Our Vision

To be a recognised preferred source of battery metals

- **Pioneer Dome:** Continue to explore and monetise LCT minerals, building on the success of the Sinclair Mine

- **Golden Ridge:** Transform into a premier source of cobalt & nickel
Presentation Coverage

Pioneer Resources Limited
- Corporate Overview
- Key Asset Overview
- LCT Development and Sinclair Mine

Golden Ridge Project
- Cobalt Strategy
- Targets and Results
- Plans and budget (use of funds)
- Nickel Sulphide Strategy
## Corporate Overview

### Capital Structure

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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<tbody>
<tr>
<td>Share Price</td>
<td>$0.02</td>
</tr>
<tr>
<td>Shares Outstanding</td>
<td>1,454M</td>
</tr>
<tr>
<td>Market Capitalisation</td>
<td>$29M</td>
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<tr>
<td>Cash (approx. 31/08/2018)</td>
<td>$8.2M</td>
</tr>
<tr>
<td>Debt (Cabot Offtake advance)</td>
<td>$6.6M</td>
</tr>
<tr>
<td>Options Outstanding (unlisted)</td>
<td>6.7M</td>
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</tbody>
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### Board of Directors

- **Craig McGown**: Non-Executive Chairman
- **David Crook**: Managing Director
- **Allan Trench**: Non-Executive Director
- **Wayne Spilsbury**: Non-Executive Director
- **Tim Spencer**: CFO/Company Secretary
## Key Assets

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Commodity</th>
<th>Ownership</th>
<th>Status</th>
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<tbody>
<tr>
<td>Pioneer Dome</td>
<td>Eastern Goldfields</td>
<td>Caesium</td>
<td>100%</td>
<td>Commenced Sinclair Mine (LCT minerals)</td>
</tr>
<tr>
<td>Pioneer Dome</td>
<td>Eastern Goldfields</td>
<td>Lithium, Tantalum</td>
<td>100%</td>
<td>Widespread LCT pegmatite targets</td>
</tr>
<tr>
<td>Golden Ridge</td>
<td>Eastern Goldfields</td>
<td>Cobalt/NiS</td>
<td>100%</td>
<td>Advanced exploration for cobalt &amp; nickel</td>
</tr>
<tr>
<td>Mavis</td>
<td>Ontario</td>
<td>Lithium</td>
<td>Earning 80%</td>
<td>Spodumene intersected in Pioneer Drilling</td>
</tr>
<tr>
<td>Acra</td>
<td>Kalgoorlie</td>
<td>Gold</td>
<td>80%</td>
<td>NST farming-in to project (up to 75%)</td>
</tr>
</tbody>
</table>
Pioneer’s Business Strategy

- **Cash from Sinclair Zone Caesium Mine – 2018-2019**
- **Commercialise K Feldspar, lepidolite, petalite, silica**
- **Drill for further discoveries**
  - Drill Lithium (Spodumene and Lepidolite) Targets
  - Watch for Caesium vectors and drill for Pollucite
- **Concurrently…..and ongoing**
  - Golden Ridge Co: - Drilling for Cobalt resources
  - Gloden Ridge Ni$: - Drilling concise Nickel Sulphide targets
Caesium is a Heavy Alkali Metal
Caesium and Pollucite: What is It

- Very rare in any volume: Known at approx 110 localities worldwide (but range in size from fist-size to small pods)
  - Two (now three) ‘commercial-sized’ pollucite deposits:
    - Tanco, Canada and
    - Bikita, Zimbabwe
    - Sinclair, Western Australia
- forms in the highly evolved core zone of LCT pegmatites
- co-exists with petalite, silica and lepidolite (lithium mica)
Most goes into Caesium Formate (CsFm)

- CsFm is a drilling fluid used in high temperature/high pressure oil and gas drilling
- The two main producers of Caesium are:
  - Tanco Mine (Cabot, Canada): CsFm business
  - Bikita Mine (Zimbabwe) Cs chemical market
- CABOT Specialty Fluids:
  - 2010-2014 (5 years) EBITDA averages US$37 million, or $312 million between 2004 and 2016
  - CsFm LEASED to oil companies including Shell, Total, Statoil, ExxonMobil and BP, used in 30 wells per year (2008-2009)
- PIONEER ENTERS BINDING OFFTAKE AND FUNDING AGREEMENT WITH CABOT CORPORATION FOR SINCLAIR ZONE CAESIUM PROJECT
  - Includes US$4.8 million financing arrangement to fully fund mining operations at the Sinclair Mine
Sinclair Mine - two stage open pit

