

## Pioneer Resources Limited (ASX: PIO)

### QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 31 MARCH 2018

30 April 2018, Pioneer Resources Limited ("Pioneer" or the "Company" (ASX: PIO)) is pleased to update the market with a summary of activities undertaken during the March Quarter of 2018.

#### HIGHLIGHTS

##### ***PIONEER DOME Caesium Potassium Lithium Project – Eastern Goldfields, WA***

- 'Pre-mining' diamond drilling intersected high-grade caesium in line with previous drill results.
- Highlight Caesium (Pollucite) intersections included:
  - **PDD162: 11.15m at 17.43% Cs<sub>2</sub>O from 38.20m.**
  - **PDD166: 5.70m at 29.61% Cs<sub>2</sub>O from 37.70m.**
  - **PDD167: 2.68m at 27.11% Cs<sub>2</sub>O from 40.82m and 7.18m at 16.04% Cs<sub>2</sub>O from 47.88m.**
- Results used to update caesium Mineral Resource Estimate and then finalise open pit mine design.
- Broad zones of other alkali-metal minerals (including potassium and lithium) also intersected.
- Potential to commercially develop potassium and lithium minerals to increase Sinclair revenue.
- Commercial study to be finalised during May and, subject to all approvals, mining activities scheduled to commence in the second half of 2018.

##### ***MAVIS LAKE and RALEIGH Lithium Projects – NW Ontario, Canada***

- Highly successful 9 hole-1,591m diamond drill programme completed at the Fairservice target - all holes intersected significant spodumene mineralisation.
- Standout intersections included:
  - **MF18-53: 55.25m at 1.04% Li<sub>2</sub>O from 82.75m.**
  - **MF18-58: 28.95m at 1.14% Li<sub>2</sub>O from 116.80m.**
  - **MF18-51: 23.30m at 1.09% Li<sub>2</sub>O from 76.80m.**

##### ***GOLDEN RIDGE COBALT AND NICKEL PROJECT – Eastern Goldfields, WA***

- In January 2018 the Company announced the results of a 31 hole - 3,084m RC programme.
- Highlight results included:
  - **31m at 0.15% Co and 0.37% Ni from 43m**
  - **6m at 0.57% Co and 0.52% Ni from 22m**
  - **19m at 0.22% Co and 0.23% Ni from 34m**
- New nickel sulphide discovery; **22m at 1.02% Ni and 475ppm Cu from 202m.**

#### CORPORATE

At 31 March 2018 the Company had cash reserves of \$3.76 million and no debt.

## EXPLORATION REVIEW: MARCH 2018.

The Company maintained a high level of focussed activity: drilling and advancing the permits required ahead of mining at the Sinclair Zone Caesium Deposit; as well as drilling programmes at the Golden Ridge and Mavis Lake Projects during the quarter. The projects tested each continued to return strong results.

A very successful pre-mining diamond drilling programme was completed at the Sinclair Zone Caesium Deposit, with results to be used to update the caesium Mineral Resource Estimate and 3D model, and then used to develop the final open pit mine design. A commercial study is expected to be finalised during May and, subject to all approvals, mining activities scheduled to commence in the second half of 2018.

Pioneer is also assessing the potential to commercially extract other alkali-metal minerals – lithium (petalite and lepidolite) and potassium (microcline) – which occur within the proposed Sinclair Mine shell.

Very encouraging lithium (spodumene) results were returned from drilling at the Mavis Lake Project in Ontario, Canada; and cobalt and nickel sulphide results from the Golden Ridge Project, near Kalgoorlie, WA.

One additional gold-prospective tenement was pegged at the Company's Kangan Project in the West Pilbara of WA. The Company now has 4 exploration licences in this Project.

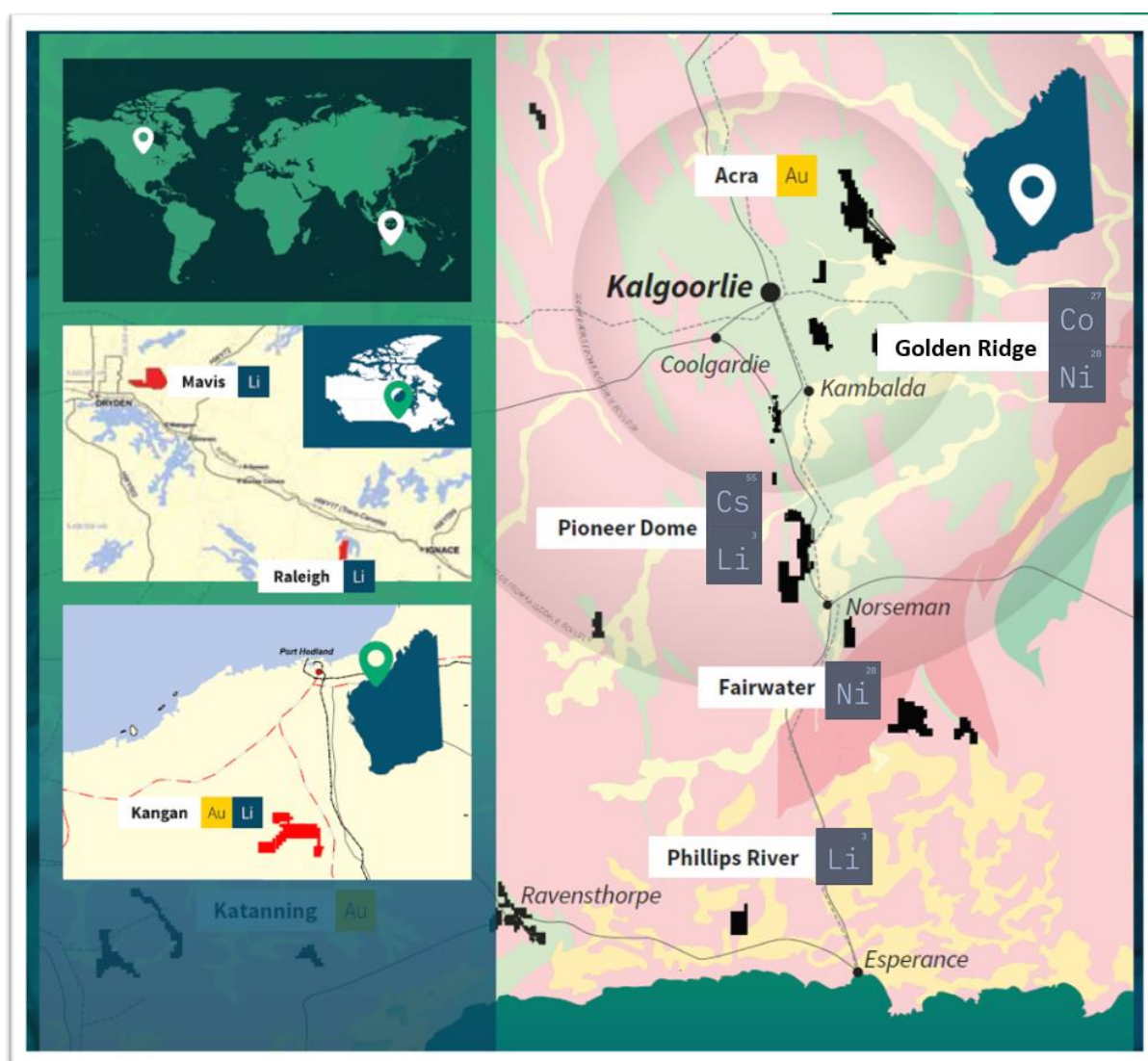


Figure 1: Company Project Location Plan. Tenement information is listed in Appendix 1.

