

NEWS RELEASE
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For Immediate Dissemination

MACARTHUR MINERALS AND VENTUREX ENTER INTO MEMORANDUM OF UNDERSTANDING AND RESULTS OF HELIBORNE RECONNAISSANCE

Macarthur Minerals Limited (TSX-V: MMS) (the “Company” or “Macarthur Minerals”) is pleased to announce that:

- it has entered into a Memorandum of Understanding (“MOU”) with Venturex Resources Limited (“VXR”) to enter into a Farm-in and Joint Venture Agreement (“FJVA”) for rights to lithium on VXR’s Sulphur Springs Project (“Sulphur Springs”), in the Pilbara region of Western Australia, which is contiguous with some of the Company’s Exploration Licence Applications.
- if pegmatite-hosted lithium mineralisation is identified at Sulphur Springs, it will allow for exploration and drilling for lithium to be fast tracked on that acreage, as the majority of the Sulphur Springs acreage comprises granted Mining Leases.
- assay results from the initial heliborne reconnaissance sampling of pegmatites is encouraging and confirms the presence of moderately to strongly fractionated rare element pegmatites within three of the Company’s Exploration Licence Applications. These results are positive, support the Company’s exploration targeting model, and justify ongoing assessment of the project tenements.

MEMORANDUM OF UNDERSTANDING WITH VENTUREX RESOURCES LIMITED

The Company (through its 100% owned subsidiary Macarthur Lithium Pty Ltd) and VXR (through its 100% owned subsidiary Venturex Sulphur Springs Pty Ltd) have entered into a MOU that will serve as a framework for entering into a FJVA for exploring for lithium at Sulphur Springs for further development.

The key terms of the MOU are:

- the Company and VXR will negotiate and enter into a FJVA for lithium rights on the Sulphur Springs acreage within 3 months.
- entry into the FJVA is conditional upon the Company conducting due diligence within two months to confirm that Sulphur Springs is prospective for lithium.
- the Company will earn into 51% of the rights for lithium on Sulphur Springs by paying expenditure over a period of time, thereafter the FJVA will be a contributing joint venture 51% Macarthur and 49% VXR.
- the amount of the Company’s expenditure to earn 51% is to be negotiated following completion of due diligence by the Company.
- the Company will manage the FJVA and will be paid a project management fee upon the forming of a contributing joint venture.

The FJVA is subject to regulatory and TSX-V approval, if required.

Sulphur Springs

Sulphur Springs covers approximately 108 square kilometres (26,687 acres) of Mining Leases, an Exploration Licence application and Miscellaneous Licenses for haul road access into the project area. Sulphur Springs covers a northeast-southwest trending faulted geological contact between mafic rocks and folded sediments where the Archean greenstones and volcanoclastic rocks are folded around the intrusive Strelley Granite batholith. The acreage covers an area of potential host rock sequences ('greenstone belts') for Lithium-Caesium-Tantalum ("LCT") class of pegmatites and is located within 5–10km of a monzogranite intrusion (Strelley batholith), which may be the magmatic source for LCT pegmatites.

The Sulphur Springs acreage is adjacent to Macarthur's exploration licence applications E45/4735, E45/4732 and E45/4779 (see Figure 1). The majority of the acreage is comprised of granted Mining Leases M45/653, M45/494, M45/587 and M45/1001, which will allow for drilling and exploration activities for lithium to be fast-tracked. VXR has conducted reverse circulation (RC) drilling for zinc-copper across the Sulphur Springs acreage, which has generated a geochemical database and the opportunity to resample existing drill spoil and RC drill chips for lithium or lithium pathfinder elements.

Many of Macarthur's Exploration Licence Applications and VXR's Sulphur Springs acreage is adjacent to acreage of Australian iron ore producer, Atlas Iron Limited (ASX: AGO) ("Atlas"). Atlas' Managing Director, David Flanagan, speaking to CNBC at the Resources' Rising Stars Conference in May 2016, said: "It turns out we've got a lot of tenements near companies with high-value lithium projects. It also turns out that some of that lithium also appears on our grounds,"¹ Atlas announced in its May 2016 Investor Presentation that it held "prospective tenure in zones of known world-class lithium-tantalum deposits"² in the Pilbara region of Western Australia.

