



# ASX ANNOUNCEMENT

ASX: CXO

14<sup>th</sup> December 2016

## **Core Acquires Large Granted Tenement Prospective for Lithium in Northern Arunta Pegmatite Province in NT**

### HIGHLIGHTS

- **Core has acquired 574km<sup>2</sup> granted tenure covering the central Barrow Creek Pegmatite Field in the NT**
- **Barrow Creek is an early-stage look-alike to Core's high grade discoveries at the Finniss Lithium Project with a long history of tin and tantalum production around Barrow Creek, similar to Core's Finniss Lithium Project (and Greenbushes)**
- **Lithium contents of the source granites for the Barrow Creek Pegmatite Field are comparable to those at Finniss**
- **Acquisition complements Core's surrounding 2,500km<sup>2</sup> of recently granted tenements in the Barrow Creek and Anningie Pegmatite Fields**
- **13 potential Tin Tantalum Pegmatite targets identified to date at Barrow Creek**
- **Barrow Creek has year round access for field work and is close to rail connection that links direct to Darwin Port**
- **Potential for Darwin to become central processing and transport hub for NT spodumene production**

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Core Exploration Ltd (ASX: CXO) ("Core" or the "Company") is pleased to announce that it has acquired a 100% interest in granted Exploration Licence 31058 comprising 574km<sup>2</sup> in the Barrow Creek Pegmatite Field in the NT, building on the Company's successful discovery of high grade spodumene pegmatites at the Finniss Lithium Project ("Finniss").

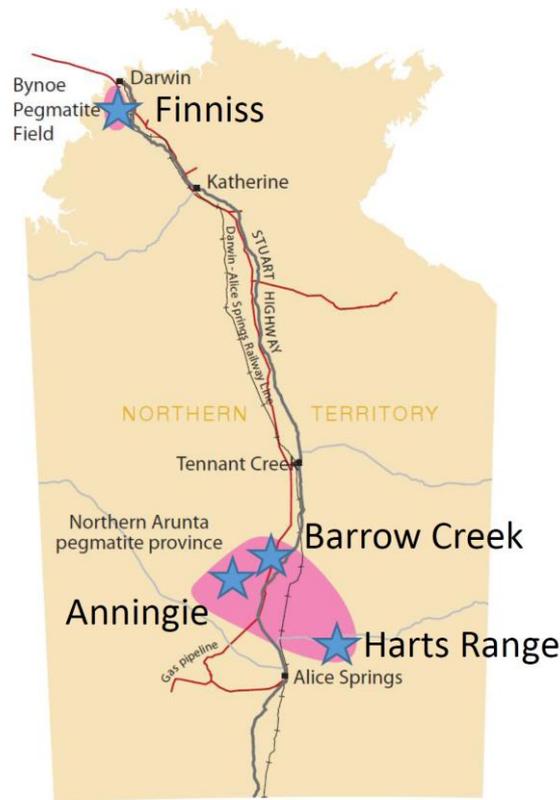


Figure 1. Tin-tantalum pegmatite provinces of the Northern Territory (from NTGS Report 16 – 2004)

As with Greenbushes in WA and Finniss in the Bynoe Pegmatite Field in the NT, the Barrow Creek Pegmatite Field has also had a long history of tin and tantalum mining prior to lithium mineralisation being recognised.

The pegmatites in the Barrow Creek Field are potentially enriched with lithium as evidenced by the presence of economic lithium mineral spodumene in the region, as well as highly elevated lithium in previous geoscientific sampling of source granites and pegmatites by the NTGS. The source granites at Barrow Creek are considered comparable to source granites related to the highly prospective Bynoe Pegmatite Field.

The recent grant of four EL’s (Exploration Licences) covering an additional 2,500km<sup>2</sup> (Figures 1 -3) in and around the Anningie and Barrow Creek Pegmatite Fields, along with this new acquisition at Barrow Creek and together with Core’s 100% interest in the Finniss Lithium Project gives Core a dominant position in the NT pegmatite fields and ensures Core is able to operate year round.

Very little previous exploration has been conducted for lithium at Barrow Creek.

Once the current focus on Phase 2 RC drilling is completed at Finniss, Core has the opportunity for active fieldwork at Barrow Creek Project in early 2017 until recommencement of drilling at Finniss in 2017.



### **Northern Arunta Pegmatite Province**

The major tin-tantalum (+lithium) pegmatite fields of the Northern Territory occur at the Bynoe Pegmatite Field and the northern margin of the Arunta Region (Figure 1).

The Northern Arunta pegmatite province occurs in well-defined clusters at the Barrow Creek and Anningie Pegmatite Fields (Figures 1-3).

At Barrow Creek, a large number of tin-tantalum-bearing pegmatites, prospective for lithium intrude the Palaeoproterozoic Bullion Schist within 30 km of Barrow Creek (Figures 2-3).

The pegmatites typically occur in linear swarms and range in size from a few metres long up to hundreds of metres long and tens of metres wide.

