



31 January 2017

Centralised Company Announcements Platform  
Australian Securities Exchange  
10<sup>th</sup> floor, 20 Bond Street  
Sydney NSW 2000

**QUARTERLY ACTIVITIES AND CASHFLOW REPORT 31 DECEMBER 2016**

Please find attached the Quarterly Activities and Appendix 5B Quarterly Cash Flow Reports for the Quarter ended 31 December 2016.

Yours faithfully



Stephen Biggins  
**Managing Director**





## ASX Release

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31<sup>st</sup> January 2017

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### Directors:

**Greg English**  
Non-Executive Chairman

**Stephen Biggins**  
Managing Director

**Heath Hellewell**  
Non-executive Director

**Issued Capital:**  
374,503,991 Ordinary Shares  
114,772,959 Quoted Options  
1,000,000 Unquoted Options  
6,960,000 Unquoted Performance Rights

**ASX Codes:** CXO, CXOOA

## QUARTERLY ACTIVITIES REPORT FOR THREE MONTHS ENDED 31 DECEMBER 2016

### Highlights

The Board of Core Exploration Ltd (“Core” or “Company”) is pleased to present its Quarterly activities report for the Period ended 31 December 2016.

High grade spodumene intersections in Core’s RC and diamond drilling programs during the reporting period at the Finniss Lithium Project (“Finniss”) in the Northern Territory have confirmed Finniss, as a major new discovery of high grade lithium.

With the granting and acquisition of 3 ELs at Finniss and 5 ELs at Barrow Creek, Core holds the largest lithium tenure position in the NT. Finniss includes the highest grade lithium drill intersections, the largest historic pegmatite mine and at least another 25 recorded pegmatite mines in the Northern Territory.

The discovery of high grade lithium at Finniss is very significant for Core given that the scale of some of the new pegmatites identified by Core are directly comparable to the scale of pegmatites hosting large lithium resources in Western Australia.

Core has commenced metallurgical test work to determine potential to produce commercial grade spodumene concentrates and is assessing potential for early development of mining at Finniss.

Core has a current cash position of approximately \$8.3 million to further its project objectives.

## Lithium Projects in the NT

Core has continued to expand and advance major discoveries on its strategic lithium projects in pegmatite provinces in the NT during the reporting period. The Company has a strong diversity of lithium projects with a range of exploration maturities.

The focus of Core's activity during the reporting period has been drilling at the Finniss Lithium Project near Darwin where high grade spodumene intersections in Core's maiden lithium drilling program have confirmed Finniss, as a major new discovery of high-grade lithium.

The highest lithium grade intersections ever drilled in the NT were made at the Grants Prospect drilled in Core's maiden drilling program during the quarter at Finniss.

The Finniss Lithium Project has substantial infrastructure advantages; being close to grid power, gas and rail and within easy trucking distance by sealed road to Darwin Port - Australia's nearest port to Asia.

### Finniss Lithium Project, NT (100% CXO owned)

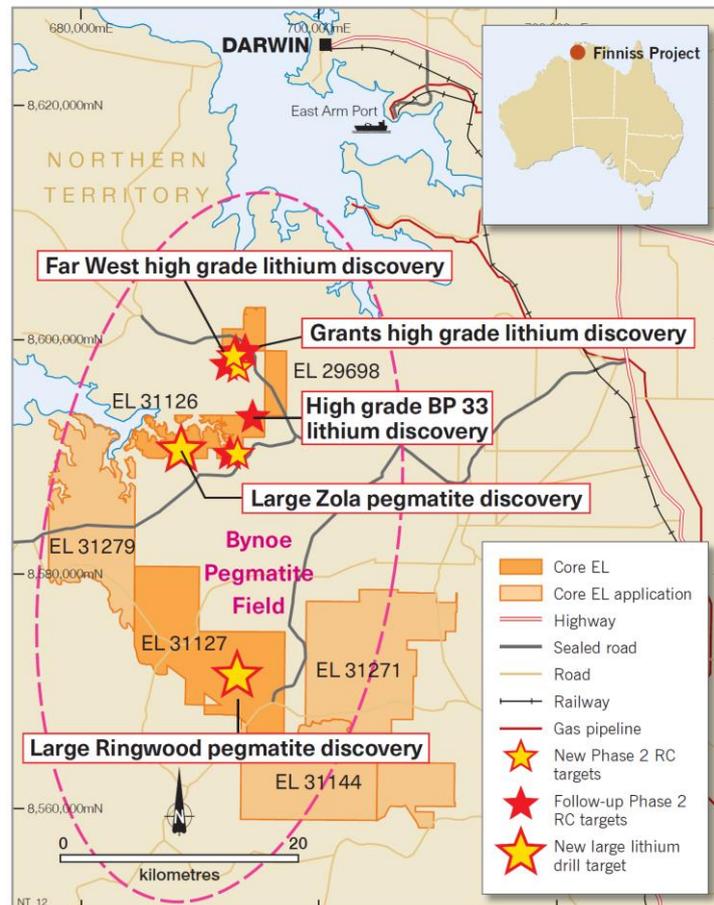


Figure 1. Drill target locations, Finniss Lithium Project near Darwin, NT.

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## **High Grade Spodumene Confirms Significant New Discovery at Finniss**

Results from the Company's lithium drilling programs at the Finniss Lithium Project during the reporting period confirmed Finniss as a major new discovery of high grade lithium.

The discovery of high grade zones of lithium is very significant for Core given the scale of some of the new pegmatites identified by the Company's current field programs are comparable to the scale of pegmatites hosting large lithium resources in Western Australia.

### **RC drill results to date at Finniss include:**

- **38m @ 1.49% Li<sub>2</sub>O** from 71m (FRC003) at BP33, including:
  - **7m @ 2.02 % Li<sub>2</sub>O** from 79m
- **49m @ 1.78% Li<sub>2</sub>O** from 71m (FRC006) at Grants, including:
  - **9m @ 2.05% Li<sub>2</sub>O** from 110m
- **32m @ 1.59% Li<sub>2</sub>O** from 68m (FRC0017) at Grants, including:
  - **4m @ 2.01% Li<sub>2</sub>O** from 83m
- **40m @ 1.66% Li<sub>2</sub>O** from 58m (FRC0018) at Grants, including:
  - **10m @ 2.02% Li<sub>2</sub>O** from 65m
- **45m @ 1.57% Li<sub>2</sub>O** from 62m (FRC030) at Far West, including:
  - **8m @ 2.48% Li<sub>2</sub>O** from 88m
- **59m @ 1.45% Li<sub>2</sub>O** from 79m (FRC031) at Grants, including:
  - **3m @ 2.12% Li<sub>2</sub>O** from 86m
- **38m @ 1.49% Li<sub>2</sub>O** from 70m (FRC032) at Grants, including:
  - **3m @ 2.00% Li<sub>2</sub>O** from 81m
- **55m @ 1.42% Li<sub>2</sub>O** from 66m (FRC033) at Grants, including:
  - **4m @ 2.18% Li<sub>2</sub>O** from 93m
- **43m @ 1.46% Li<sub>2</sub>O** from 133m (FRC036) at Grants, including:
  - **4m @ 2.06% Li<sub>2</sub>O** from 169m

### **Diamond drill results at Finniss include:**

- **42m @ 1.53% Li<sub>2</sub>O** from 58m (FRCD001) at Grants
- **39m @ 1.55% Li<sub>2</sub>O** from 69m (FRCD002) at Grants
- **48m @ 1.53% Li<sub>2</sub>O** from 70m (FRCD003) at Grants
- **34m @ 1.47% Li<sub>2</sub>O** from 85m (FRCD004) at BP33

## **Finniss Lithium Project : Activity during the December 2016 Quarter**

During the reporting period, drilling at Finniss comprised two phases of RC drilling (66 holes for 8,209m), four diamond drillholes totalling 475m and shallow RAB (354 holes for 2,066 m) and Aircore (238 holes for 2,325 m) (Figure 1 & 2 and Tables 1-3).

Also during this period, CXO collected 468 soil samples (3,874 collected previously in 2016). These have been analysed and data are being processed in a holistic manner to augment other exploration tools in the project area.

An airborne magnetic-radiometric-dtm survey commenced in late December and is continuing into January. This detailed (50m EW spacing) multiclient survey totals 385 km<sup>2</sup> and 2,234 line km, of which roughly one third is within Core tenure.