## ***PIONEER DOME Project (Including the Sinclair Zone Caesium Deposit).***

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### ***Pioneer 100%, Caesium, Potassium, Lithium, Nickel Sulphide.***

The Pioneer Dome Project is advancing apace. The Company's priority is the Sinclair Zone Caesium Deposit which is a near-term mining proposition to extract and sell the high margin caesium mineral pollucite (and possibly potassium and lithium minerals) from the proposed Sinclair open pit mine. The Company is currently working through the regulatory processes required prior to commencing operations.

The Sinclair Mine as planned will extract the Sinclair Zone Caesium Deposit, which will be sold as a 'direct shipping' product.

In addition, the Company is investigating the commercial viability of selling other minerals that will be extracted as 'overburden' while mining the Sinclair Zone Caesium Deposit, including the lithium minerals petalite and lepidolite, and the potassium mineral microcline.

The Pioneer Dome Project is located approximately 130km south of Kalgoorlie, and 200km north of the Port of Esperance, in WA.

### ***SINCLAIR ZONE CAESIUM DEPOSIT ADVANCES TOWARDS MINING***

In early 2017 Pioneer reported the discovery of Australia's first caesium (in the mineral 'pollucite') deposit at the Sinclair Zone, a prospect within the Pioneer Dome Project.

Pollucite is a rare, high value commodity that forms in extremely differentiated pegmatite systems and global supply is very constrained. The primary use of pollucite is in the manufacture of Caesium Formate brine, a high-density fluid used in high temperature/high pressure oil and gas drilling.

#### **Caesium: Diamond Core Drilling Programme Completed**

A close-spaced diamond core drilling programme commenced in January and was completed during the quarter, with results reported after the quarter (ASX announcement, 19 April 2018). The programme comprised 20 holes which produced a total of 1,333.29 metres of core.

Fifteen holes targeted caesium or lithium mineralisation and other holes were drilled to provide geotechnical information. Most holes also intersected the overlying potassium (microcline) zone.

The caesium-focused drilling was designed to infill the five most heavily value-weighted sections within the Sinclair Zone Caesium Deposit. Each of the key sections returned high grade pollucite intersections in line with previous drill results and modelling.

The open pit design and economic study are anticipated to be completed by the end of May 2018, and on the basis that the Board determines to proceed, mining activities are expected to commence in the second half of 2018.

#### **Highlight Caesium (Pollucite) intersections included:**

- **PDD162:** 11.15m at 17.43% Cs<sub>2</sub>O from 38.2m
- **PDD166:** 5.70m at 29.61 Cs<sub>2</sub>O from 37.7m
- **PDD167:** 2.68m at 27.11 Cs<sub>2</sub>O from 40.82m
- and** 7.18m at 16.04 Cs<sub>2</sub>O from 47.88m
- **PDD170:** 7.45m at 16.58 Cs<sub>2</sub>O from 43.6m
- **PDD174:** 4.30m at 20.89 Cs<sub>2</sub>O from 43.5m

**Lithium (petalite and lepidolite) Mineralisation Occurs on the Caesium Mineralisation periphery. Drilling Results Included:**

- PDD161: 25.02 m at 2.14% Li<sub>2</sub>O from 41.98m
- PDD163: 16.43 m at 2.27% Li<sub>2</sub>O from 40.57m
- PDD164: 16.10 m at 2.64% Li<sub>2</sub>O from 39.9m
- PDD168: 16.50 m at 1.75% Li<sub>2</sub>O from 40.5m
- PDD173: 26.70 m at 1.82% Li<sub>2</sub>O from 34.3m
- PDD175: 23.10 m at 1.94% Li<sub>2</sub>O from 41.9m
- PDD176: 19.00 m at 1.62% Li<sub>2</sub>O from 38.0m

**Potassium (Microcline) Mineralisation Forms an Extensive Overlaying Mono-Mineralic Zone**

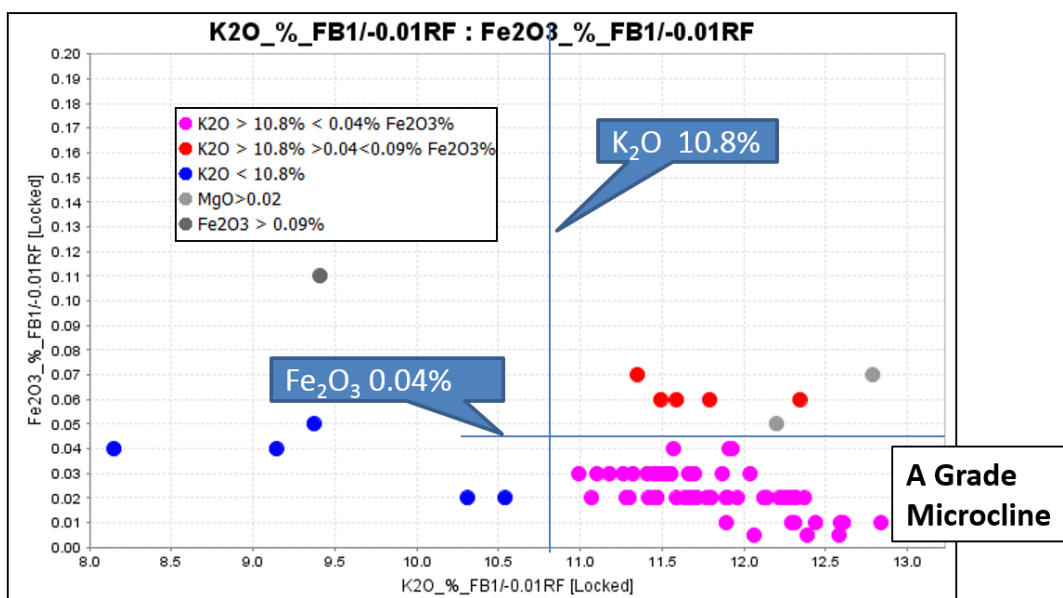
During the quarter the Company released assay results from microcline samples from two diamond core holes, PDD125 and PDD126, drilled during 2017 at the Sinclair Zone Caesium Deposit (ASX announcement, 21 February 2018). Microcline is visually recorded in earlier drilling as the dominant mineral in the overburden of the proposed Sinclair Mine, however the assay record is incomplete. PDD125 and PDD126 however indicate that the microcline includes a very high purity phase (refer to Figure 2) which may have commercial applications.