• **Stage 1** (Underway – 4 months mining activity): *Pollucite (caesium) sold to Cabot Corp with Potassium Feldspar and lithium minerals stockpiled and marketed*
Sinclair Mine - two stage open pit

- **Stage 1** (Underway – 4 months mining activity): *Pollucite (caesium)* sold to *Cabot Corp* with Potassium Feldspar and lithium minerals stockpiled and marketed

- **Stage 2** (Proposed 2019 – 6 months mining activity): *Cut-back of pit to expose large potassium feldspar and remaining lithium mineral resources*
These are called ‘Complex Pegmatites’ with good reason

A-Grade Microcline
Sanitary Ware

Hi Rubidium Microcline
Spark Plugs
Mono-Mineralic Zoned Pegmatite akin to Tanco

**Wall zone**
- Microcline $(K,Na)[AlSi_3O_4]$
- Albite $\text{Clevelandite}$

**Intermediate Zone**
- Perthite $\text{Albite Clevelandite}$
- Petalite $\text{Li[AlSi}_4\text{O}_{10}]$

**Highly Fractionated Core**
- Pollucite $\text{CsAlSi}_2\text{O}_6\cdot x\text{H}_2\text{O}$
- Lepidolite $\text{K}_2(\text{Li,Al})_{5-6}[\text{Si}_{6-7}\text{Al}_2\text{O}_{20}](\text{OH,F})_4$
- Silica $\text{Si}_2\text{O}_3$
Future Sinclair Pegmatite Work

- Continue drilling strike extensions to Sinclair Pegmatite – Mineralisation is ‘open’
  - Pegmatite mapped over a 4 kilometre strike length
- Initialise systematic Sinclair Pegmatite ‘down-dip’ drilling. Very few holes below 100m to date.
- Initial drilling at PEG007 (evidence of differentiation – K feldspar outcropping)
- 3,200m RC drilling planned.
Pioneer Dome – just getting started

- **Caesium (Pollucite)**
  One of the few significant Pollucite deposition environments known in the world – so why not more?

- **Potassium Feldspar**
  Australia’s largest, and tonnages have market significance

- **Lithium (Spodumene / Petalite)**
  intersected in drilling: Conventional lithium exploration model to be followed

- **Lithium (Lepidolite)** widespread
  Much of the Chinese lithium chemicals market involves lepidolite feedstock
Located 40km from Kalgoorlie, a world class mining centre

Large drilling database from 1960s to present.

Detailed review identified 12 cobalt prospects,

- 4 drilled (proof of concept) during 2017 returning thick, high grade intersections of cobalt mineralisation

105 km² tenement area. Key cobalt targets on granted mining leases.

10,000m target expansion aircore drilling and 3,000m RC drilling planned for December Quarter

On-going resource definition RC drilling throughout 2019
Golden Ridge Cobalt Grades compare well with other advancing projects

Pioneer’s 2017 Results

ROCKET
- GRRC34: 31m at 0.15% Co from 43m
- GRRC37: 6m at 0.57% Co from 22m

LEO’S DAM
- GRRC27: 22m at 0.18% Co from 38m
- GRRC33: 19m at 0.22% Co from 34m

ANOMALY 13
- GRRC30: 16m at 0.17% Co from 42m

ANOMALY 14
- GRRC18: 8m at 0.17% Co from 34m
- GRRC19: 17m at 0.11% Co from 34m
- GRRC24: 11m at 0.21% Co from 35m

Comparable Cobalt Projects

<table>
<thead>
<tr>
<th>Company</th>
<th>Tonnes (mt)</th>
<th>Grade* Co</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ardea ($82m)</td>
<td>805</td>
<td>0.05 %</td>
<td>Kalgoorlie, WA</td>
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<tr>
<td>CleanTeq ($410m)</td>
<td>109</td>
<td>0.10 %</td>
<td>Syerston, NSW</td>
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<tr>
<td>GME ($45m)</td>
<td>108</td>
<td>0.06 %</td>
<td>Leonora, WA</td>
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<tr>
<td>Conico/Barra ($22)</td>
<td>32</td>
<td>0.12 %</td>
<td>Norseman, WA</td>
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<tr>
<td>Platina</td>
<td>9</td>
<td>0.15 %</td>
<td>Owendale, NSW</td>
</tr>
<tr>
<td>Augur</td>
<td>16</td>
<td>0.05 %</td>
<td>Homeville, NSW</td>
</tr>
<tr>
<td>Cougar</td>
<td>10</td>
<td>0.07 %</td>
<td>Leonora, WA</td>
</tr>
<tr>
<td>Australian ($212m)</td>
<td>89</td>
<td>0.11 %</td>
<td>Sconi, QLD</td>
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Refer respective Company websites for details
Grades appropriately rounded from reported Co grade
Drilling Results Drive Exploration Roadmap
Golden Ridge Cobalt Project Drilling Roadmap