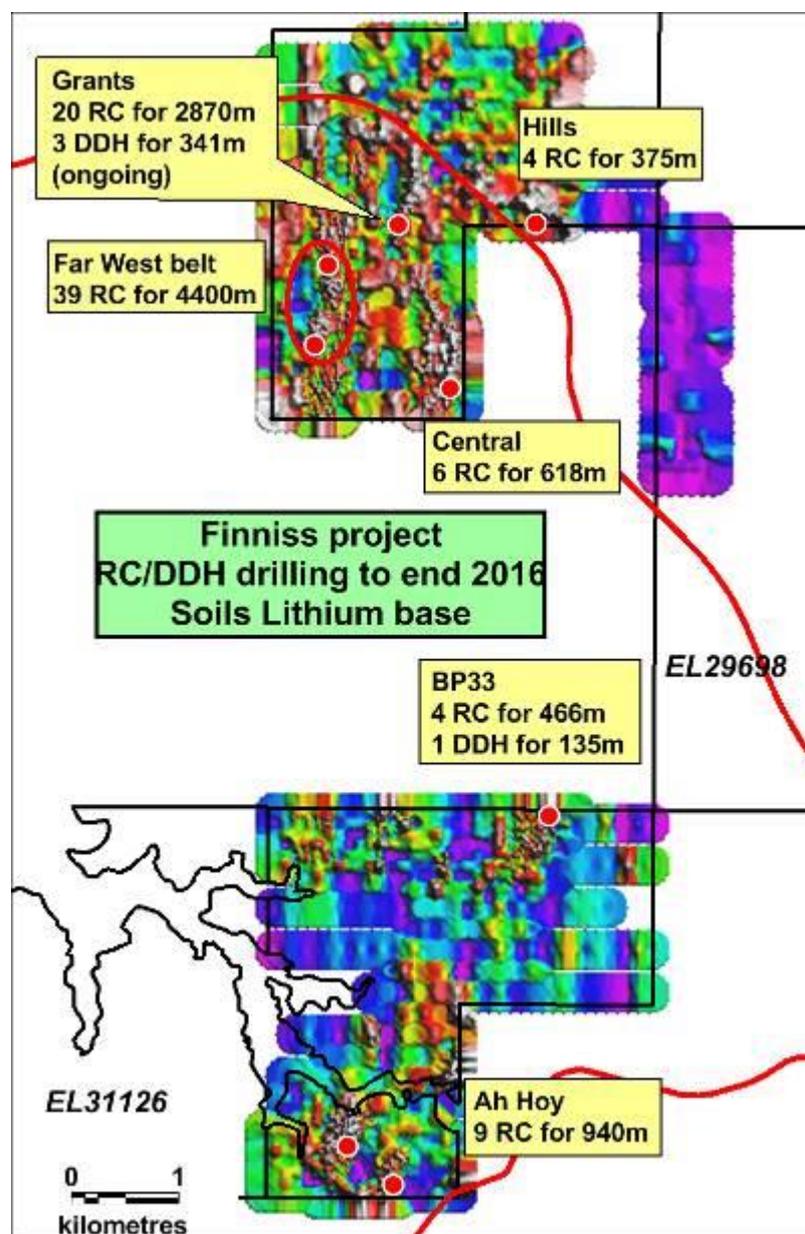


Figure 2. RC and Diamond drilling overlain on lithium in soils, Finniss Project, NT

## Grants Prospect RC and Diamond Core Drilling Results

### Phase 1 RC Drilling

Six holes were drilled by Core in its maiden drilling program at the Finniss Lithium Project at the Grants prospect.

The best result was **1.78% Li<sub>2</sub>O over 49m**, containing zones of high-grade spodumene mineralisation of up to **9m @ 2.05% Li<sub>2</sub>O** (drill hole FRC007). Other holes at Grants also returned zones of high-grade lithium as listed in Table 1 below.

All holes in Phase 1 at Grants hit pegmatite intersections over broad intervals of 30–50 metre widths (approximately 20-30m true width), containing high grades of lithium as spodumene mineralisation (Table 1 and Figures 3-6).

Hole	Prospect	GDA 94			From (m)	To (m)	Interval (m)	Li <sub>2</sub> O (%)
		E	N					
<b>PHASE 1</b>								
FRC001	BP33	694436	8593515		72.0	87.0	15.0	1.10
FRC002	BP33	694474	8593440		68.0	70.0	2.0	0.80
				Including	76.0	89.0	13.0	1.50
					82.0	86.0	4.0	2.00
FRC003	BP33	694512	8593467		70.0	108.0	38.0	1.50
				Including	79.0	87.0	8.0	2.00
				Including	93.0	97.0	4.0	2.00
				Including	101.0	104.0	3.0	2.00
					119.0	120.0	1.0	1.90
FRC004	BP33	694408	8593495		61.0	75.0	14.0	1.40
					82.0	90.0	8.0	1.10
FRC005	Grants	693024	8599089		No Significant Intercepts			
FRC006	Grants	693000	8599090		71.0	120.0	49.0	1.78
				Including	97.0	103.0	6.0	2.23
				Including	110.0	119.0	9.0	2.05
FRC007	Grants	692992	8598996		62.0	76.0	14.0	1.22
FRC008	Grants	693014	8599169		84.0	104.0	20.0	1.19
				Including	96.0	98.0	2.0	2.14
FRC009	Far West Central	692200	8597927		No Significant Intercepts			
FRC010	Far West Central	692309	8597987		69.0	73.0	4.0	1.14
FRC011	Ah Hoys	692386	8590342		No Significant			

Hole	Prospect	GDA 94			From (m)	To (m)	Interval (m)	Li <sub>2</sub> O (%)
		E	N					
					Intercepts			
FRC012	Ah Hoys	692492	8590362		81.0	90.0	9.0	0.64
FRC013	Ah Hoys SE	692925	8589994		No Significant Intercepts			
FRC014	Ah Hoys SE	692920	8589994		89.0	108.0	19.0	0.68
FRC015	Hills	694369	8599081		No Significant Intercepts			
FRC016	Hills	694362	8599132		No Significant Intercepts			
FRC017	Grants	693100	8599077		67.0	99.0	32.0	1.59
FRC018	Grants	693084	8598991		58.0	98.0	40.0	1.66
FRC019	Hills	694336	8599132		No Significant Intercepts			
FRC020	Far West North	692338	8598024		No Significant Intercepts			
FRC021	Far West North	692341	8598526		No Significant Intercepts			
FRC022	Far West North	692395.0	8598358.0		No Significant Intercepts			
FRC023	Far West North	692394	8598313		No Significant Intercepts			
FRC024	Far West North	692263	8598211		No Significant Intercepts			
FRC025	Far West North	692239	8598134		No Significant Intercepts			
FRC026	Far West North	692297	8597929		No Significant Intercepts			
FRC027	Far West North	692336	8598607		93.0	96.0	3.0	1.34
FRC028	Far West North	692342	8598691	and and including	57.0 64.0 76.0 83.0	58.0 68.0 93.0 93.0	1.0 4.0 17.0 10.0	1.14 1.04 1.12 1.53
FRC029	Far West North	692360	8598770		No Significant Intercepts			
FRC030	Far West North	692333	8598692	including including and	62.0 66.0 88.0 114.0	107.0 73.0 96.0 116.0	45.0 7.0 8.0 2.0	1.57 2.28 2.48 0.74

Table 1. Drill results from all holes Phase 1 RC Drill Program at Finniss Lithium Project, NT.

## Phase 1 Diamond Drilling

Diamond core returned from the first diamond drilling at the Finniss Project during the reporting period has consistently hit thick intersections of high grade spodumene mineralisation in all drill holes at the Grants Prospect and also at BP33.

Hole No.	Prospect	GDA 94			From (m)	To (m)	Interval (m)	Li2O (%)
		E	N					
<b>Phase 1 Diamond</b>								
FRCD001	Grants	693086	8598991		58.0	100.0	42.0	1.5
FRCD002	Grants	693102	8599078		69.0	108.0	39.0	1.6
FRCD003	Grants	692999	8599095		70.0	118.0	48.0	1.5
FRCD004	BP33	694515	8593558		85.0	119.0	34.0	1.5
				and	127.0	129.0	2.0	1.6

Table 2. High grade assays of the four diamond drillholes Finniss Project NT.

On the basis of these excellent results, Core transported 400kg of large diameter HQ core for metallurgical test work at Nagrom metallurgical facilities in Perth, W.A, to determine potential to produce commercial grade spodumene concentrate with the test results expected in early 2017.