Microcline requires an iron-free sample preparation and an XRF-fusion assay to deliver valid assay results, and different size fractions are analysed separately. Currently approximately 1,000 samples, producing 2,500 fraction samples, are in the laboratory for analysis, with results due by the end of May 2018. The market will be updated then.

Potassium feldspar is a long established industrial mineral used in the manufacture of ceramics and glassware, particularly for glazes in tableware, floor tiles and sanitary products.

**First Results included:**

- PDD125 20m at 11.43% K<sub>2</sub>O, 3.14% Na<sub>2</sub>O, 18.55% Al<sub>2</sub>O<sub>3</sub>, 0.034% Fe<sub>2</sub>O<sub>3</sub>, and 13m at 11.76% K<sub>2</sub>O, 2.77% Na<sub>2</sub>O, 18.68% Al<sub>2</sub>O<sub>3</sub>, 0.020% Fe<sub>2</sub>O<sub>3</sub>,
- PDD126 36m at 11.47% K<sub>2</sub>O, 2.88% Na<sub>2</sub>O, 18.40% Al<sub>2</sub>O<sub>3</sub>, 0.044% Fe<sub>2</sub>O<sub>3</sub>,

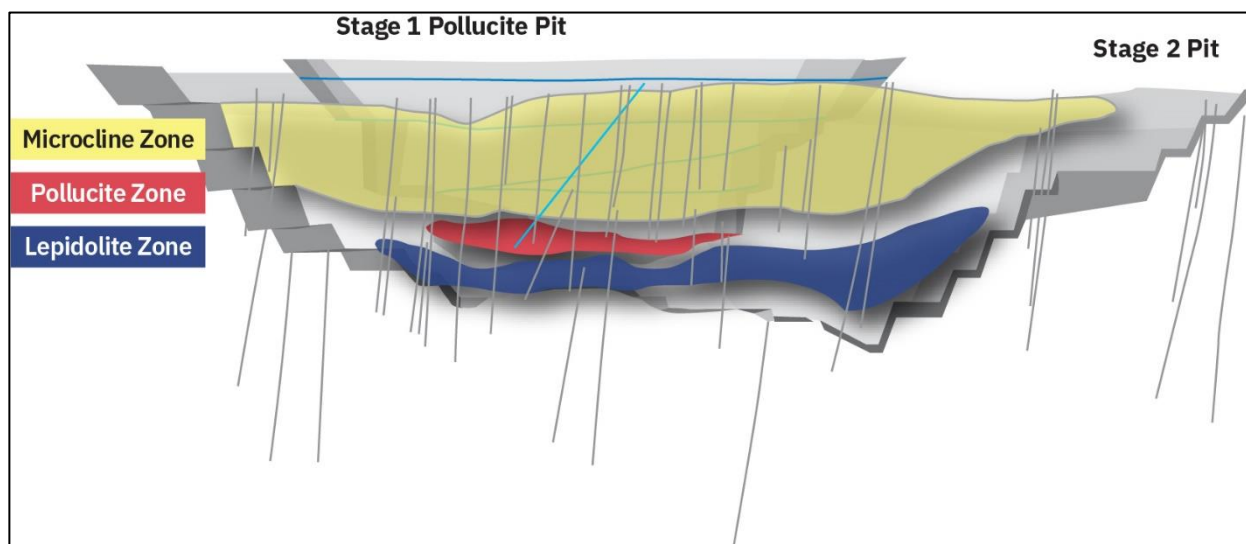


**Figure 2: X-Y plot of K<sub>2</sub>O and Fe<sub>2</sub>O<sub>3</sub> shows that 61 samples plot in the A-Grade Microcline field.**

## Mine Sequence and Mineral Recovery

The Company's priority is the extraction and delivery of the pollucite to its offtake partner. In doing so, the excavation will 'mine through' microcline, petalite and lepidolite to access the pollucite (Refer Stage 1 Pollucite Pit, Figure 3).

The microcline, petalite and lepidolite will be stockpiled separately, for recovery should commercial arrangements be concluded. The Company continues to engage in discussions with relevant interested parties in respect of the marketing and sale of these other minerals, in which case the Stage 2 Pit would be developed.



**Figure 3: Conceptual Long Section of the Sinclair Zone with preliminary pit shells:** Shows diagrammatically the relationship between the caesium-containing pollucite deposit and the microcline overburden. The Stage 1 Pit will be used to extract pollucite (and microcline). The Stage 2 Pit may be used at a future time to extract lepidolite and additional microcline following further study.

## PEG009 PEGMATITE PROSPECT FARM-IN WITH LEPIDICO

After the quarter, Lepidico Limited announced the commencement of an RC drilling programme at the PEG009 prospect of the Pioneer Dome Project, under its Farm-in Agreement with Pioneer. As planned, the programme consists of 13 holes for a total of 750m, targeting a 200 m long multi-element soil anomaly (including Li, Rb and Cs) associated with a sub-cropping lepidolite-bearing pegmatite.

Drilling has intersected lepidolite-bearing pegmatites averaging approximately 5m in thickness, as well as a series of thinner, sub-parallel quartz-feldspar pegmatites. Assay results are expected in early May.

Lepidico announced it had entered into a Farm-in Agreement to earn a 75% interest in the PEG009 lepidolite prospect on 23 February 2017. Rock chip sampling by Pioneer had returned up to 3.94% Li<sub>2</sub>O from lepidolite-rich pegmatite and up to 3.84% Li<sub>2</sub>O from a micaceous pegmatite.

Rock samples from PEG009, grading 1.25% Li<sub>2</sub>O, were used by Lepidico for bench testing of its Phase 1 Plant to determine its amenability to the L-Max® process. High specification battery grade lithium carbonate of 99.7% purity was produced.

## OUTLOOK

The next pass of RC drilling is in progress at the Sinclair Zone Project, testing targets to the immediate north of the Sinclair Zone Caesium Deposit, principally targeting lithium minerals but also supplying information to enable future targeting for caesium. These holes have also intersected the microcline zone.



Work at the Sinclair Zone Caesium Deposit will continue to focus on the development of proposed caesium mining operation, and will include;

- Finalisation of regulatory documents required ahead of mining the Sinclair Zone Caesium Deposit.
- Detailed pit design scenario work, including variants where other pegmatite minerals (including lepidolite and microcline) are extracted for sale in addition to pollucite. Once this has been finalised.
- The Mine Plan and revenue estimates will be finalised, the decision to mine considered, and quotes sought from mining contractors.