The first reported occurrence of alluvial tin mining from tin-bearing pegmatites in the Arunta Region was not until 1935, when shallow alluvial deposits were worked on leases southwest of Barrow Creek township at what was to become the Anningie Tin Field.

The source granite for the pegmatites is considered to be the lithium-rich, fractionated S-type Barrow Creek Suite, which occurs as apophyses throughout the Barrow Creek area (Figure 2).

NTGS and other geoscientific research highlights that the Barrow Creek Suite source granites have enriched lithium contents comparable with the highest lithium granites in the NT.

The lithium minerals spodumene, elbaite and lepidolite are also reported to occur in pegmatites within the region of the Anningie Tin Field.

Core's Managing Director Stephen Biggins commented :

“Core believes there is an excellent fit between the lithium potential of Barrow Creek Pegmatite Field, direct rail link to Darwin Port and Core's objectives to make Darwin and Core's Finniss Lithium Project near Darwin a central processing and global transport hub for NT lithium and spodumene production as forecast increasing lithium demand continues to grow.”

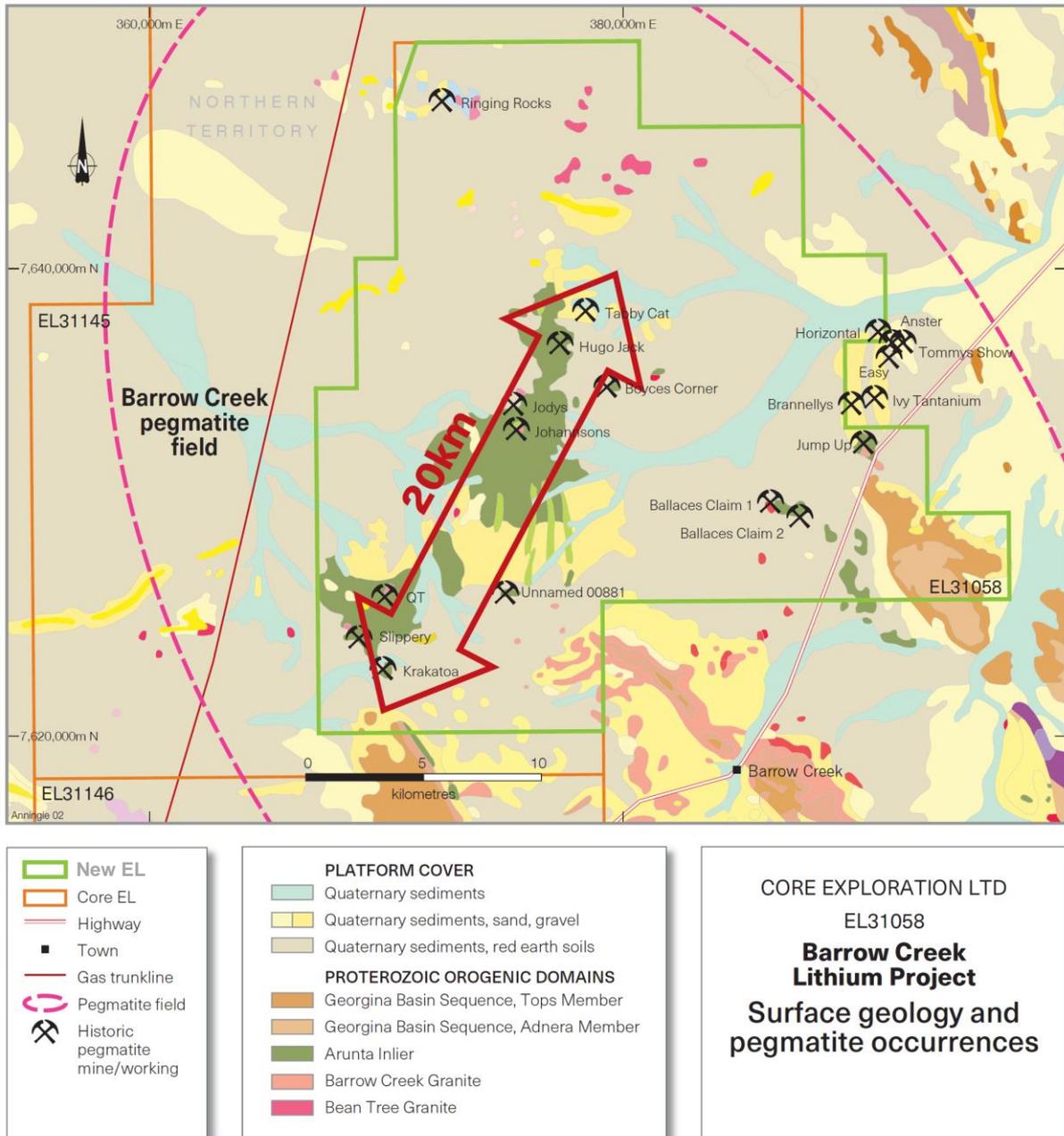