Figure 3. Large green spodumene crystals making up a high proportion of pegmatite volume hosted by lighter coloured quartz and feldspar (albite)  
73.8m – 87.1m **FRDD003** (HQ) Grants Prospect, Finniss Lithium Project, NT.

## Phase 2 RC Drilling at Grants

The first batch of results from the Phase 2 RC drilling completed during the reporting period at the Grants Prospect have increased the size and depth of continuous high grade mineralisation defined at Grants.

The best results include 59m high grade spodumene intersection at 1.45% Li<sub>2</sub>O (FRC031) and 55m at 1.42% Li<sub>2</sub>O (FRC033), containing a number zones above 2% Li<sub>2</sub>O. All the other drill holes at Grants (6 in total) also hit high grade lithium intersections with all new results listed in Table 3 below.

These new RC assay results are consistent with all previous RC and diamond drillholes at Grants which have all hit thick intersections of excellent quality coarse grained spodumene, and show that high grade spodumene mineralisation is continuous between drill sections and is open at depth.

Drilling at Grants has now confirmed continuous high grade spodumene mineralisation in drilling over 250m in length. Mineralisation is open at depth to at least 200m and is up to 30m in true width (refer Figures 4-6).

Drillhole	Prospect		From (m)	To (m)	Interval (m)	Grade (Li <sub>2</sub> O %)
FRC031	Grants		79.0	138.0	<b>59.0</b>	<b>1.45</b>
		including	86.0	89.0	3.0	2.12
		and	108.0	110.0	2.0	2.26
		and	124.0	126.0	2.0	2.27
FRC032	Grants		70.0	108.0	<b>38.0</b>	<b>1.49</b>
		including	81.0	84.0	3.0	2.00
FRC033	Grants		66.0	121.0	<b>55.0</b>	<b>1.42</b>
		including	93.0	97.0	4.0	2.18
		and	102.0	104.0	2.0	2.17
		and	115.0	118.0	3.0	2.18
FRC034	Grants		68.0	105.0	<b>37.0</b>	<b>1.36</b>
		including	85.0	88.0	3.0	2.12
		and	94.0	98.0	4.0	2.05
FRC035	Grants		128.0	140.0	<b>12.0</b>	<b>1.18</b>
FRC036	Grants		133.0	176.0	<b>43.0</b>	<b>1.46</b>
		including	169.0	173.0	4.0	2.06

*Table 3. High grade assays of all 6 new Phase 2 RC drillholes at Grants.*

Core's high grade assays from all RC and diamond drilling at Grants are also confirmed by observations in drill core that high grade lithium (as spodumene) is consistently present as a major rock forming mineral throughout the fully-cored pegmatite drill intersections.

The pegmatite at Grants comprises only a few simple minerals with typically large crystals of spodumene, quartz and feldspar (albite dominant) accounting for approximately 95% of the pegmatite composition. This simple mineralogy should be an advantage when assessing potential for spodumene concentrate production.

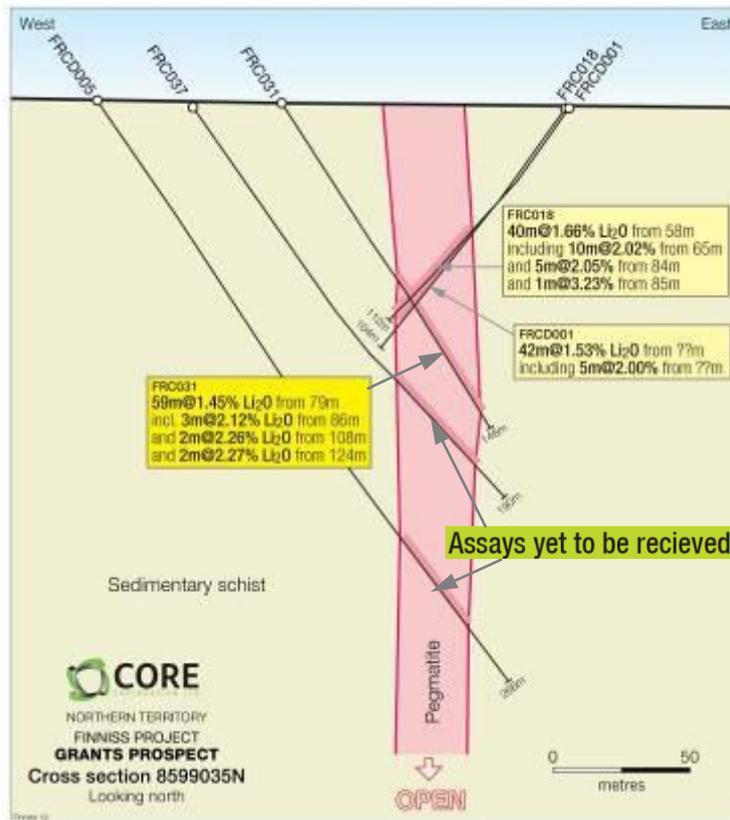


Figure 4. Cross-Section 8599035N, Grants Prospect, Finniss Lithium Project, NT.

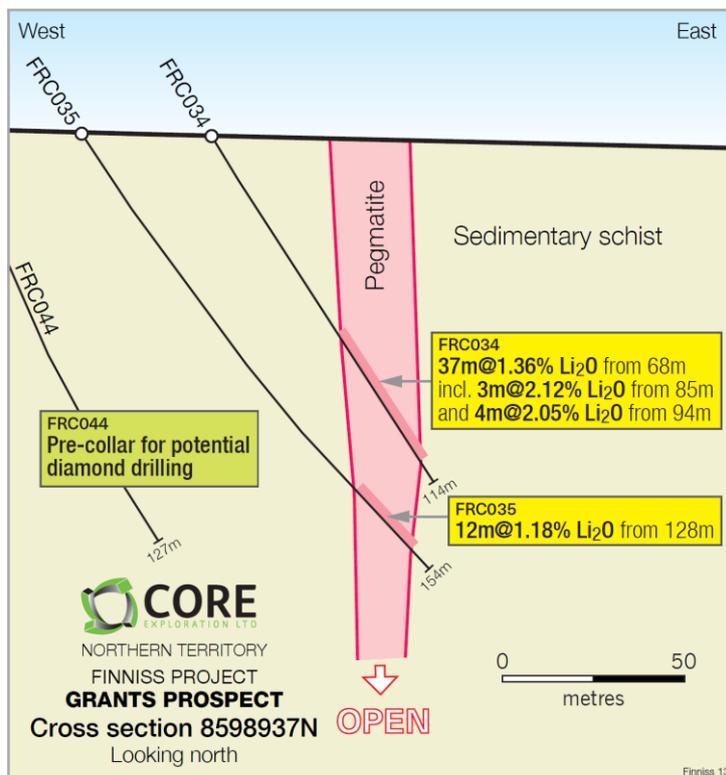


Figure 5. Cross-Section 8598937N, Grants Prospect, Finniss Lithium Project, NT.