On the basis that the Board determines to proceed with mining, and subject to receiving the required permitting, the Company is working towards extracting the Sinclair Zone Caesium Deposit during the second half of 2018.

## **MAVIS LAKE Project**

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***Pioneer Option to earn up to 80% from JV partner, International Lithium Corp. ("ILC") (TSX Venture: ILC.V).***

The Mavis and Raleigh Lithium Projects are situated 19 and 80 kilometres respectively east from the town of Dryden, NW Ontario, Canada.

### **Work Completed:**

- 9 diamond core holes for 1,591 metres (ASX announcements, 23 January and 19 February 2018). Results were reported after the end of the quarter (ASX announcement, 6 April 2018).
- Recently generated ground and drone magnetic survey data has been processed and interpreted for Mavis and Raleigh Projects.

A standout drilling intersection of **55.25m at 1.04% Li<sub>2</sub>O from 82.75m, which included 10.45m at 1.54% Li<sub>2</sub>O** was returned from drill hole MF18-53 (See Photo 1).

All nine holes in the 2018 programme intersected between one and three mineralised pegmatite lenses (see Table 1) on step-out drill spacings of between 20m and 40m. The drilling intersected the Fairservice Pegmatite 6 generally between 100 and 140m vertically below surface along a strike length of 200m.



**Photo 1:** MF18-53. The entire interval, including internal waste, returned 55.25m at 1.04% Li<sub>2</sub>O from 82.75m. Higher grade zones included 25m at 1.12% Li<sub>2</sub>O from 82.70m and 13.70m at 1.41% Li<sub>2</sub>O from 122.30m

## Drilling Intersections included:

Hole ID	From (m)	To (m)	Intersection (m)	Lithia (Li <sub>2</sub> O %)
MF18-51	76.80	100.10	23.30	1.09
<b>Including</b>	<b>87.75</b>	<b>100.10</b>	<b>12.35</b>	<b>1.50</b>
MF18-51	119.95	129.20	9.25	1.47
MF18-52	83.30	89.65	6.35	1.32
MF18-52	150.45	161.00	10.55	1.18
<b>Including</b>	<b>154.55</b>	<b>161.00</b>	<b>6.45</b>	<b>1.56</b>
MF18-53	80.75	136.00	55.25	1.04
<b>Including</b>	<b>82.70</b>	<b>89.30</b>	<b>6.60</b>	<b>1.47</b>
<b>Including</b>	<b>115.50</b>	<b>117.90</b>	<b>2.40</b>	<b>2.61</b>
<b>Including</b>	<b>122.30</b>	<b>132.75</b>	<b>10.45</b>	<b>1.54</b>
MF18-54	94.80	113.00	18.20	1.27
<b>Including</b>	<b>107.80</b>	<b>113.00</b>	<b>5.20</b>	<b>2.42</b>
MF18-54	139.25	145.35	6.10	2.33
MF18-55	135.10	147.45	12.35	1.41
MF18-56	142.10	148.90	6.80	1.26
MF18-57	141.53	151.20	9.67	1.23
<b>Including</b>	<b>143.25</b>	<b>149.20</b>	<b>5.95</b>	<b>1.63</b>
MF18-58	55.00	58.65	3.65	1.87
MF18-58	116.80	145.75	28.95	1.14
<b>Including</b>	<b>119.75</b>	<b>128.95</b>	<b>9.20</b>	<b>1.80</b>
MF18-59	144.80	152.35	7.55	1.30

\* All reported widths are drill hole intersection widths and have not been converted to true width. True width is unknown at this time. Intersections > 0.5% Li<sub>2</sub>O (including >1.00% Li<sub>2</sub>O)

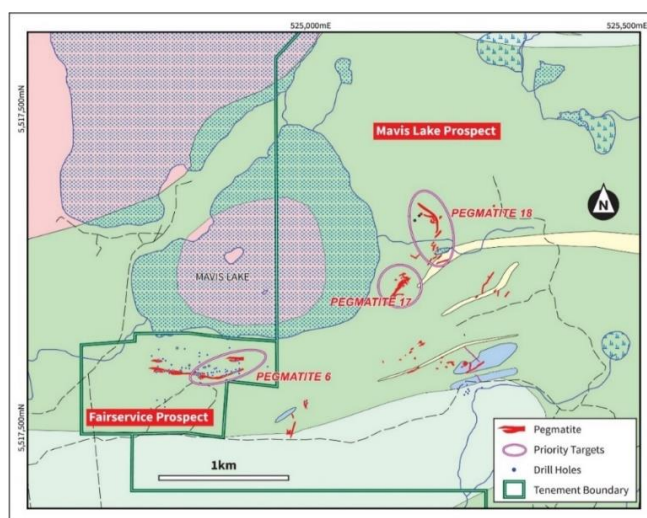


Figure 4. Prospect Location Map showing Location of the Fairservice Pegmatite 6 drilling area.

## OUTLOOK

- Litho-chemistry to be amalgamated with interpretive geological maps (from magnetic surveys) to highlight new drilling target areas.
- Ground appraisal of new drill targets and orientation for drill hole site set-up in difficult terrain.

## ***GOLDEN RIDGE Project (Includes Blair Nickel Sulphide Mine)***

### ***Pioneer 100%. Nickel Sulphides, Cobalt***

The Golden Ridge Project covers an area of 121 km<sup>2</sup> and is located 26 kilometres south east of Kalgoorlie. The Project includes substantial areas prospective for lateritic cobalt, plus the suspended Blair Nickel Sulphide Mine and near-mine prospects. The Blair Mine closed in 2008 during a time of depressed nickel prices, having produced 1.26mt of nickel sulphide ore at 2.62% Ni.

#### **Cobalt-Focussed Work Completed:**

- 31 reverse circulation drill holes for 3,084 metres.
- Four cobalt targets drilled: Rocket, Leo's Dam, Anomaly 13 and Anomaly 14 Prospects (see Figure 6).
- 16 holes intersected significant cobalt mineralisation (see Table 2 below).

All prospects are located within granted mining leases and an exploration licence along the eastern flank of the Blair Dome, a geological structure within the Golden Ridge Project (ASX announcement, 24 January 2018).