Figure 2. EL 31058 and Core's other tenements, Barrow Creek Pegmatite Field, NT

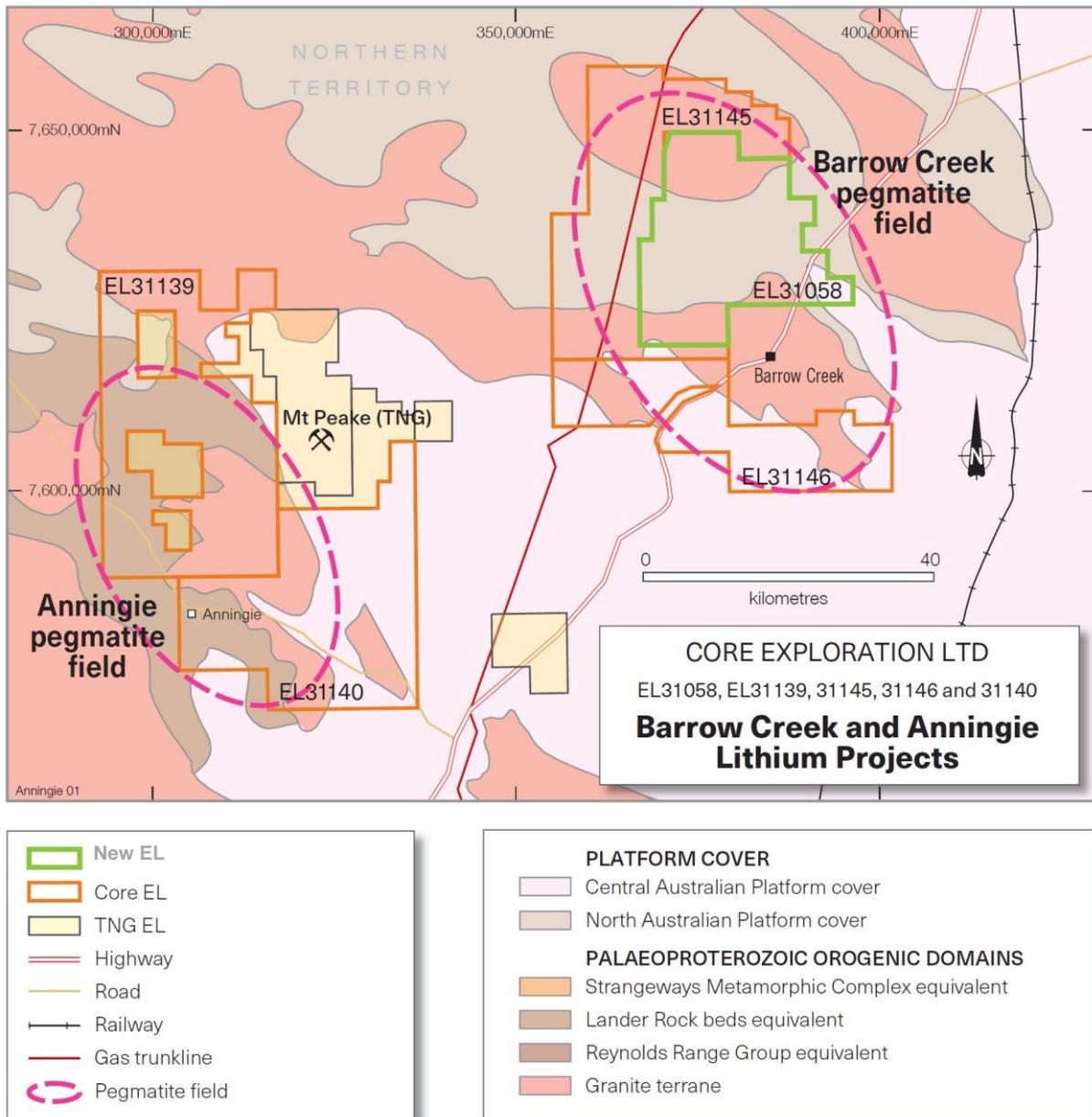


Figure 3. Core's tenements within the Anningie and Barrow Creek Pegmatite Fields, NT

### Terms of Acquisition

Core has agreed to purchase granted Exploration Licence 31058 from Excedo Exploration Pty Ltd.

At Completion of the Agreement, Excedo will transfer the rights to EL 31058 and all mining information to Core's 100%-owned subsidiary Lithium Developments Pty Ltd.

At Completion, Core will pay Excedo \$85,000 cash and issue 1,000,000 CXO Shares. The Shares will be in Escrow for 6-months.



For further information please contact:

Stephen Biggins  
Managing Director  
Core Exploration Ltd  
08 7324 2987  
[info@coreexploration.com.au](mailto:info@coreexploration.com.au)

*The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Stephen Biggins (BSc(Hons)Geol, MBA) as Managing Director of Core Exploration Ltd who is a member of the Australasian Institute of Mining and Metallurgy and is bound by and follows the Institute's codes and recommended practices. He has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Biggins consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*