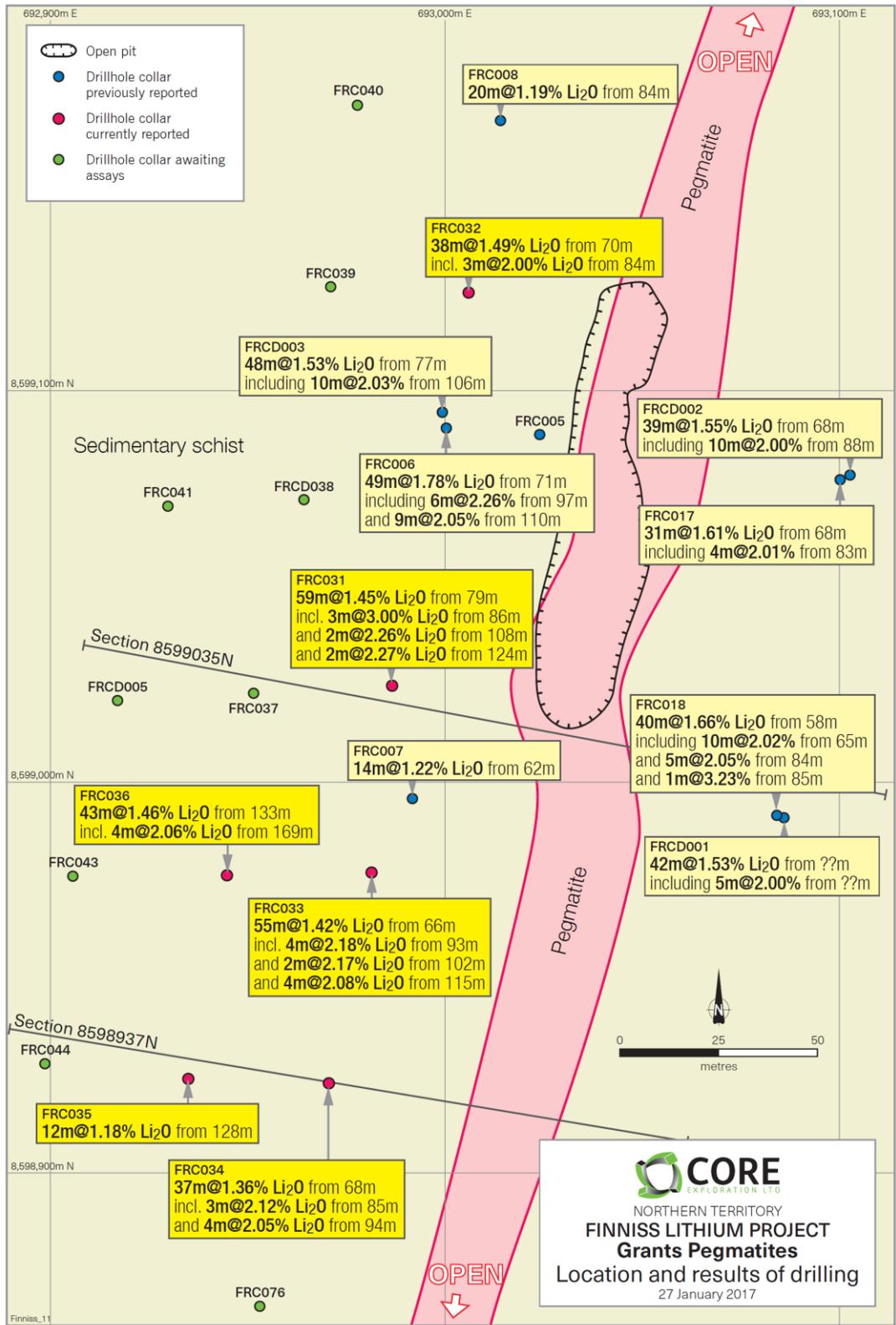


Figure 6. Grants Pegmatite showing Core's RC and diamond drilling and historic mining and trenching, Finniss Lithium Project, NT.

## **BP33 Prospect RC and Diamond Core Drilling Results**

The first prospect drilled by Core at Finniss was the BP33 prospect, where four holes were drilled with all holes hitting pegmatite intersections over broad 40–60 metres (approximately 30-35m true width), containing high grades of lithium as spodumene mineralisation (Table 1 and Figures 7-8).

The best result was 1.5% Li<sub>2</sub>O over 38m, containing zones of high-grade spodumene mineralisation of up to 7m @ 2.02% Li<sub>2</sub>O (drill hole FRC003). The other three holes at BP33 also returned zones of high-grade lithium. Results are listed in Table 1 above.

Initial observations of the BP33 core show that high-grade lithium as spodumene is almost ubiquitous throughout the first 40m fully cored pegmatite drill intersection (Figure 7-8).

The BP33 prospect is located approximately 150m north of BP32 and 200m NE of BP32W. It is likely that all these pegmatite bodies are part of a larger interconnected pegmatite swarm, and Core plans to drill these prospects with subsequent phases of drilling at Finniss. BP33 pegmatite has been mined historically from surface down to 10-20m for tin and tantalum.



*Figure 7. Light green spodumene crystals hosted by lighter coloured quartz and feldspar, 95.2m – 103.1m FRDD001 (HQ), BP33 Prospect, Finniss Lithium Project NT.*

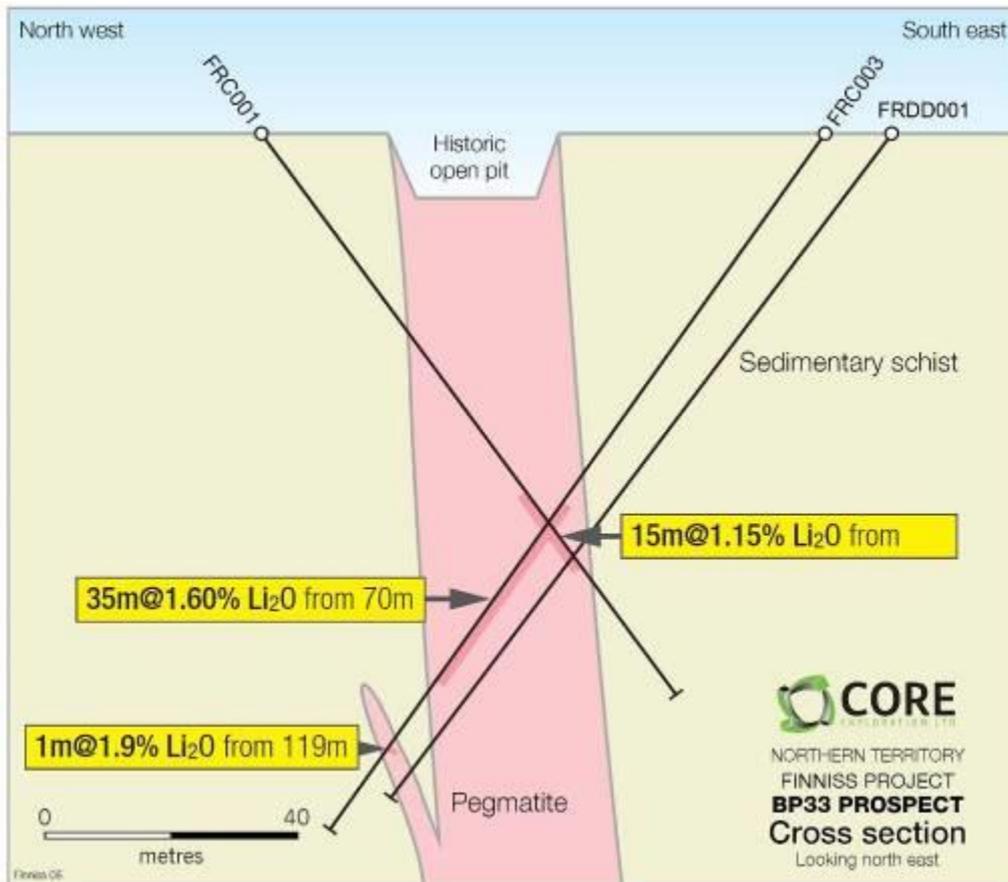


Figure 8. FRDD001 and X-section BP33 Prospect, Finniss Lithium Project, NT.

## **Far West Prospect**

During the quarter, CXO has investigated historically mapped pegmatite, soil anomalies and scout RAB drill results in the Far West belt, including the historic Greenbushes (Greenex) prospects Far West North and Far West Central.

This extensive program was aimed at verifying subsurface geometry, continuity and lithium grade, as well as identifying new spodumene-bearing pegmatites.

Broadly spaced RC drilling has intersected a semi-continuous pegmatite body up to approximately 15 m true thickness that extends over a distance of 1 km north-south. Importantly, the strike extent has not been closed off and internally this belt retains the potential for a number of high-grade pegmatite pods.

High grade lithium assays were received from its initial RC drill program at the Far West North Prospect during the reporting period and followed significant lithium discoveries at the Grants Prospect and BP33.

Core's first drilling results indicate that Far West North and Far West Central have the potential to deliver a series of interconnected pegmatite bodies of spodumene bearing pegmatite that combined, may represent a considerable volume of mineralised pegmatite.

A thick zone of high grade spodumene has been intersected during the first drilling program at Far West North (45m @ 1.57 Li<sub>2</sub>O FRC030). Further drilling is required to better understand the dimensions and orientation of this zone with other intersections at Far West North. (Figure 9).

Similarly, several 50-60m thick intersections of pegmatite have also been intersected at Far West Central, assays have not yet been received from this drilling (Figure 9).