#### **Highlight Cobalt Results Included:**

<b>Table 2</b>				
<b>Significant Cobalt Results from RC Drilling</b>				
<b>Hole ID</b>	<b>Prospect</b>	<b>From (m)</b>	<b>To (m)</b>	<b>Intersection</b>
GRRRC34	<b>Rocket</b>	43	74	31m at 0.15% Co and 0.37% Ni from 43m
<b>Including</b>				<b>29m at 0.16% Co and 0.33% Ni from 45m</b>
GRRRC37		22	28	6m at 0.57% Co and 0.52% Ni from 22m
<b>Including</b>				<b>5m at 0.67% Co from 22m and 0.15% Ni (max 1m at 1.60% Co)</b>
<b>GRRRC27</b>	<b>Leo's Dam</b>	<b>38</b>	<b>60</b>	<b>22m at 0.18% Co and 0.53% Ni</b>
GRRRC28		45	50	5m at 0.10% Co and 0.61% Ni
<b>GRRRC33</b>		34	53	19m at 0.22% Co and 0.23% Ni
<b>Including</b>				<b>16m at 0.25% Co and 0.30% Ni from 34m</b>
GRRRC30	<b>Anomaly 13</b>	42	58	16m at 0.17% Co and 0.42% Ni
<b>Including</b>				<b>9m at 0.27% Co and 0.45% Ni from 42m</b>
GRRRC32	13	34	50	16m at 0.08% Co and 0.56% Ni
GRRRC13	<b>Anomaly 14</b>	42	48	6m at 0.11% Co and 0.32% Ni
GRRRC14		42	48	6m at 0.11% Co and 0.56% Ni
GRRRC16		32	39	7m at 0.14% Co and 0.72% Ni
GRRRC17		52	56	4m at 0.08% Co and 0.33% Ni
<b>GRRRC18</b>		<b>34</b>	<b>42</b>	<b>8m at 0.17% Co and 0.17% Ni</b>
GRRRC19		34	51	17m at 0.11% Co and 0.17% Ni
<b>Including</b>				<b>11m at 0.15% Co and 0.34% Ni from 34m</b>
GRRRC21		34	49	15m at 0.08% Co and 0.43% Ni
GRRRC22		30	38	8m at 0.08% Co and 0.08% Ni
<b>GRRRC24</b>		<b>35</b>	<b>46</b>	<b>11m at 0.21% Co and 0.53% Ni</b>

*All reported widths are drill hole intersection widths and have not been converted to true width. True width is unknown at this time. Composites are of intersections Co >0.05% (including >0.08% Co)*



## Outcomes of Cobalt Drilling Programme

Drilling has confirmed that the Project has well developed lateritic cobalt and nickel mineralisation at the four Prospects drilled, and each is open for expansion.

- The Rocket Prospect, which returned the highest grade and thickest intersection, followed-up an earlier diamond drill hole which intersected cobalt mineralisation from a depth of 106m back towards surface.
- Leo's Dam is sparsely drilled with widely spaced aircore drill traverses, predominantly drilled by Pioneer when exploring for nickel sulphides, returning lateritic cobalt development over a strike length of 1.5 km.
- Anomaly 13 is over 600m long and open to extensions in both north and south directions.
- Anomaly 14 is the prospect best defined by shallow aircore and RAB drilling. The prospect is over 600m long with multiple mineralised trends apparent, which are open for extensions in both north and south directions.

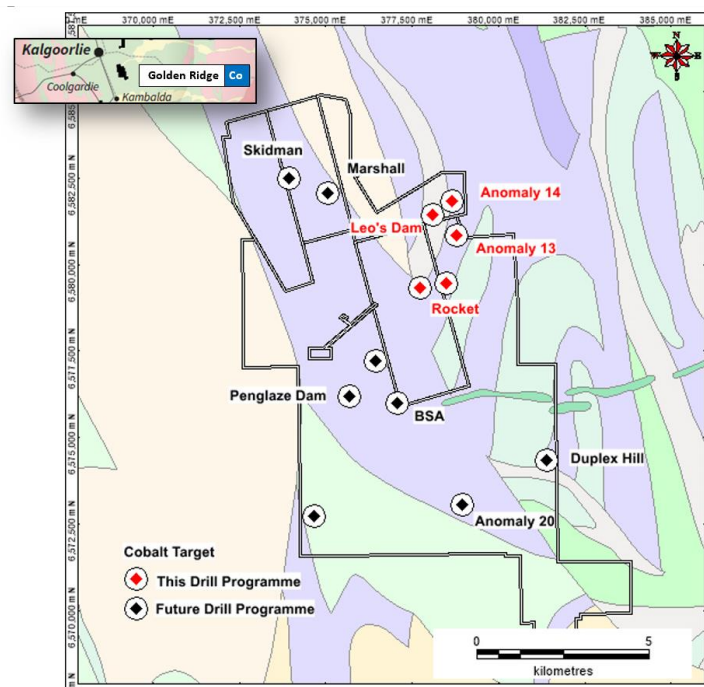
## A Single 'Proof of Concept' Hole Intersected Nickel Sulphides at Leo's Dam

- The result included:
  - **GRRC38: 22m at 1.02% Ni and 475ppm Cu from 202m**

Including:

- **3m at 1.27% Ni and 526 ppm Cu from 202m**
- **4m at 1.23% Ni and 503 ppm Cu from 213m**
- **4m at 1.08% Ni and 616 ppm Cu from 220m**

The Company's working model for the Project invokes a geological dome structure, with nickel sulphide mineralisation occurring at the base of ultramafic rocks which overlay a folded mafic rock core. The nickel mineralisation reported here conforms with this model and strongly influences the placement of future drill holes that are to target nickel sulphides. (ASX announcement, 25 January 2018).



**Figure 5: Golden Ridge Project Tenements and Prospects. The Project is located 26km SE of Kalgoorlie, W.A.**

## OUTLOOK

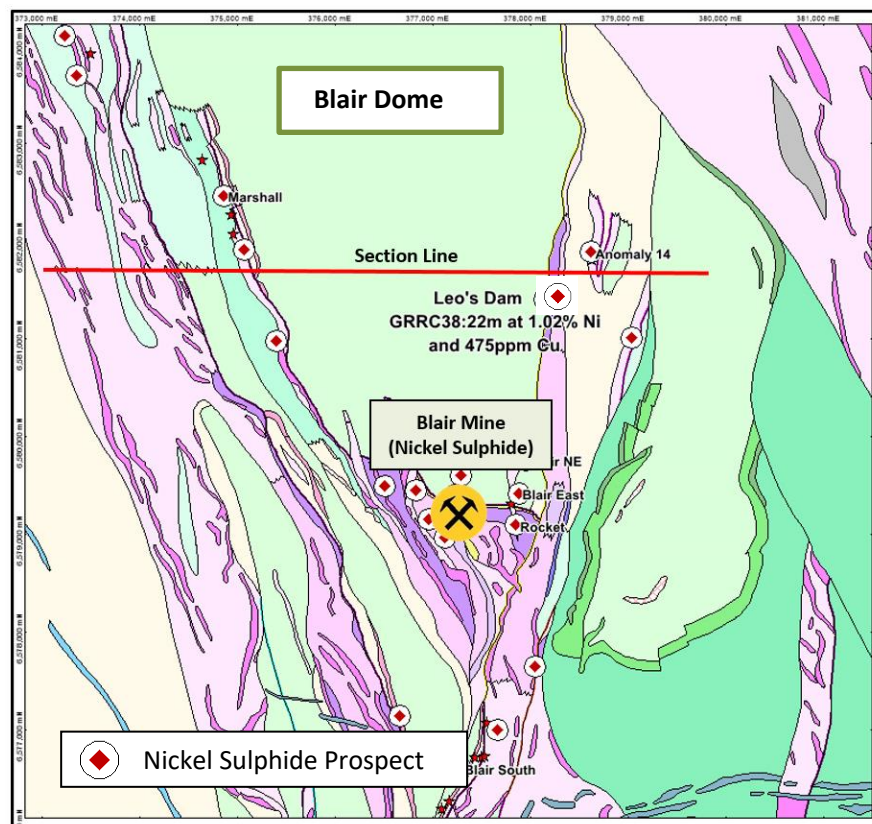
Drilling during 2018 has validated the observation that the Golden Ridge Project has a well-developed lateritic cobalt mineralisation mantle at the four Prospects drilled. Earlier drilling indicates that cobalt mineralisation is widespread throughout the Project, and future work will be directed towards defining resources.

