



QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 31 MARCH 2012

Lithex Resources Limited (ASX: LTX) is an Australian exploration company focused on developing its tin, tantalum, lithium & rare earth metal projects in the East Pilbara & Gascoyne regions of Western Australia.

As at release date of
27 April 2012:

Issued Shares: 44.08M

Options: 14.73M @
\$0.20 – \$0.30C

Share Price: \$0.08

Market Cap: \$3.52M

Cash: \$2.18M

Debt: Nil

For further information
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Summary & Highlights

- > **Maiden Inferred Mineral Resource at Moolyella completed**
- > **Initial Auger Program completed across tailing dumps, stockpiles and unmined alluvial leads**
- > **RC Drilling well under way at Moolyella (completed post Quarter)**
- > **Pegmatites identified at the Pilgangoora Project**
- > **Potential for pegmatite hosted Heavy Rare Earth Mineralisation at Shaw River**
- > **Application made for an additional exploration licence at the Arthur River Project**
- > **Appointment of an experienced Exploration Manager to the Lithex team**

Project Overview

Lithex's projects are located in the East Pilbara & Gascoyne regions of Western Australia and total in excess of 780km² in area. The East Pilbara projects are well placed with the majority of areas accessible via sealed roads and within close proximity to regional townships of Marble Bar & Port Hedland. Arthur River is accessible via road north east of Gascoyne Junction - see **Figure 1**



Figure 1 – Project Location

Moolyella Project

The Moolyella Project is located approximately 23 Kilometers east-north-east of the township of Marble Bar and is accessible by sealed road.

The Moolyella Project consists of granted Exploration Licences E45/3424 and E45/3172 (90%) along with Mining Lease Application M45/1081 (90%), Exploration Licence Application E45/3873 (100%) and Prospecting Licences P45/2813, P45/2814 & P45/2815 (100%).

Maiden Inferred Mineral Resource

During the quarter Lithex announced that it had completed the first stage of its Auger Drill Program and completed a volumetric survey of the large tailing stockpile areas.

This drill program and volumetric survey resulted in the Company announcing a Maiden Inferred Mineral Resource Estimate of 1.9 million tonnes for Moolyella tailings – see **Table 1**.

Furthermore, preliminary metallurgical test work on the tailing material conducted by Nagrom indicated recoveries of up to 84.7% for tin (Sn) and up to 66.3% for tantalum (Ta_2O_5).

	Inferred Resources		
	Tonnes (million)	Sn (ppm)	Ta (ppm)
Moolyella Tailings	1.9	160	20
Excluding Tailings D and H	1.2	190	22

Table 1 – Moolyella Tailings - Mineral Resource Estimate, February 2012

Please refer to the announcement made on 1 March 2012 for further information.

Pegmatite Gully & Eluvial Gully RC Drill Program

During the quarter the Company announced that the maiden drill program was well underway at Pegmatite Gully & Eluvial Gully. The RC drill program at Pegmatite Gully was completed, with approximately 700 meters drilled and testing of the broad eluvial target at Eluvial Gully commenced shortly after the Christmas – New Year break, with initial results reported subsequent to the end of the Quarter.

Lithium Rock Chip Results

The company was pleased to announce on 17 January 2012 the results of the Lithium rock chop program with up to 1.82% Li_2O present in samples. The results confirmed the presence of highly anomalous lithium – see **Table 2**.

Sample	MGA94 Easting (m)	MGA94 Northing (m)	Li ₂ O (%)
3004563	800563	7659001	0.15
3004573	800640	7658902	0.49
3004576	800222	7658754	0.10
3004581	800642	7658760	1.82
3004586	800678	7659249	0.16
3004682	801276	7659200	0.63
35	801700	7659630	0.17
46*	800580	7659125	1.06
47	800424	7658746	0.12
51	800465	7659101	0.10
52	800681	7659100	0.14

*Previously Reported as Li

Results reported for >0.1% Li₂O

Table 2 – Summary of all assay results for rock chips returning above 0.1% Li₂O

Pilgangoora Project

The Pilgangoora Project consists of exploration licences E45/2375* (90%) and E45/3373 (90%); together with prospecting licence P45/2599 (100%). It is located approximately 120 Kilometers south-east of Port Hedland via the Great Northern Highway.