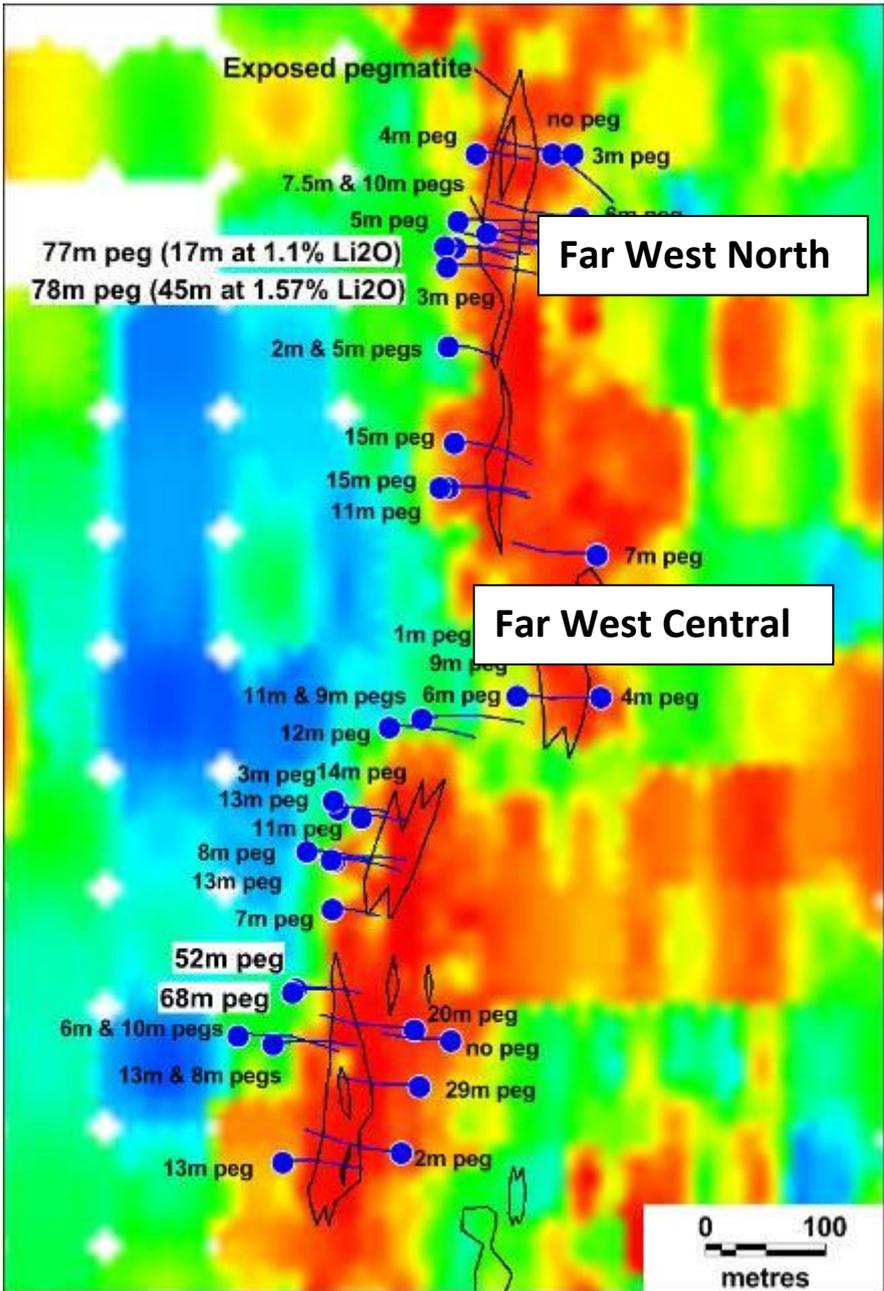


Figure 9. Far West (North and Central) RC collars and pegmatite drill intersections (in metres) overlain on lithium in soils image and target zones, Finniss Lithium Project, NT.

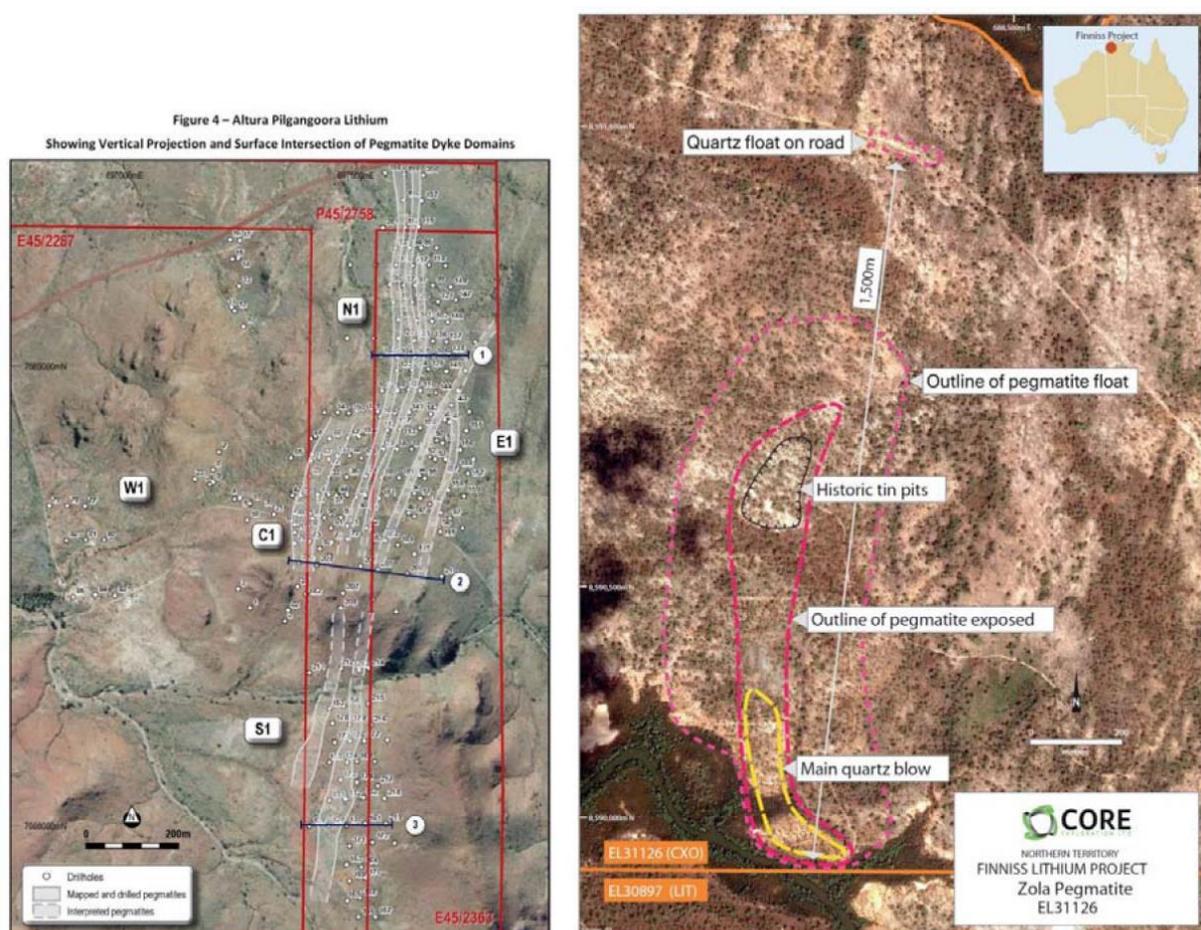
## Zola Prospect

Reconnaissance mapping and careful research of historic reports by Core during the reporting period has uncovered several large un-documented or poorly documented pegmatites.

The large-scale Zola Pegmatite Prospect on newly granted EL 31126 includes a north-south trending swarm of pegmatites covering an area conservatively estimated at between 1-2 square kilometres (Figures 10).

The most important aspect of Zola is the large scale. The outcrop of decomposed pegmatite and quartz blows extend for up to 1,500 m NS and could be as long as 2,000m under cover (abundant quartz in road-cutting to the north – Figure 10). Pegmatite material extends EW for at least 450m at surface, suggesting a substantial swarm of fractionated pegmatites.

The scale of the Zola Pegmatite prospect is directly comparable to the scale of pegmatites hosting large resources in the Pilgangoora region in Western Australia (Figure 10).



## Ringwood Prospect

During the reporting period, Core discovered the large Ringwood Pegmatite Swarm within the Finnis Lithium Project.

The Ringwood Pegmatite Swarm together with the large pegmatite find at Zola are expected to add substantial scale and upside to Core's Finnis Lithium Project. Ringwood, Zola and other large pegmatites discovered by Core at Finnis are directly comparable in size to the scale of lithium pegmatites in Western Australia.

The Ringwood Pegmatite Swarm presents as pegmatite and quartz outcrop and float extends at least 2,000m long and 800m wide (Figure 11).