ASSAY RESULTS FROM INITIAL HELIBORNE RECONNAISSANCE

As previously announced, the Company has completed its initial heliborne reconnaissance across a portion of its acreage in the Pilbara region of Western Australia. Assay results from the initial heliborne reconnaissance sampling of pegmatites located within three of the Company's Exploration Licence Applications (E45/4702, E45/4711 and E45/4748) are encouraging.

The low K/Rb ratios (9 to 98) from whole rock assays confirms that some of the pegmatites sampled are moderately to strongly fractionated, indicating the potential for locating lithium mineralised pegmatites. (K/Rb is the ratio of potassium to rubidium, which is one of the indices used to indicate the fractionation state of pegmatites. Low ratios indicate greater fractionation – LCT type pegmatites are strongly to extremely fractionated).

The assays from four samples (PLR06_1–4) of a strongly fractionated pegmatite sampled within E45/4702 confirm the presence of up to 2,000ppm Li₂O within lithium muscovite and the samples contain elevated Cs (up to 1248ppm) Nb (up to 244ppm), Ta (up to 700ppm), Sn (up to 477ppm), Ga (up to 349ppm) and Be (up to 18ppm). Another sample (PLR019) from a pegmatite within E70/4702 returned 235ppm Be. A sample (PLR033) of moderately fractionated quartz-feldspar-muscovite pegmatite from E45/4711 returned a maximum result of 239ppm Li₂O and a moderately fractionated pegmatitic granite (PLR039) located with E45/4748 contains weakly elevated Li₂O (112ppm). These results are encouraging and warrant further assessment.

Given the short nature of the initial reconnaissance trip and the large acreage holding, the Company is confident in locating lithium-bearing pegmatites and is currently working through the exploration strategy

¹ CNBC, Nyshka Chandran May 25, 2016 *Australian lithium miners in focus on rising global demand for electric vehicles* <http://www.cnbc.com/2016/05/25/australian-lithium-miners-in-focus-on-rising-global-demand-for-electric-vehicles.html>

² Atlas Iron Limited's May 2016 Investor Presentation, <http://www.atlasiron.com.au/irm/PDF/5868/May2016InvestorPresentation>

designed to locate economic pegmatite deposits in the company's tenement portfolio.

Reconnaissance, including sampling, was only conducted on seven of the Company's 16 Exploration License Applications in the Pilbara and did not include all areas contained in those applications (figure 2). In essence, the initial reconnaissance program only assessed the lithium potential of a fraction of the Company's acreage package.

Lithium Strategy

The Company's strategy is to apply for prospective acreage proximate to known lithium occurrences or where there are either, producing lithium mines or lithium mines under development. Consistent with this strategy, the Company has applied for acreage in the Pilbara region where Pilbara Minerals Limited (ASX: PLS) has its Pilgangoora lithium-tantalum project for which it recently raised A\$100 million for further development³ and Dakota Minerals Limited (ASX: DKO) has its Lynas Find Project for which it recently raised A\$12.3 million to conduct further exploration⁴. The Company has also applied for acreage in the Ravensthorpe region where Galaxy Resources Limited (ASX: GXY) has commenced production for spodumene and tantalum concentrate at its Mt Cattlin project.

Macarthur is currently evaluating its acreage and commencing discussions with various third parties concerning potential joint ventures to maximise the exploration effort throughout 2016.

The Company has undertaken an extensive review of geological datasets for available acreage prospective for lithium in Western Australia based on geological attributes referred to above. That review indicates that available acreage in Western Australia having those geological attributes is becoming scarce.

Acreage Package

The Company now holds 20 Exploration Licence Applications and prospective interest in rights to lithium on Sulphur Springs covering a total area of 1,545 square kilometres (381,778 acres) in the Pilbara Craton, and in the Ravensthorpe and the Edah regions of the Yilgarn Craton.

ABOUT VENTUREX RESOURCES LIMITED

VXR is a resource company listed on the Australian Securities Exchange (ASX: VXR) focused on becoming a significant copper-zinc producer through the development of its two advanced copper zinc projects; Sulphur Springs Project and the Whim Creek Project located in the East Pilbara region of Western Australia.