The Pilgangoora area is a highly mineralised region of the Pilbara with a strong history of commercial tantalum production, and lithium bearing (spodumene) feldspar pegmatites.

Lithex's tenements are in close proximity to Altura Mining's (ASX:AJM) recently updated lithium resource of 13.29M tonnes at 1.21% Li₂O. (See ASX: 21 November, 2011)

During the quarter Lithex commenced ground reconnaissance exploration activities, targeting pegmatite hosted deposits of tin, tantalum and lithium. Several pegmatite bodies have been located in the field and will be the focus of initial rock-chip sampling and mapping activities - see **Figure 2**.

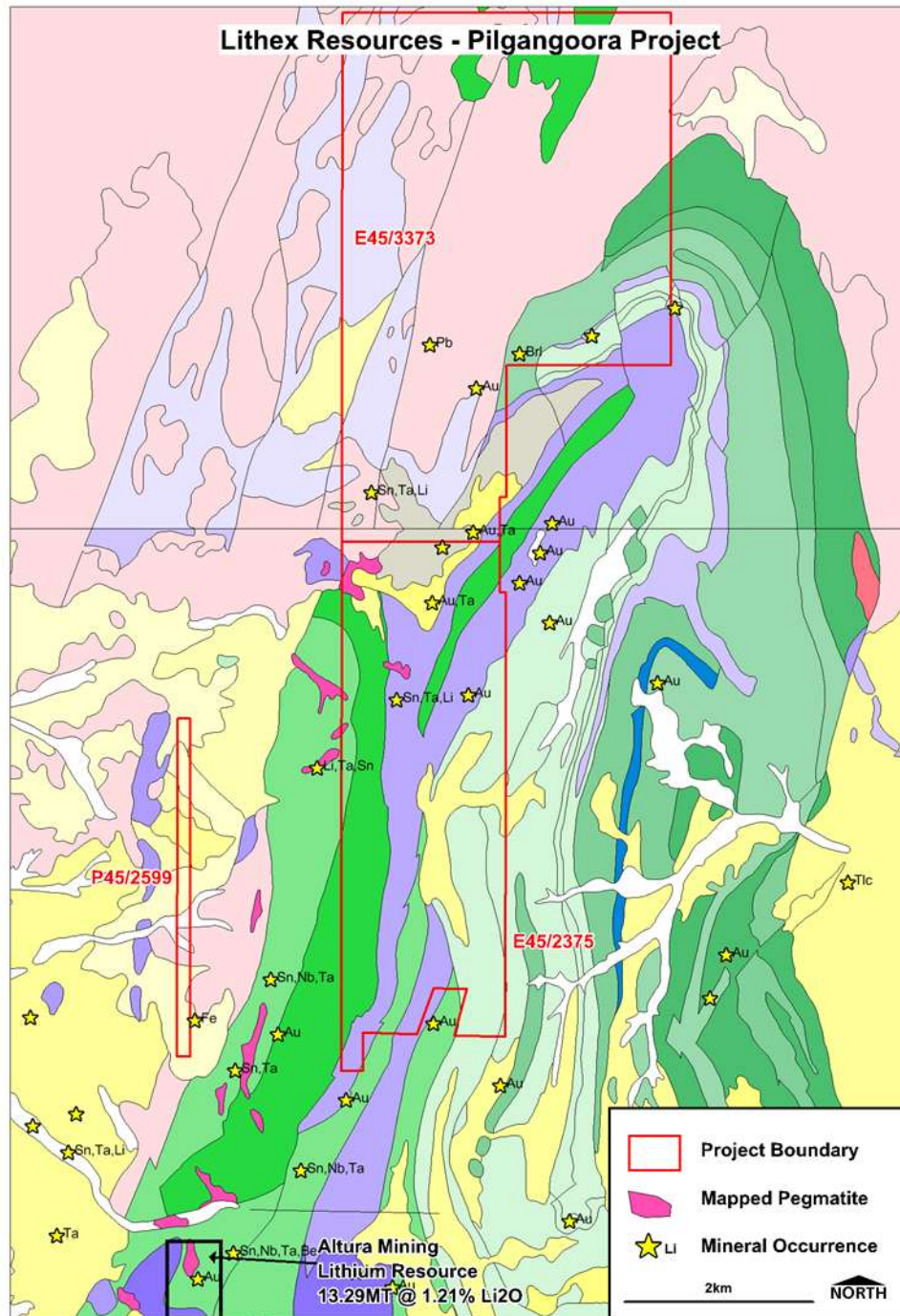


Figure 2 – Location of the Lithex Pilgangoora Project

*E45/2375: Lithex has a 90% interest in the tin, tantalum & lithium rights for this tenement.

Shaw River Project

The Shaw River Project consists of Exploration Licence E45/3354 (90%) and E45/3439 (90%) and is located approximately 50 kilometers south west of Marble Bar. The Shaw River Project has historically produced tin and tantalum concentrates from alluvial sources. Lithex is targeting the hard rock sources of these alluvial deposits, in addition to the remaining un-mined alluvial deposits previously identified (Non JORC compliant).

In addition, Lithex notes the potential for pegmatite hosted heavy rare earth mineralisation (HREE) in the Shaw River area. Australia's first rare earth mine was located on the project, which was worked in 1913 and 1930 and yielded about 2 tonnes of gadolinite (Yttrium iron beryllium silicate). An analysis of this gadolinite yielded 45.78% of yttrium trioxide (Y_2O_3) and 4.81% of other rare earth oxides (REO) - see **Figure 3** (Source: Geoscience Australia)

During the quarter Lithex progressed with its exploration activities at the Shaw River Project including continuing data compilation as well as further radiometric evaluation and on-ground activities, with the focus on Heavy Rare Earth Elements (HREE).

Lithex has commissioned HyVista Corporation to conduct an Airborne Hyperspectral survey across the entire Shaw River group of tenements with the aim of identifying pegmatite rocks, which are known to host heavy rare earth, tin, tantalum and lithium mineralisation in the area, with results expected in May.