Ringwood is positioned within a 6,000m long trend of previously unmapped pegmatites north from Mt Finnis Mine (NT's largest historically producing pegmatite mine). Spodumene mineralisation has also been recently drilled to the north of the Ringwood trend by Liontown (ASX:LTR) at the Sandra's Pegmatite (Figure 11).

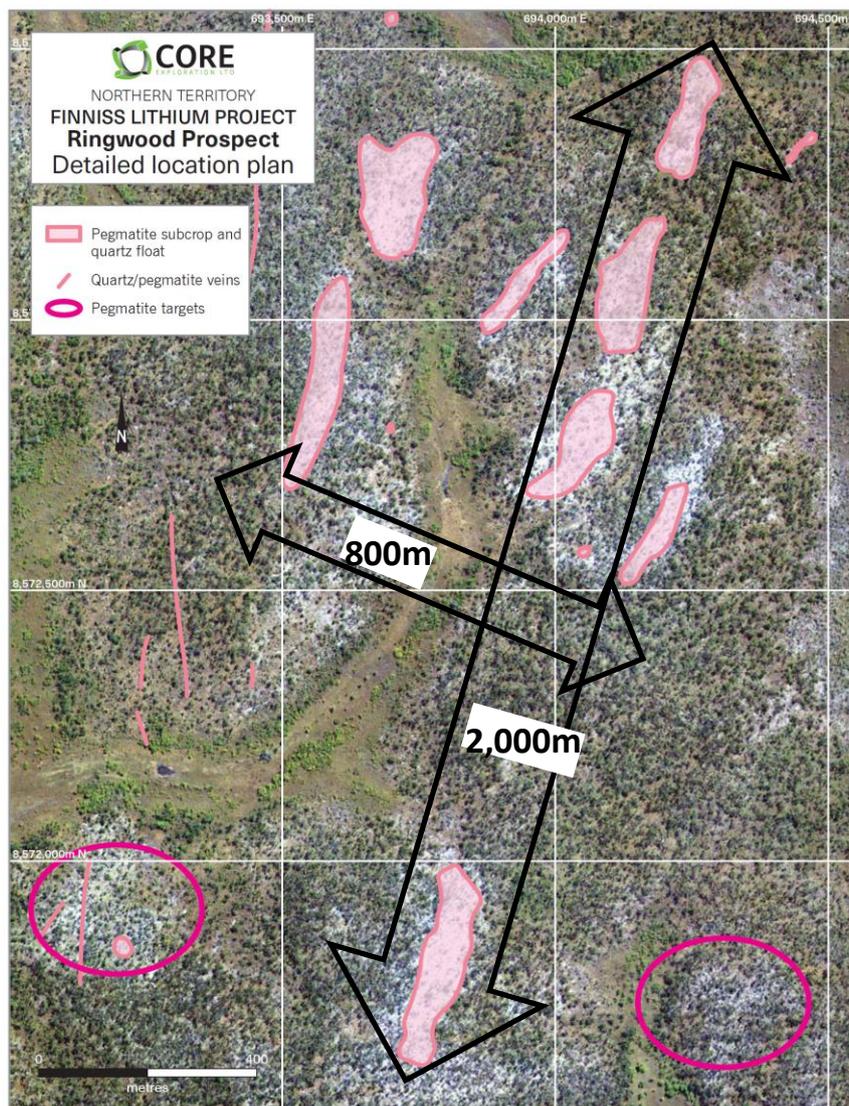


Figure 11. Ringwood Pegmatite Swarm interpreted outcrop geology and satellite imagery EL 31127 Finnis Lithium Project NT.

## Anningie and Barrow Creek Lithium Projects, NT (100% CXO owned)

During the reporting period, Core acquired a 100% interest in granted Exploration Licence 31058 comprising 574km<sup>2</sup> in the 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).

Core’s Anningie and Barrow Creek Lithium Projects now encompass five Exploration Licences (four granted during the reporting period), covering approximately over 2,500 square kilometres in and around the Anningie and Barrow Creek Tin Tantalum Pegmatite fields in the north Arunta Region of the NT, which are considered highly prospective for lithium.

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 keeps growing.

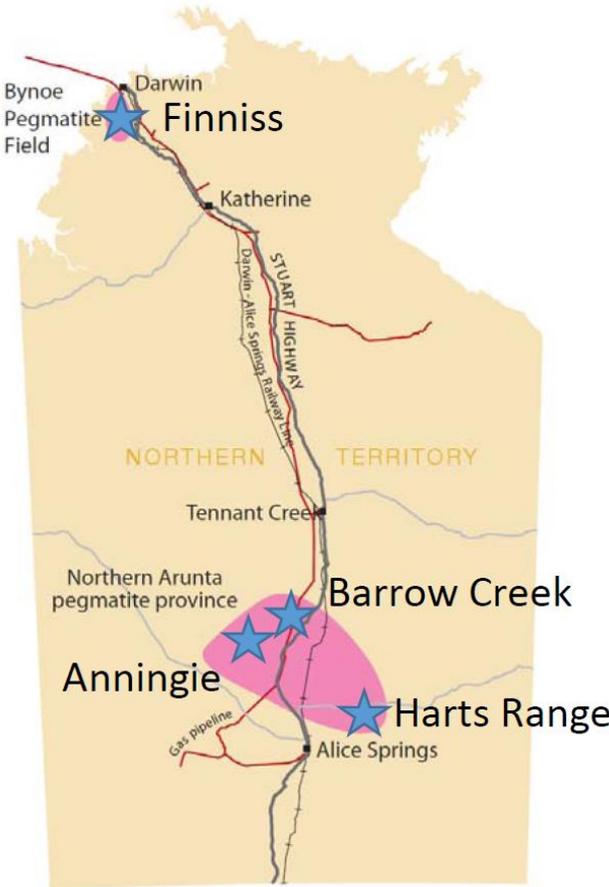


Figure 12. Core’s Lithium Projects and tin-tantalum pegmatite provinces of the Northern Territory (from NTGS Report 16 – 2004)

## 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 (Figures 12 and 13). The Northern Arunta pegmatite province occurs in well-defined clusters in the Barrow Creek and Anningie pegmatite fields (Figure 13).

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.

As with Greenbushes in WA, before economic lithium was recognised, the northern Arunta also has a long history of tin and tantalum mining. It is also evident that the pegmatites in the Anningie and Barrow Creek fields are enriched with lithium as evidenced by economic lithium minerals spodumene as well as highly elevated lithium in geoscientific sampling of source granites and pegmatites.

To date lithium has not been explored for in the north Arunta and the potential of the area is yet to be properly assessed given all of the historical work only focused on tin-tantalum. The pegmatites that have been recognised and exploited to date are only the near surface expression and there is high potential for larger mineralised bodies at depth.

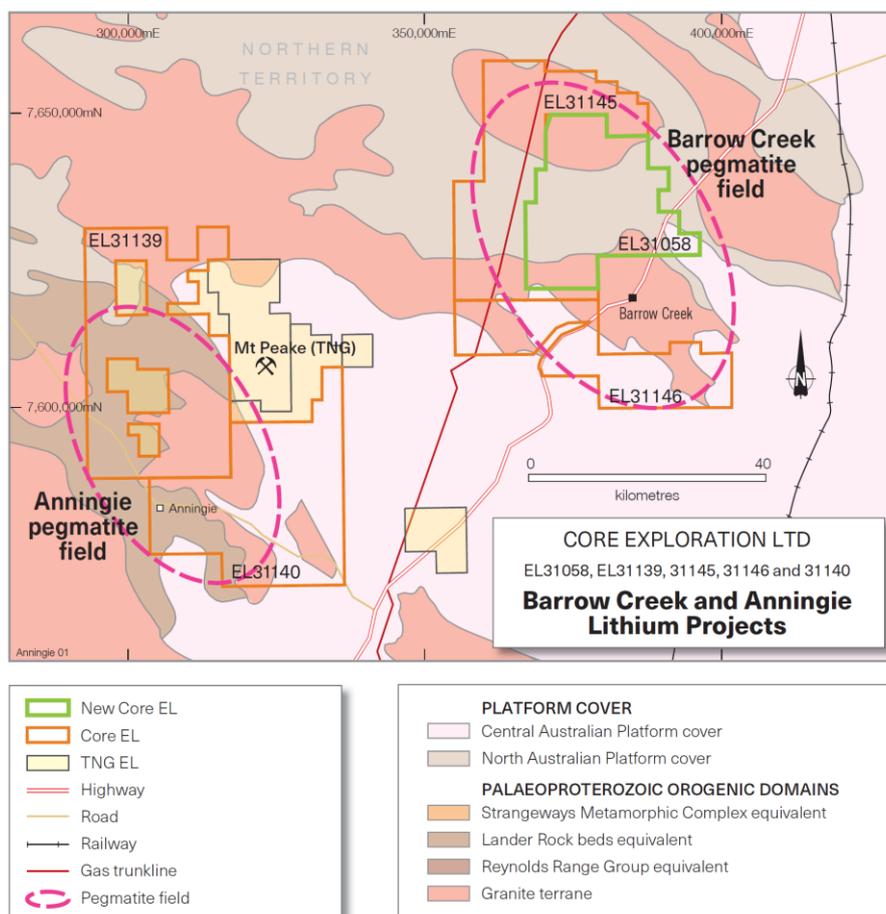


Figure 13. Core's tenements within the Anningie and Barrow Creek Pegmatite Fields, NT

## Barrow Creek Pegmatite Field

At Barrow Creek, a large number of tin-tantalum-bearing pegmatites have been identified over a 20km area. These pegmatites prospective for lithium intrude the Palaeoproterozoic Bullion Schist within 30 km of Barrow Creek (Figures 13 & 14).