ABOUT CSA GLOBAL

As previously announced on February 15, 2016, the Company appointed CSA Global Pty Ltd ("CSA Global") as independent global lithium and mining exploration experts to assist it in project development.

CSA Global is a leading geological, mining and management consulting company whose staff includes geologists, mining engineers, project managers, data management professionals, and technical personnel. CSA Global has been operating from Perth, Western Australia since 1986. It is an independent company, with origins dating back to 1984 as part of the CSA Group founded in Ireland. CSA Global now has offices in the UK, Indonesia, Johannesburg, Vancouver, Darwin, and Brisbane. CSA has a high level of expertise in most mineral commodities gained from over twenty years' experience within the exploration and mining industry at an international level. It has experience in all stages of the mining cycle from project generation to production. For further information regarding CSA Global, please refer to the company website at www.csaglobal.com.

Dr Andrew Scogings MSc, PhD, MAIG, MAusIMM, has more than 30 years of experience in industrial minerals exploration, geology, mining, product development, and marketing. During his time with CSA, he

³ Pilbara Minerals Limited's ASX announcement dated April 7, 2016, <http://www.asx.com.au/asxpdf/20160407/pdf/436cb822nflw3w.pdf>

⁴ Dakota Minerals Limited's ASX announcement dated May 2, 2016, <http://www.asx.com.au/asx/statistics/displayAnnouncement.do?display=pdf&idsId=01736822>

has undertaken project management and technical advice for a diverse range of industrial minerals exploration and mining projects including lithium, graphite, chromite, potash, mineral sands, silica, and REE in Australia, Africa, Greenland, Indonesia and Norway. Andrew is a regular contributor to Industrial Minerals Magazine (UK), SME Mining Engineering (USA) and Geobulletin (RSA) having published several papers on the requirements of JORC 2012 Clause 49, highlighting the need to report industrial minerals resources according to market specifications. Andrew was lead author for Industrial Minerals Research's recently published *'Natural Graphite Report- Strategic outlook to 2020'*. He is a member of the AIG and AusIMM and is a Registered Professional Geoscientist (RP Geo.) specializing in industrial minerals.

Mr Ralph Porter MSc, BSc (Geology), MAIG, MSEG is a geologist with over 35 years' of mineral exploration experience. He is highly experienced in target generation, project evaluation and exploration program implementation for gold, base metals, tantalum, nickel and PGM's. He has a strong understanding of many deposit styles with particular strength in orogenic gold, epithermal gold and porphyry copper-gold systems. He is credited with the discovery of the Pajingo epithermal gold deposits, North Queensland, Australia and was involved in the early exploration and discovery phases of Thunder Bay North PGM-Ni-Cu deposit, Ontario, Canada. Ralph was Special Projects Manager for Sons of Gwalia in Western Australia for nearly 10 years, which included responsibility for tantalum exploration (hosted within pegmatites and other deposit styles) for 5 years.

ABOUT PROFESSOR KEN COLLERSON

Professor Collerson a member of the Company's Lithium Advisory Board, who has more than 40 years' experience as a geoscientist. He will provide a significant depth of knowledge and breadth of lithium experience to the Company that is unsurpassed.

Professor Collerson is a world leading authority on the geology and geochemistry of strategic metal mineralization including lithium. He has significant experience with LCT (lithium-caesium-tantalum) spodumene-bearing pegmatites and has worked extensively in the Pilbara region where the Company's acreage is located in Western Australia. Most recently Ken worked on a hard rock lithium project in the Jarkvissle area of Sweden. Professor Collerson believes that the Company's acreage in the Pilbara region of Western Australia is highly prospective for lithium.

Professor Collerson has a PhD from the University of Adelaide and is an internationally recognized thought leader in the geosciences. He has published extensively and his work is highly cited.

QUALIFIED PERSONS

Mr Porter, a member of the Australian Institute of Geoscientists, is a full-time employee of CSA Global and is a Qualified Person as defined in National Instrument 43-101. Mr Porter has reviewed and approved the technical information contained in this news release.

Dr Scogings, a member of the Australian Institute of Geoscientists and Registered Professional Geoscientist (Industrial Minerals), is a full-time employee of CSA Global and is a Qualified Person as defined in National Instrument 43-101. Dr Scogings has reviewed and approved the technical information contained in this news release.