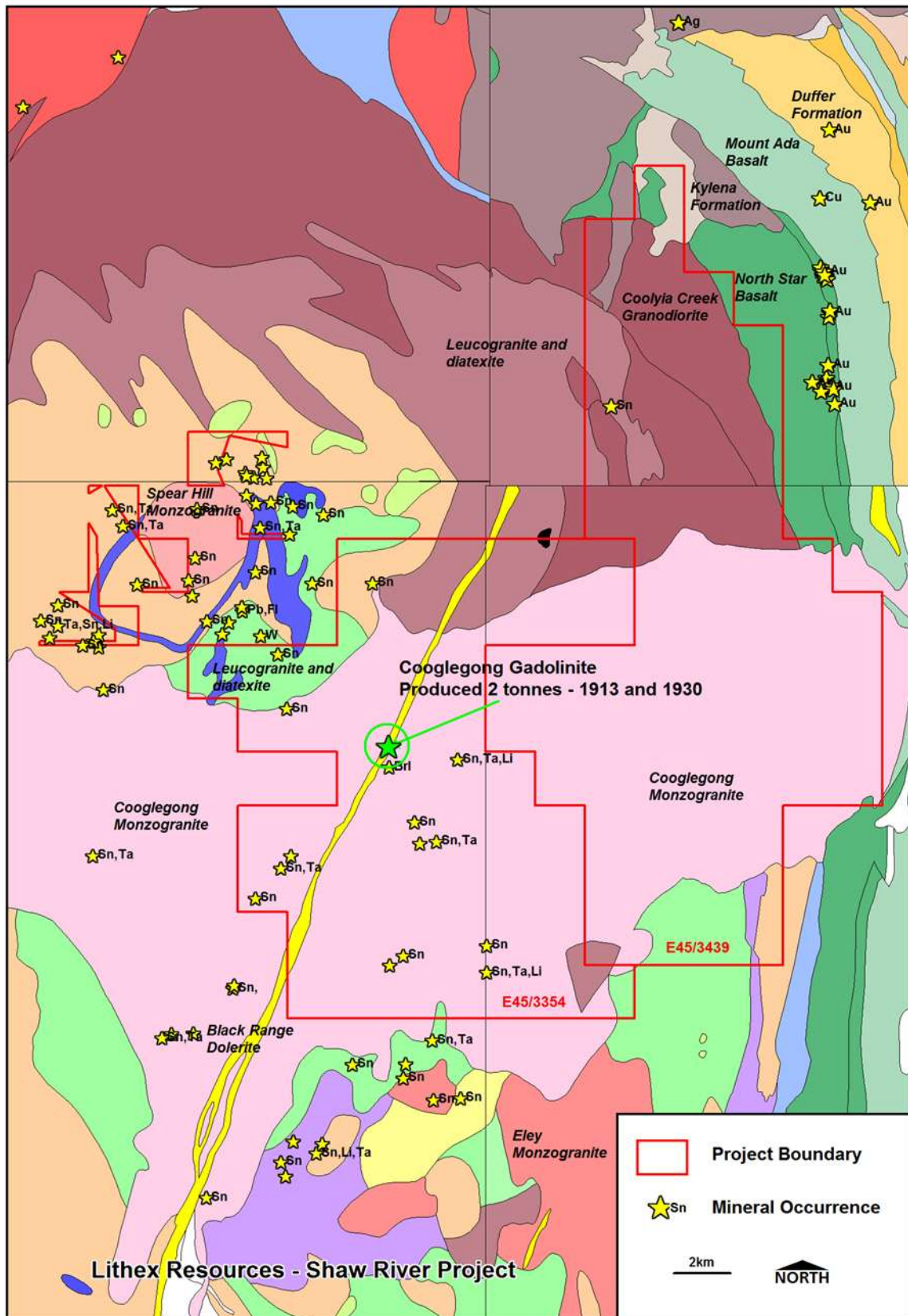


Figure 3 – Location of the Lithex Shaw River Project

Arthur River Project

The Arthur River Project is located approximately 250 kilometers east of Carnarvon in the Gascoyne Region and consists of granted Exploration Licence E09/1066 (100%) and E09/1067 (100%) as well as Exploration Licence Application E09/1963 (100%).

During the quarter the company applied for an additional tenement, exploration licence number E09/1963, adjacent to its existing granted exploration licence, number E09/1066. This tenement is considered to be prospective for tin, tantalum and other rare metals associated with lepidolite, molybdenum & tungsten associated with the granites and calcrete hosted uranium deposits – see **Figure 4**.