Tin tantalum concentrate production commenced in the 1940's from the Barrow Creek pegmatite field from weathered pegmatite and elluvium.

The source granite for the pegmatites is considered to be 1713 Ma, fractionated S-type Barrow Creek Suite, which occurs as apophyses throughout the Barrow Creek area (Figures 12 and 14).

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.

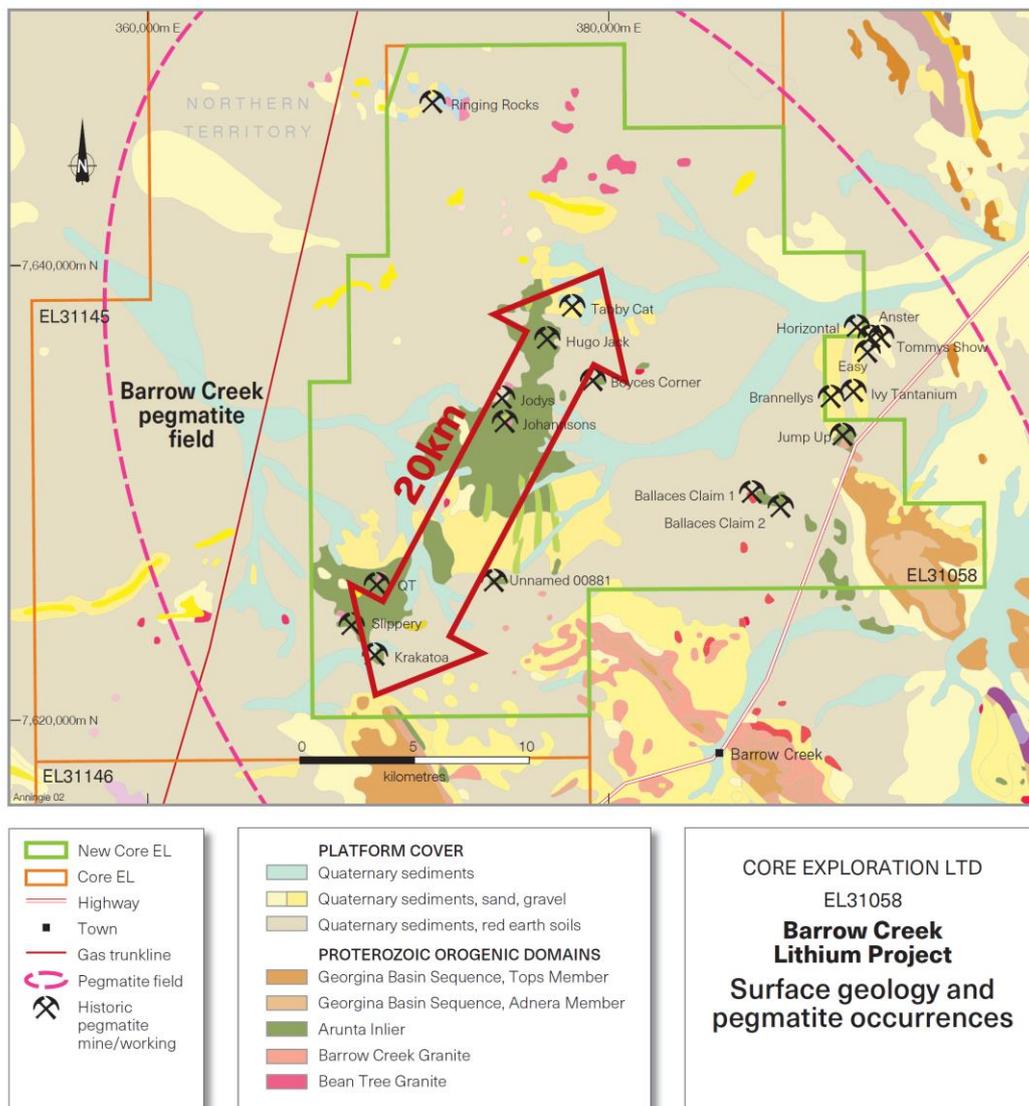


Figure 14. EL 31058 and Core's other tenements, Barrow Creek Pegmatite Field, NT

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### **Anningie Pegmatite Field**

The Anningie Tin Field is located adjacently southwest of TNG Ltd's (ASX:TNG) Mt Peake Vanadium Project approximately 80km west of Barrow Creek in NT (Figure 13).

The lithium minerals spodumene, elbaite and lepidolite are reported to occur in pegmatite a few kilometres east of the Anningie Tin Field.

Pegmatites at Anningie were sampled by the NTGS (~circa 2004) and analysed for major- and trace-element chemistry. The NTGS report states that some of the pegmatites at Anningie have the most favourable chemistry of all the North Arunta pegmatites. Lithophile trace elements Rb, Cs and Li, are consistently high and also more elevated in Ta, Nb, Sn and Li, than the other pegmatites sampled in the suite.

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## Proposed Activities Next Quarter

### **Finniss Lithium Project, NT**

Core completed its expanded Phase 2 RC drilling program in the days before Christmas 2016. A large number of the assays from this 6,900m drilling program are yet to be received and will be reported over the coming weeks.

Core currently has a diamond rig actively drilling at Finniss. First assay results from this diamond drilling program are expected in March after the core is cut and submitted to the laboratory.

The first results from metallurgical test work on a bulk sample of from Grants are expected in February. Work is currently underway on 400kg of large diameter HQ core at the Nagrom metallurgical facilities in Perth, W.A to determine potential to produce commercial grade spodumene concentrate.

Core is also currently conducting a detailed airborne geophysical survey over the Finniss Lithium Project with data expected to become available in March.

As noted above, once all drill assays are received from the Grants Prospect, Core will consider a Mining Study on the Grants Pegmatite to assess the potential for early development of a DSO spodumene mining project at Grant.

Core will be assessing the incoming results during February and March to prioritise aggressive drilling programs in 2017, including the maiden RC drill testing of large pegmatite targets identified by Core within the Finniss project at Zola and Ringwood.

Core's drilling and field programs will ramp up as the dry season approaches in Q2 2017.

### **Anningie and Barrow Creek Lithium Project, NT**

Once the current focus on 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 Q2 2017.

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## Corporate

### CASH POSITION

Core currently has a cash position of \$8.3 million.

Exploration and evaluation expenditure by the Company during the December 2016 Quarter was \$1,072,000.

### EXPLORATION TENEMENTS

During the quarter:

- EL31139, EL31140, EL31145, EL31146 were granted as part of the Finniss Lithium Project in the NT.
- EL31058 was acquired from Excedo Exploration Pty Ltd at Barrow Creek Lithium Project in the NT.
- EL29514 surrendered as part of the Albarta Project, NT.

### SHARE CAPITAL CHANGES

#### Ordinary shares

On 13 October, Core issued 66,895,188 shares at 9 cents each following a successful placement to raise \$6.02 million.

On 31 October, 92,000 shares were issued upon exercise of quoted options with an exercise price of 5.0 cents.

On 3 November, Core issued 32,861,263 shares at 9 cents each following completion of a share purchase plan to raise \$2.96 million.

On 30 November, 640,000 shares were issued to the exploration manager upon exercise of performance rights.

On 19 December, 1,000,000 shares were issued to Excedo Exploration Pty Ltd as part consideration for the acquisition of Exploration Licence EL31058.

