the Clayton Valley.

ASX IPO OF MACARTHUR AUSTRALIA LIMITED UPDATE

The Company also provides an update that it has extended the Australian Securities Exchange ("ASX") Initial Public Offering ("IPO") of Macarthur Australia Limited ("Macarthur Australia") to issue between 25 and 50 million shares at A\$0.20 to raise between A\$5 – 10 million ("Offer") to close on 30 June 2017 with an expected date for quotation on 12 July 2017.

Macarthur Australia has been meeting with potential cornerstone investors.

A copy of the prospectus and first, second and third supplementary prospectuses and application form is available to qualified investors at www.macarthuraustralia.com.

QUALIFIED PERSONS

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 is intended to be listed on the ASX, 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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Caution Regarding the IPO and Forward Looking Statements

All offers of shares in regards to the IPO of Macarthur Australia Limited are made pursuant to the Prospectus dated 20 March 2017, the First Supplementary Prospectus dated 28 April 2017, the Second Supplementary Prospectus dated 11 May 2017 and the Third Supplementary Prospectus dated 19 May 2017 prepared in accordance with the Australian Corporations Act 2001 (Cth) and lodged with the Australian Securities and Investments Commission (ASIC). You should consider the Prospectus and the Supplementary Prospectuses in deciding whether to acquire the shares. Anyone who wishes to acquire shares as part of the IPO will only be able to do so by completing an application form which will be in or accompany the Prospectus and the Supplementary Prospectuses.

Certain of the statements made and information contained in this press release may constitute forward-looking information and forward-looking statements (collectively, "forward-looking statements") within the meaning of applicable securities laws. The forward-looking statements in this press release reflect the current expectations, assumptions or beliefs of the Company based upon information currently available to the Company. With respect to forward-looking statements contained in this press release, assumptions have been made regarding, among other things, the timely receipt of required approvals, the reliability of information, including historical mineral resource or mineral reserve estimates, prepared and/or published by third parties that are referenced in this press release or was otherwise relied upon by the Company in preparing this press release. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and no assurance can be given that these expectations will prove to be correct as actual results or developments may differ materially from those projected in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include fluctuations in exchange rates and certain commodity prices, uncertainties related to mineral title in the project, unforeseen technology changes that results in a reduction in iron ore demand or substitution by other metals or materials, the discovery of new large low cost deposits of iron ore, uncertainty in successfully returning the project into full operation, and the general level of global economic activity. Readers are cautioned not to place undue reliance on forward-looking statements due to the inherent uncertainty thereof. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. The forward-looking statements contained in this press release are made as of the date of this press release and except as may otherwise be required pursuant to applicable laws, the Company does not assume any obligation to update or revise these forward-looking statements, whether as a result of new information, future events or otherwise.

Figure 1 – Stonewall Project Sampling Program

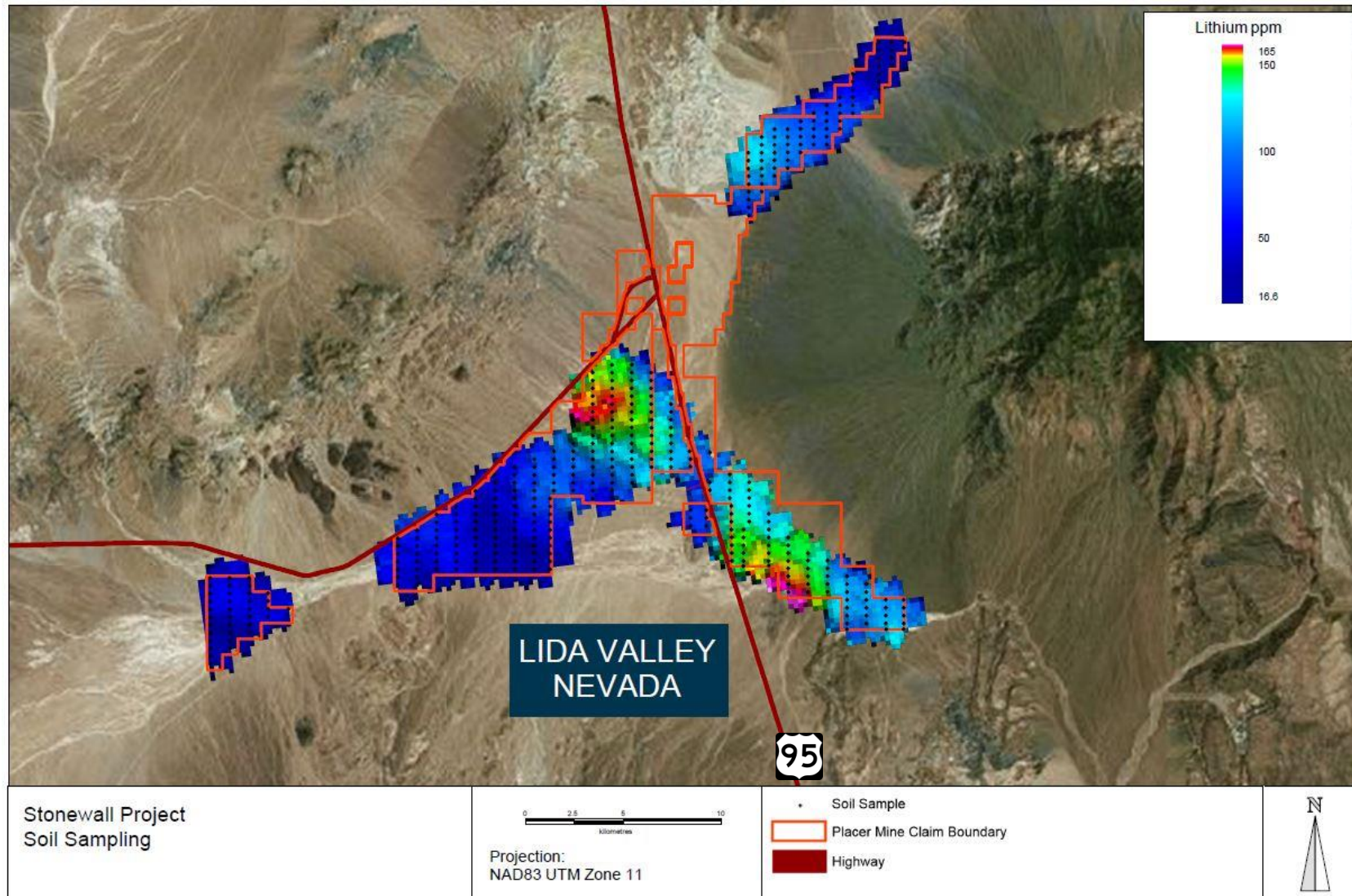


Figure 2 - Strategic Location of the Stonewall Project