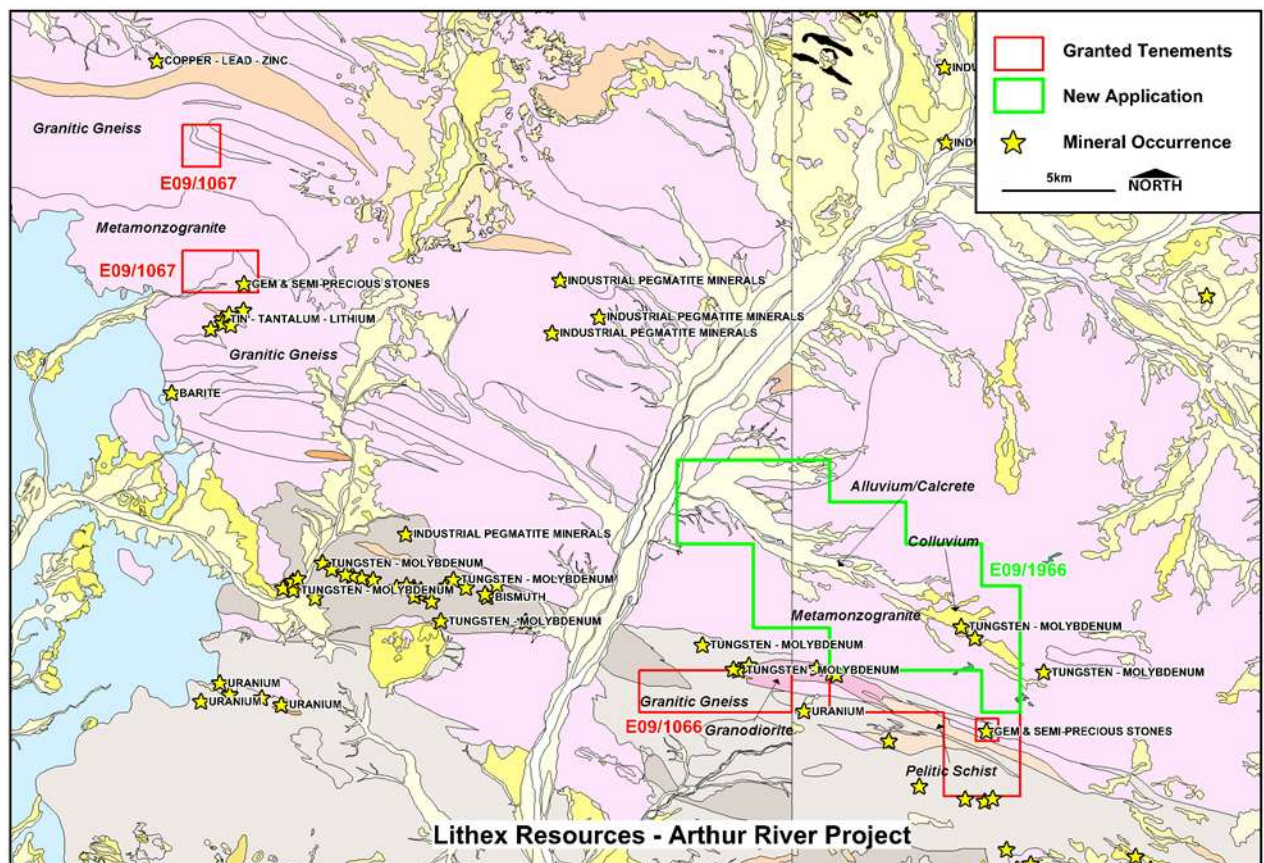


Figure 4 – Location of the Lithex Arthur River Project

Exploration Manager

During the quarter the Company was pleased to announce the appointment of a full time Exploration Manager, Mr. Brendan Borg. Brendan holds a Bachelor of Science in Geology and a Master of Science in Hydrogeology and has over 15 years' experience working in exploration, operations, environmental and project development roles.

ENDS

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Forward Looking Statement

This report may contain forward looking statements that are subject to risk factors which are based on Lithex Resources' expectations relating to future events. Forward-looking statements are subject to risks, uncertainties and other factors, many of which are outside the control of Lithex Resources, which could cause actual results to differ materially from such statements. Lithex Resources makes no undertaking to update or revise the forward-looking statements made in this report to reflect events or circumstances after the date of this release.

Competent Persons Statement

Information in this report relating to Exploration Results is based on data compiled by Mr Brendan Borg, who is a Member of the Australasian Institute of Mining and Metallurgy, and who is a full-time employee of the Company. Mr Borg has sufficient relevant experience to qualify as a Competent Person as defined by the 2004 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Borg consents to the inclusion of the data in the form and context in which it appears.

Information in this report that relating to Mineral Resource Estimation is based on work completed by Mr Jonathan Abbott, who is a full-time employee of MPR Geological Consultants Pty. Ltd., and a Member of the Australian Institute of Geoscientists. Mr Abbott has not reviewed the quality or validity of the sampling data or potential for economic extraction of the resources. Lithex personnel are responsible for those aspects of the Resource Estimates. Mr Abbott has sufficient relevant experience to qualify as a Competent Person as defined by the 2004 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Abbott consents to the inclusion of the data in the form and context in which it appears.

The information in this report relating to exploration results and potential for economic extraction of the resources was compiled by Mr Malcolm Carson from exploration results supplied to Lithex Resources Ltd. Malcolm Carson has sufficient experience that is relevant to the style of mineralisation, the types of deposit under consideration and to the activity that he is undertaking and qualifies as a Competent Person as defined in the 2004 Edition of the Australasian Code for Reporting of Exploration Results ("JORC Code"). Mr Carson is a Member of the AusIMM and Director of Lithex Resources Ltd. Mr Carson consents to the inclusion in the report the matters based on the information in which it appears.