The next steps in the Project's **cobalt strategy** include:

- Detailed analysis of geochemical and geophysical datasets, and integrating drilling to generate an estimated Exploration Target.
- Precise RC drilling to generate an Inferred Resource.
- Bulk sampling for bench-scale extractive metallurgy which will focus initially on an ore concentration technique.

The **nickel sulphide** discovery at the Leo's Dam Prospect has reinforced the Blair Dome exploration model and its prospectivity to host significant nickel sulphide deposits, both near-mine and regionally. Further work on the project's nickel sulphide targets will include;

- Further drilling along the fertile prospective near-mine contact: Nickel sulphides form in specific geological environments and drilling coupled with litho-geochemistry is used to identify rock units that are prospective. Early diamond core drilling provides the greatest geological information;
- Petrography: Samples have been submitted for description, to better understand the genesis of the nickel mineralisation;
- Down-hole Electromagnetic (EM) surveys are used to identify conductive rock units (which may include nickel sulphides) adjacent to a prospective drill hole.



**Figure 6: Plan view of the Blair Dome showing the Blair Nickel Sulphide Mine and the location of Leo's Dam and drill hole GRR38, which returned 22m at 1.02% Ni and 475ppm Cu from 202m.**

### ***Pioneer 80%. Northern Star Resources Limited 20%, with an option to earn up to 75%***

The Acra Gold Project covers an area of 340 km<sup>2</sup> and is located 60 kilometres north east of Kalgoorlie, WA (Figure 1). The Project has historically been explored for nickel, however Pioneer's exploration focus turned to gold, and was successful in identifying a 20km long gold target zone.

In October 2016, the Company entered into a Joint Venture Agreement with gold miner Northern Star Resources Limited (ASX: NST) under which Northern Star may earn up to a 75% interest in the Project.

### ***DRILLING COMPLETED BY THE JOINT VENTURE***

Exploration activity in the March 2018 quarter saw the completion of 552m of diamond drilling at Jubilee Gift and 5,672m of aircore drilling at Camel Dam.

#### **Jubilee Gift**

- 3 HQ diamond holes completed for a total of 576.8m.
- Drilling targeted two mineralised structures, orientated northwest-southeast and north-south respectively.
- 3 gold anomalies have been recognised.
- Gold anomalism is associated with quartz-carbonate-sulphide veins within alteration halos on the contact of basalt and ultramafic units.

#### **Camel Dam**

- A programme of 128 aircore holes completed for a total of 5,672m.
- Samples are currently being analysed, with assays due early in the next quarter.
- Drilling intersected weakly altered, chloritic-carbonate basalts, dolerites and felsic to intermediate volcanics intercalated with hematite-albite altered felsic porphyry and shales.

#### **Regional: Seismic Processing**

- Seismic data recorded as part of a WASM student project was received for E27/579 and E27/438.
- Imagery indicates discontinuities consistent with the mapped geological contacts, suggesting that the survey has detected lithological changes and the Emu Fault, the dominant structure of the Acra system.
- Commercial re-processing is underway by HiSeis for two available seismic datasets.

### **OUTLOOK**

- RC and diamond drilling at Jubilee Gift, Camelia South, Evelyn Gladys and Kalpini South Prospects.
- A review of untested Jubilee Trend end of hole drilling geochemistry is underway.
- Regional mapping targeting the Emu Fault re-straining bend concept.
- Targeting for prospects east of North Brilliant, Wellington and other Emu Fault-related prospects.

## **KANGAN (Pilbara) Gold Project**

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### **Pioneer 100%, Gold, Lithium.**

The Kangan Project is located 80 km south of Port Hedland (see Figure 1) in the emerging western Pilbara gold precinct of WA where the presence of conglomerate-hosted gold is proposed.

One additional tenement was pegged and won in a subsequent ballot, increasing the Company's tenement holding to two granted exploration licences and two exploration licence applications (E47/3318-1, E47/3321-1, E(A)45/4948 and E(A)47/3945 respectively) covering an area of 336km<sup>2</sup>. The Eastern-most tenement application abuts the Wodgina Lithium Mine tenements.

### **OUTLOOK**

Pioneer plans to conduct further follow up reconnaissance field work, including metal detecting, mapping, sampling and prospecting. One of the aims of this work will be to establish the host rock/s of the Project's in-situ gold mineralisation.

## **Other Western Australian Projects**

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### **Bogardi Lithium Clay Project**

#### **Pioneer 90%. Lithium.**

The Bogardi Project is a conceptual target for a large unconventional lithium-in-clay deposit. Globally, lithium-in-clay mineralisation forms a spectrum of deposits ranging from the salars in South America (eg Salar de Atacama, Chile) through to the hectorite-dominant-clays (smectite) in Mexico (eg Sonora) and Nevada (eg King Valley) though to the sedimentary basins in Serbia (eg Piskanja and Jadar). Currently there are no analogues of lithium-in-clay mineral deposits in Western Australian.

The Bogardi Project targets part of the Byro sub-basin which is filled with siltstones, sandstones, shales and conglomerate. Ground preparation allows hydrothermal fluids generated from the Darling fault extension to migrate through, leach and precipitate lithium within the sedimentary pile. This is now manifested by a distinct, coherent surface geochemistry Li anomaly (with supporting Be, P, Nb, Ta and Rb) which extends for over 25 km, based on data generated by GSWA (Sanders et al 1998).

### **OUTLOOK**

The Company was granted co-funding under the WA state government's Exploration Incentive Scheme (EIS) for funds to test this prospect.