#### Options

On 16 October, 200,000 unquoted options with an exercise price of 8.5 cents each were not exercised and expired.

On 31 October, 92,000 quoted options with an exercise price of 5.0 cents were exercised.

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## Unquoted performance rights

On 30 November, 3,600,000 unquoted performance rights were issued to directors as approved by shareholders at the 2016 AGM and to the company secretary under the Company's Performance Share Plan.

On 30 November, 640,000 unquoted performance rights were exercised following meeting of exploration based key performance indicators.

A summary of movements and balances of equity securities between 1 October 2016 and this report are listed below:

	Ordinary shares	Quoted options	Unquoted options	Unquoted performance rights
<b>On issue at start of Quarter</b>	<b>273,015,540</b>	<b>114,864,959</b>	<b>1,200,000</b>	<b>4,000,000</b>
Share placement	66,895,188	-	-	-
Expiry of unquoted options	-	-	(200,000)	-
Exercise of quoted options	92,000	(92,000)	-	-
Issue of SPP shares	32,861,263	-	-	-
Issue of remuneration performance rights	-	-	-	3,600,000
Exercise of performance rights	640,000	-	-	(640,000)
Tenement acquisition shares	1,000,000	-	-	-
<b>Total securities on issue at the date of this report</b>	<b>374,503,991</b>	<b>114,772,959</b>	<b>1,000,000</b>	<b>6,960,000</b>

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### **Competent Person Statement**

*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 this information in the form and context in which it appears.*

*The report includes results that have previously recently been released under JORC 2012 by Core as listed in the table below. The Company is not aware of any new information that materially affects the information included in this announcement.*

30/01/2017	Continuous High Grade Spodumene in Phase 2 RC Drilling
16/01/2017	Drilling Recommences and RC Assays due Shortly at Finniss
10/01/2017	CXO, KSN, LTR Commence Joint Bynoe Geophysical Survey
14/12/2016	Core Acquires Large Tenement Prospective for Lithium
13/12/2016	High Grade Lithium Intersections at Far West Prospect
7/12/2016	High Grade Lithium Assays from Maiden Diamond Drilling
24/11/2016	Thick High Grade Spodumene in All Diamond Core at Finniss
25/10/2016	High Quality Spodumene in First Drill Core at Finniss
20/10/2016	Further High Grade Lithium Intersections at Finniss
18/10/2016	New Large-Scale Pegmatite Targets Discovered at Finniss
3/10/2016	Highest Grade Spodumene Intersections Ever Drilled in the NT
23/09/2016	High Grade Spodumene Confirms Significant Lithium Discovery

## Tenement Table

Tenement number	Tenement name	Beneficial Interest at the end of the Quarter	Changes during Quarter
<b>South Australia</b>			
EL 5731	Fitton	100%	None
EL 4906	Roxby Downs	100%	None
EL 5015	Yerelina	100%	None
EL 5192	Calcutta	100%	None
EL 5320	Yorke Peninsula	100%	None
EL 5375	Billy Springs	100%	None
EL 5809	Mt Lyndhurst	100%	None
<b>Northern Territory</b>			
EL27369	Mt Russell	100%	None
EL27709	Pattersons	100%	None
EL28029	White Range East	100%	None
EL28136	Blueys	100%	None
EL28940	Mordor	100%	None
EL29347	Yambla	100%	None
EL29389	Mt George	100%	None
EL29512	Daicos	100%	None
EL29514	Mt Emma	0%	Surrendered
EL29579	Jervois	100%	None
EL29580	Jervois	100%	None
EL29581	Jervois	100%	None
EL29669	Jervois	100%	None
EL29689	Riddoch	100%	None
EL30669	Ross River	100%	None
EL30793	McLeish	100%	None
EL29698	Finniss	100%	None
EL31058	Barrow Creek	100%	Acquired
EL31126	Bynoe	100%	None
EL31127	Bynoe	100%	None
EL31139	Anningie West	100%	Granted – previously application
EL31140	Anningie South	100%	Granted – previously application
EL31145	Barrow Creek North	100%	Granted – previously application
EL31146	Barrow Creek South	100%	Granted – previously application

## Appendix 5B

# Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

### Name of entity

Core Exploration Limited

### ABN

80 146 287 809

### Quarter ended ("current quarter")

31 December 2016

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	(1,072)	(1,748)
(b) development	-	-
(c) production	-	-
(d) staff costs (net of capitalised expenditure)	(78)	(110)
(e) administration and corporate costs	(159)	(364)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	11	31
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Research and development refunds	-	(257)
1.8 Other (provide details if material)		
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(1,298)</b>	<b>(2,488)</b>

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) property, plant and equipment	-	(3)
(b) tenements (see item 10)	(85)	(125)
(c) investments	-	-
(d) other non-current assets	-	-
2.2 Proceeds from the disposal of:		
(a) property, plant and equipment	-	-
(b) tenements (see item 10)	-	-
(c) investments	-	-
(d) other non-current assets	-	-
2.3 Cash flows from loans to other entities	-	-
2.4 Dividends received (see note 3)	-	-
2.5 Other (provide details if material)	-	-
<b>2.6 Net cash from / (used in) investing activities</b>	<b>(85)</b>	<b>(128)</b>

<b>3. Cash flows from financing activities</b>		
3.1 Proceeds from issues of shares	8,985	9,035
3.2 Proceeds from issue of convertible notes	-	-
3.3 Proceeds from exercise of share options	-	-
3.4 Transaction costs related to issues of shares, convertible notes or options	(605)	(607)
3.5 Proceeds from borrowings	-	-
3.6 Repayment of borrowings	-	-
3.7 Transaction costs related to loans and borrowings	-	-
3.8 Dividends paid	-	-
3.9 Other (provide details if material)	-	-
<b>3.10 Net cash from / (used in) financing activities</b>	<b>8,380</b>	<b>8,428</b>

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
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<b>4. Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1 Cash and cash equivalents at beginning of period	1,268	2,413
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(1,298)	(2,488)
4.3 Net cash from / (used in) investing activities (item 2.6 above)	(85)	(128)
4.4 Net cash from / (used in) financing activities (item 3.10 above)	8,380	8,428
4.5 Effect of movement in exchange rates on cash held	-	-
<b>4.6 Cash and cash equivalents at end of period</b>	<b>8,265</b>	<b>8,265</b>

<b>5. Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1 Bank balances	765	268
5.2 Call deposits	7,500	1,000
5.3 Bank overdrafts	-	-
5.4 Other (provide details)	-	-
<b>5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>8,265</b>	<b>1,268</b>

<b>6. Payments to directors of the entity and their associates</b>	<b>Current quarter \$A'000</b>
6.1 Aggregate amount of payments to these parties included in item 1.2	120
6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	-
6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2	

The amount above includes all payments to Directors and also includes payments to entities associated with Stephen Biggins and Heath Hellewell. The payments relate to executive services and directors' fees on commercial terms.

<b>7. Payments to related entities of the entity and their associates</b>	<b>Current quarter \$A'000</b>
7.1 Aggregate amount of payments to these parties included in item 1.2	-
7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	-
7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2	

Not applicable

<b>8. Financing facilities available</b> <i>Add notes as necessary for an understanding of the position</i>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
8.1 Loan facilities	-	-
8.2 Credit standby arrangements	-	-
8.3 Other (please specify)	-	-
8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.		

Not applicable

<b>9. Estimated cash outflows for next quarter</b>		<b>\$A'000</b>
9.1	Exploration and evaluation	800
9.2	Development	-
9.3	Production	-
9.4	Staff costs	80
9.5	Administration and corporate costs	200
9.6	Other (provide details if material)	-
<b>9.7</b>	<b>Total estimated cash outflows</b>	<b>1,080</b>

<b>10.</b>	<b>Changes in tenements (items 2.1(b) and 2.2(b) above)</b>	<b>Tenement reference and location</b>	<b>Nature of interest</b>	<b>Interest at beginning of quarter</b>	<b>Interest at end of quarter</b>
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	EL29514	Beneficially held	100%	0%
10.2	Interests in mining tenements and petroleum tenements acquired or increased	EL31058	Beneficially held	0%	100%
		EL31139	Previously exploration	0%	100%
		EL31140	licence applications all	0%	100%
		EL31145	beneficially held	0%	100%
		EL31146		0%	100%

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**Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies, which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.



Sign here: .....

Date: 31 January 2017

Company secretary

Print name: Jaroslaw (Jarek) Kopias

**Notes**

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified as either cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.