LEO'S DAM (1.6 KM TARGET)
- GRRC24: 11m at 0.21% Co from 35m
- GOR1107: 8m at 0.20% Co from 48m
- GRA0233: 10m at 0.15% Co from 38m
- GRA0275: 11m at 0.12% Co from 56m
- GRRC27: 17m at 0.21% Co from 38m
- GRA0257: 10m at 0.11% Co from 49m
- GRRC33: 16m at 0.25% Co from 34m
- GRA0227: 8m at 0.18% Co from 45m

ANOMALY 14 (1 KM TARGET)
- GRRC19: 6m at 0.22% Co from 34m
- GOR0388: 12m at 0.14% Co from 36m
- GOR0405: 10m at 0.17% Co from 40m
- GOR0409: 6m at 0.28% Co from 18m
- GOR0413: 8m at 0.19% Co from 42m
- GOR0414: 20m at 0.13% Co from 40m
- GOR0418: 18m at 0.19% Co from 42m

WESTERN TREND (1.7 KM UNDRILLED)

ANOMALY 13 (1 KM TARGET)
- GOR0451: 10m at 0.26% Co from 48m
- GRRC30: 9m at 0.27% Co from 42m
- GOR0460: 16m at 0.15% Co from 16m

EASTERN TREND (2 KM UNDRILLED)
- GRRC37: 5m at 0.67% Co from 22m

ROCKET (0.5 KM TARGET)
- BLD053: 12m at 0.27% Co from 106m
- GRRC34: 29m at 0.16% Co from 45m
- GRAC906: 10m at 0.26% Co from 34m

Wall Rocks
Cobalt Mineralisation
Yellow: Undrilled Targets
Leapfrog 3D Model: Directs Drilling at Anomaly 14

Oblique View of Anomaly 14 showing cobalt mineralisation

GOR0418: 18m at 0.19% Co from 42m
GOR0414: 20m at 0.13% Co from 40m
GOR0413: 8m at 0.19% Co from 42m
GOR0404: 30m at 0.15% Co from 36m
GOR0413: 8m at 0.19% Co from 42m
GOR0414: 20m at 0.13% Co from 40m
GOR0404: 30m at 0.15% Co from 36m
GRRC19: 6m at 0.22% Co from 34m
GRRC18: 8m at 0.17% Co from 34m
GRRC21: 6m at 0.13% Co from 35m

400m
# Golden Ridge – Work timeline

## Quarterly Work Programme

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<tr>
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<th>Sep-18</th>
<th>Dec-18</th>
<th>Mar-19</th>
<th>Jun-19</th>
<th>Sep-19</th>
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<td>Drilling</td>
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<td>Reverse Circulation 10,000m</td>
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<td>Feasibility</td>
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<td>Infill Drilling</td>
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<td>RC and Diamond On-going</td>
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</table>
Golden Ridge – Blair Dome Nickel Sulphides

- Includes the Blair Nickel Mine which, prior to closing in 2008, produced 1.26Mt at 2.62% Ni
- Total remaining Indicated and Inferred Resources: 222,710t at 2.92% Ni
- Kambalda nickel processing facility is located within 40km
- Project is well serviced by existing infrastructure
- 2017 Nickel Discovery: 22m at 1.1% Ni$ at Leo’s Dam
Blair was a high grade Ni$ mine which extends to a greater depth.
The Blair Dome Ni$ Model highlights over 11km of under-explored UM Basal Contact

Blair Ni$ Mine
- Produced 1.26Mt at 2.67% Ni (32,930t Ni)
- Remnants: 0.22Mt at 2.92% Ni (6,510t Ni)
- Ni$-focussed drilling leads to an updated Blair Dome geological model

Using whole rock geochemistry Ni$ vectors are evident at Marshalls, Leo’s Dam, Blair South and others.
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**Competent Person**

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

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