Yours faithfully



Managing Director

### **For further information please contact:**

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## **Competent Person**

The information in this report that relates to Exploration Results is based on information supplied to and compiled by Mr David Crook. Mr Crook is a full-time employee of Pioneer Resources Limited. Mr Crook is a member of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists and has sufficient experience which is relevant to the exploration processes undertaken to qualify as a Competent Person as defined in the 2012 Editions of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Mr Crook consents to the inclusion of the matters presented in the announcement in the form and context in which they appear.

## **Caution Regarding Forward Looking Information**

This document may contain forward looking statements concerning the projects owned by the Company. Statements concerning mining reserves and resources may also be deemed to be forward looking statements in that they involve estimates based on specific assumptions.

Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward-looking statements as a result of a variety of risks, uncertainties and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes.

Forward looking statements in this document are based on the Company's beliefs, opinions and estimates of the Company as of the dates the forward-looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

There can be no assurance that the Company's plans for development of its mineral properties will proceed as currently expected. There can also be no assurance that the Company will be able to confirm the presence of additional mineral deposits, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of the Company's mineral properties. Circumstances or management's estimates or opinions could change. The reader is cautioned not to place undue reliance on forward-looking statements.

## **Glossary**

For descriptions of any technical terms that are not described within the report, the reader is directed to various internet sources such as Wikipedia ([www.wikipedia.org](http://www.wikipedia.org)) or Mindat ([www.mindat.org](http://www.mindat.org))

## **References**

- Acra: Refer Company's announcements to ASX dated 16 April 2014, 22 October 2014, 26 June 2015, 6 October, 2015, 18 December, 2105, 15 February 2016, 21 October 2016
- Golden Ridge: Refer Company's announcements to ASX dated 18 November 2013 (Blair Resource Estimate), May 2014, 27 January 2015, 18 May 2015, 20 July 2015, 13 April 2017, 21 November 2017, 24 January 2018, 25 January 2018
- Mavis Lake and Raleigh: Refer Company's announcements to ASX dated 15 March 2016, 20 April 2016, 13 July 2016, 26 July 2016, 12 October 2016, 2 December 2016, 7, 8 February 2017, 10 March 2017, 11 April 2017, 23 January 2018, 16 February 2018, 19 February 2018, 6 April 2018
- Pioneer Dome: Refer Company's announcements to ASX 19 May 2016, 27 July 2016, 28 August 2016, 1 September 2016, 4 October 2016, 17 October 2016, 14 November 2016, 2 December 2016, 13 December 2016, 13 January 2017, 24 January 2017, 23 February 2017, 20 March 2017, 22 March 2017, 20 May 2017, 9 October 2017, 30 October 2017, 2 November 2017, 17 January 2018, 21 February 2018, 19 April 2018
- Kangan: Refer Company announcement to ASX dated 6 October 2017, 24 October 2017.

The Company is not aware of any new information or data that materially affects the information included in this Report



**APPENDIX 1: TENEMENTS**

<b>Tenement Schedule</b> <b>(Consolidated Basis)</b>		
<b>Tenement</b>	<b>Holder</b>	<b>Notes</b>
<b>Golden Ridge Nickel Project Located 30km SE of Kalgoorlie, WA</b>		
M26/220	Golden Ridge North Kambalda Pty Ltd	1
M26/222	Golden Ridge North Kambalda Pty Ltd	1, 11
M26/284	Golden Ridge North Kambalda Pty Ltd	1, 11
M26/285	Golden Ridge North Kambalda Pty Ltd	1, 11
L26/272	Golden Ridge North Kambalda Pty Ltd	1
E26/186	Golden Ridge North Kambalda Pty Ltd	1
E26/211	Golden Ridge North Kambalda Pty Ltd	1
<b>Fairwater Nickel Project Located 220km SE of Kalgoorlie, WA</b>		
E63/1665	Pioneer Resources Limited / National Minerals Pty Ltd	10
E63/1714	Pioneer Resources Limited / National Minerals Pty Ltd	10
<b>Pioneer Dome Project Located 133km SSE of Kalgoorlie, WA</b>		
E15/1515	Pioneer Resources Limited	
E15/1522	Pioneer Resources Limited	
E63/1669	Pioneer Resources Limited	
E63/1782	Pioneer Resources Limited	
E63/1783	Pioneer Resources Limited	
E63/1785	Pioneer Resources Limited	
E63/1825	Pioneer Resources Limited	
M63/665	Pioneer Resources Limited	
L63/77	Pioneer Resources Limited	
<b>Phillips River Lithium Project Located 50km NW of Esperance, WA.</b>		
E74/581	Pioneer Resources Limited	
<b>Bogadi Lithium Project Located 240km SE of Carnarvon, WA</b>		
E09/2180	Pioneer Resources Limited / Milford Resources Pty Ltd	12
<b>Kangan Lithium Project Located 80km S of Port Hedland, (Wodgina) WA</b>		
E45/4948	Pioneer Resources Limited	
E47/3318-I	FMG Pilbara Pty Ltd	17
E47/3321-I	FMG Pilbara Pty Ltd	17
E47/3945	Pioneer Resources Limited	
<b>Donnelly Lithium Project Located 15km SW of Greenbushes, WA</b>		
E70/4826	Paul Winston Askins	14
E70/4829	Paul Winston Askins	14
<b>Lithium Regional Projects, Located in WA</b>		
E30/487	Pioneer Resources Limited	
E63/1796	Pioneer Resources Limited	
<b>Balagundi</b>		
E27/558	Milford Resources Pty Ltd	18

Tenement	Holder	Notes
<b>Mavis Lake and Raleigh Lithium Projects, Located 10km and 60km East of Dryden, Ontario, Canada</b>		
4208712	International Lithium Corporation	15
4208713	International Lithium Corporation	15
4208714	International Lithium Corporation	15
4218370	International Lithium Corporation	15
4218371	International Lithium Corporation	15
4242501	International Lithium Corporation	15
4242502	International Lithium Corporation	15
4242505	International Lithium Corporation	15
4245250	International Lithium Corporation	15
4274924	International Lithium Corporation	15
4274925	International Lithium Corporation	15
4274926	International Lithium Corporation	15
4274927	International Lithium Corporation	15
4251131	International Lithium Corporation	15
4251132	International Lithium Corporation	15
4251133	International Lithium Corporation	15
4251134	International Lithium Corporation	15
4251135	International Lithium Corporation	15
4251136	International Lithium Corporation	15
4251137	International Lithium Corporation	15
4251138	International Lithium Corporation	15
4251139	International Lithium Corporation	15
4251140	International Lithium Corporation	15
K489140	International Lithium Corporation	15
K498288	International Lithium Corporation	15
K498289	International Lithium Corporation	15
K498290	International Lithium Corporation	15
K498292	International Lithium Corporation	15