Professor Kenneth D. Collerson is a Fellow of the AusIMM, is a member of the Lithium Advisory Board of Macarthur and is a Qualified Person as defined in National Instrument 43-101. Professor Collerson 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 identifying and developing high grade lithium and counter cyclical investments that complement Macarthur's capabilities.

Figure 1 – Location of Sulphur Springs

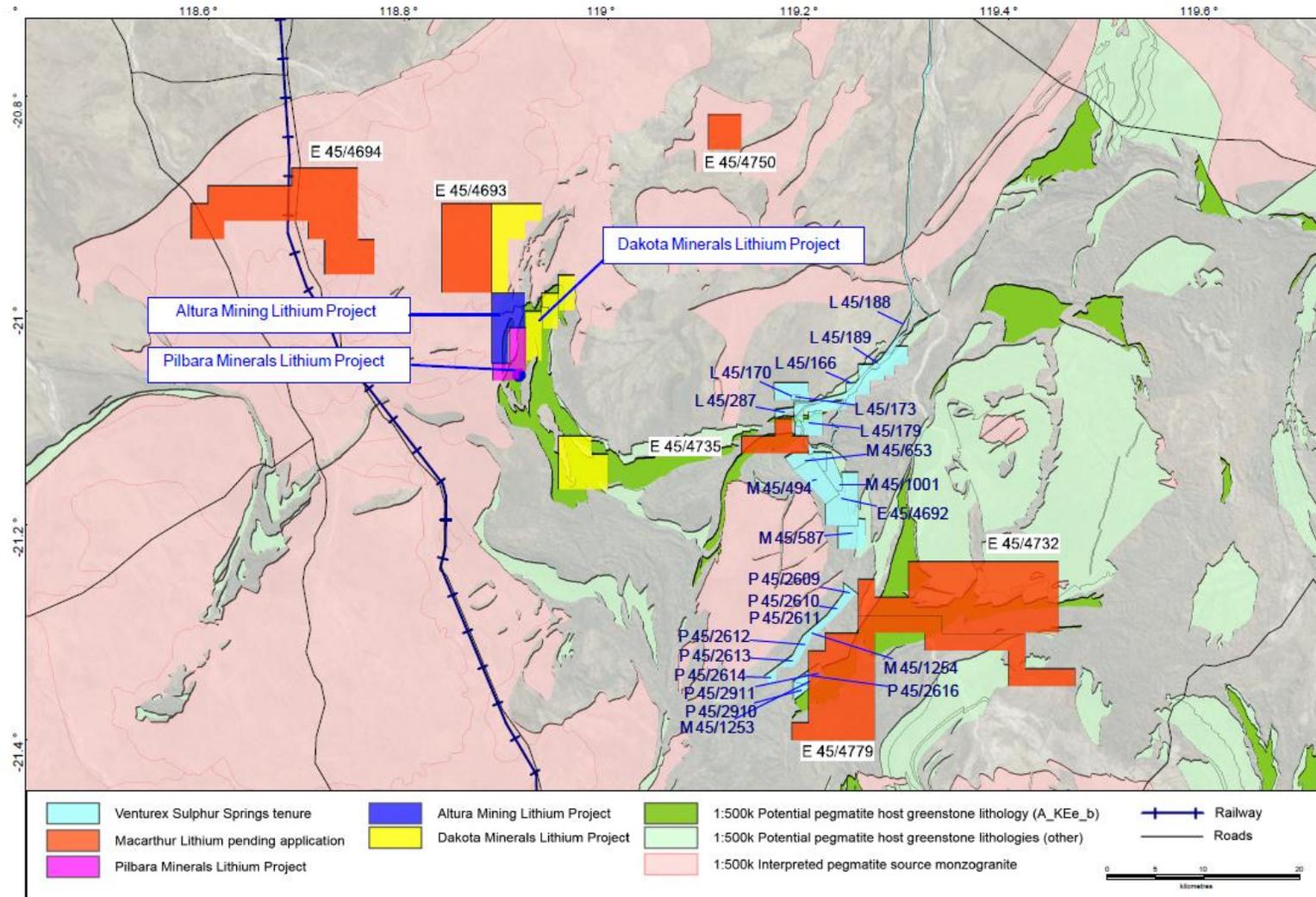
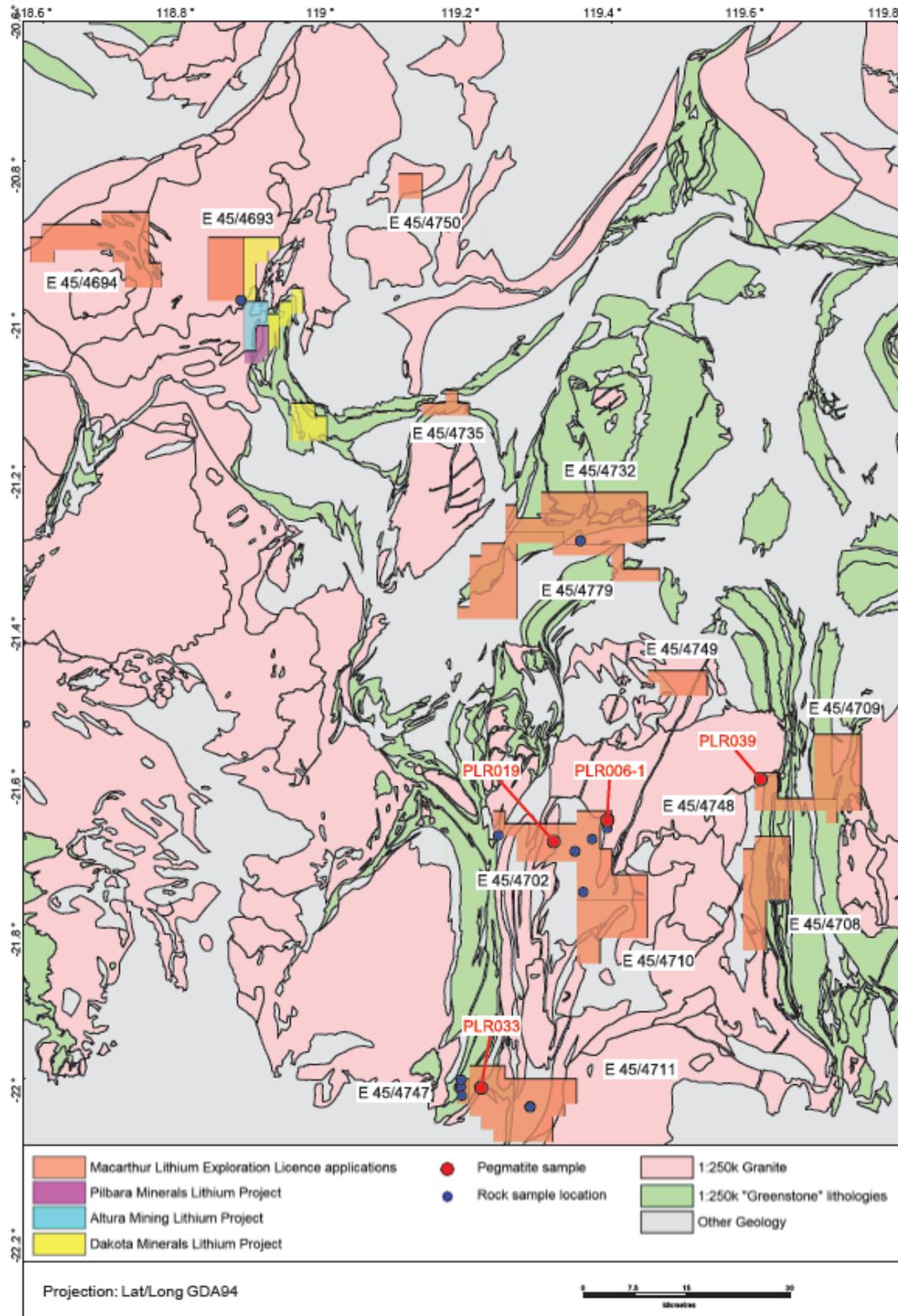


Figure 2 – Location of rock samples taken from across the Company’s Exploration Licence Applications in the Pilbara, Western Australia.



On behalf of the Board of Directors,
MACARTHUR MINERALS LIMITED

"Cameron McCall"
Cameron McCall, Chairman

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