Tenement	Holder	Notes
<b>Acra Gold Project Located 60km NE of Kalgoorlie, WA</b>		
E27/278	Pioneer Resources Limited	2, 8
E27/438	Pioneer Resources Limited	8
E27/491	Pioneer Resources Limited	8
E27/520	Pioneer Resources Limited	2, 8
E27/548	Pioneer Resources Limited	8
E27/579	Pioneer Resources Limited	8
E28/1746	Pioneer Resources Limited	2, 8
E28/2483	Pioneer Resources Limited	8
<b>Wattle Dam Nickel Project Located 65km S of Kalgoorlie, WA</b>		
M15/1101	Maximus Resources Limited	3, 5
M15/1263	Maximus Resources Limited	3, 5
M15/1264	Maximus Resources Limited	3, 5
M15/1323	Maximus Resources Limited	3, 5
M15/1338	Maximus Resources Limited	3, 5
M15/1769	Maximus Resources Limited	3, 5
M15/1770	Maximus Resources Limited	3, 5
M15/1771	Maximus Resources Limited	3, 5

M15/1772	Maximus Resources Limited	3, 5
M15/1773	Maximus Resources Limited	3, 5
<b>Tenement</b>	<b>Holder</b>	<b>Notes</b>
<b>Larkinville Lithium, Nickel Project Located 75km S of Kalgoorlie, WA</b>		
M15/1449	Maximus Resources Limited / Pioneer Resources Limited	6, 7
P15/5912	Maximus Resources Limited / Pioneer Resources Limited	6, 7
<b>Maggie Hays Hill JV, Located 140km SE of Southern Cross</b>		
E63/1784	Poseidon Nickel Limited / Pioneer Resources Ltd	16
<b>Ravensthorpe Copper-Gold Project Located 340km SW of Kalgoorlie, WA</b>		
E74/311	ACH Minerals Pty Limited	9
E74/379-I	ACH Minerals Pty Limited	9
E74/392	ACH Minerals Pty Limited	9
E74/399	ACH Minerals Pty Limited	9
E74/406	ACH Minerals Pty Limited	9
E74/486	ACH Minerals Pty Limited	9
E74/537	ACH Minerals Pty Limited	9
E74/558	ACH Minerals Pty Limited	9
E74/559	ACH Minerals Pty Limited	9
E74/560	ACH Minerals Pty Limited	9
M74/163	ACH Minerals Pty Limited	9
P74/349	ACH Minerals Pty Limited	9

<b>Notes:</b>	
1	Golden Ridge North Kambalda P/L is a wholly-owned subsidiary of Pioneer
2	Heron Resources Limited retains nickel laterite ore
3	Heron Resources Limited retains pre-emptive right to purchase Nickel Laterite Ore
4	Western Copper Pty Limited is a wholly-owned subsidiary of Pioneer
5	Wattle Dam JV Agreement: Title, Mineral Rights held by Maximus Resources Limited, except nickel. Pioneer 20% free carried interest in NiS minerals
6	Larkinville JV Agreement: Maximus Resources Limited 75% in Gold and Tantalite, Pioneer 25% free carried interest
7	Larkinville JV Agreement: Maximus has an 80% interest in nickel rights, Pioneer 20% free carried interest
8	Acra JV Agreement Northern Star Resources Limited 20% interest and may earn additional 55%. Pioneer 25% free carried interest
9	Ravensthorpe: Title and rights to all minerals held by ACH Minerals Pty Limited. Pioneer 1.5% NSR
10	Fairwater JV Agreement: Pioneer 75% Interest, National Minerals P/L 25% free carried interest
11	Gold royalty held by Morgan Stanley Finance Pty Limited and Morgan Stanley Capital Group Inc.
12	Milford Resources Pty Limited 10% free carried interest
13	1% gross royalty held by Walter Scott Wilson
14	Subject to an Option Agreement with P Askins
15	Subject to an earn-in Joint Venture with International Lithium Corp.
16	Maggie Hays Lake JV Agreement: Poseidon Nickel Limited 80%, Pioneer 20% & free carried interest to commencement of mining.
17	FMG Pilbara Pty Ltd 1.5% NSR royalty
18	Pioneer Beneficial Holder. Transfer being processed.

## 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

**PIONEER RESOURCES LIMITED**

#### ABN

#### Quarter ended ("current quarter")

**44 103 423 981**

**31 March 2018**

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
<b>1</b>	<b>Cash flows from operating activities</b>		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	(1,214)	(3,123)
	(b) development	-	-
	(c) production	-	-
	(d) unallocated staff costs	(195)	(343)
	(e) administration and corporate costs	(288)	(1,003)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	22	34
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Research and development refunds	-	329
1.8	Other (provide details if material)	-	-
<b>1.9</b>	<b>Net cash from / (used in) operating activities</b>	<b>(1,675)</b>	<b>(4,106)</b>

<b>2</b>	<b>Cash flows from investing activities</b>		
2.1	Payments to acquire:		
	(a) property, plant and equipment	(3)	(4)
	(b) tenements (see item 10)	-	-
	(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</b>	<b>Net cash from / (used in) investing activities</b>	<b>(3)</b>	<b>(4)</b>

<b>3</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of shares	-	5,766
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	-	(134)
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</b>	<b>Net cash from / (used in) financing activities</b>	<b>-</b>	<b>5,632</b>

<b>4</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>	(1,678)	1,522
4.1	<b>Cash and cash equivalents at beginning of period</b>	5,441	2,241
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,675)	(4,106)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(3)	(4)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	5,632
4.5	Effect of movement in exchange rates on cash held	-	-
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>3,763</b>	<b>3,763</b>

<b>5</b>	<b>Reconciliation of cash and cash equivalents</b>	<b>Current quarter</b>	<b>Previous quarter</b>
	at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>\$A'000</b>	<b>\$A'000</b>
5.1	Bank balances	162	141
5.2	Term deposits	3,601	5,300
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>3,763</b>	<b>5,441</b>



<b>6</b>	<b>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	121
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	

Items in 6.1: Managing Director and Non-Executive Directors' remuneration - \$121k.

<b>7</b>	<b>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	

<b>8</b>	<b>Financing facilities available</b>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
	<i>Add notes as necessary for an understanding of the position</i>		
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.		

<b>9</b>	<b>Estimated cash outflows for next quarter</b>	<b>\$A'000</b>
9.1	Exploration and evaluation	300
9.2	Development	-
9.3	Production*	-
9.4	Staff costs	180
9.5	Administration and corporate costs	210

9.6	Other (provide details if material)	
9.7	<b>Total estimated cash outflows*</b>	<b>690</b>

\* Should a formal decision to mine be made, the Company forecasts approximately \$2.0M in payments for production costs in the September quarter.

10	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced				
		E25/381 Juglah Dome (WA)	Registered holder	100%	0%
		E25/514 Juglah Dome (WA)	Registered holder	100%	0%
10.2	Interests in mining tenements and petroleum tenements acquired or increased				

#### 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: 30 April 2018

(Company Secretary)

Print name: Timothy Spencer

## 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 either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.