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Pioneer
RESOURCES LIMITED

Unearthing Australia's First Caesium Deposit
(and other things)

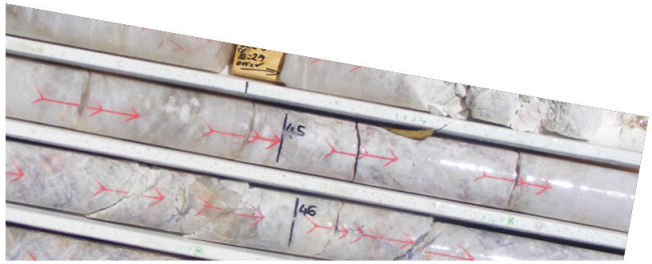
27 Co
55 Cs
3 Li
28 Ni
73 Ta

David Crook, Managing Director

121 Mining Investment

Hong Kong 2018

BOOTH 16



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Corporate Overview

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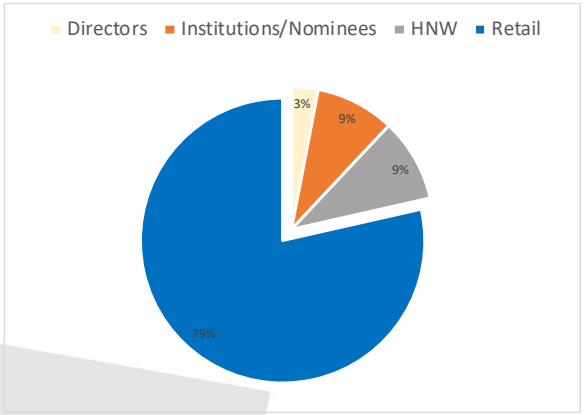
Capital Structure

Share Price	$0.025
Shares Outstanding (m)	1,430
Market Capitalisation	**$35.0**
Cash ($m) (31/03/2018)	$3.6
Debt ($m)	0.0
Options Outstanding (listed/unlisted(m))	44/16

Shareholder Analysis

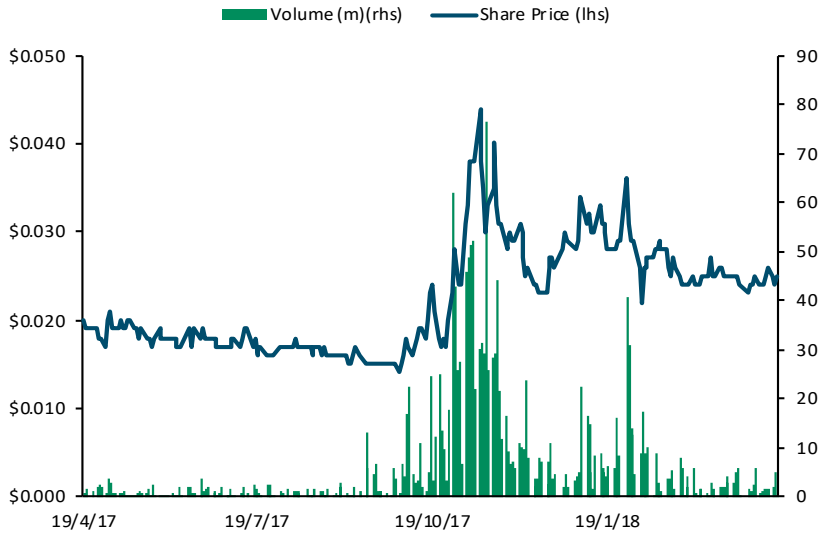


Top 20 Ownership: 21%

Board & Management

Craig McGown	Non-Executive Chairman
David Crook	Managing Director
Allan Trench	Non-Executive Director
Wayne Spilsbury	Non-Executive Director
Timothy Spencer	CFO & Company Secretary

12 Month Share Price chart



Key Assets Along Infrastructure Corridors in WA and Ontario

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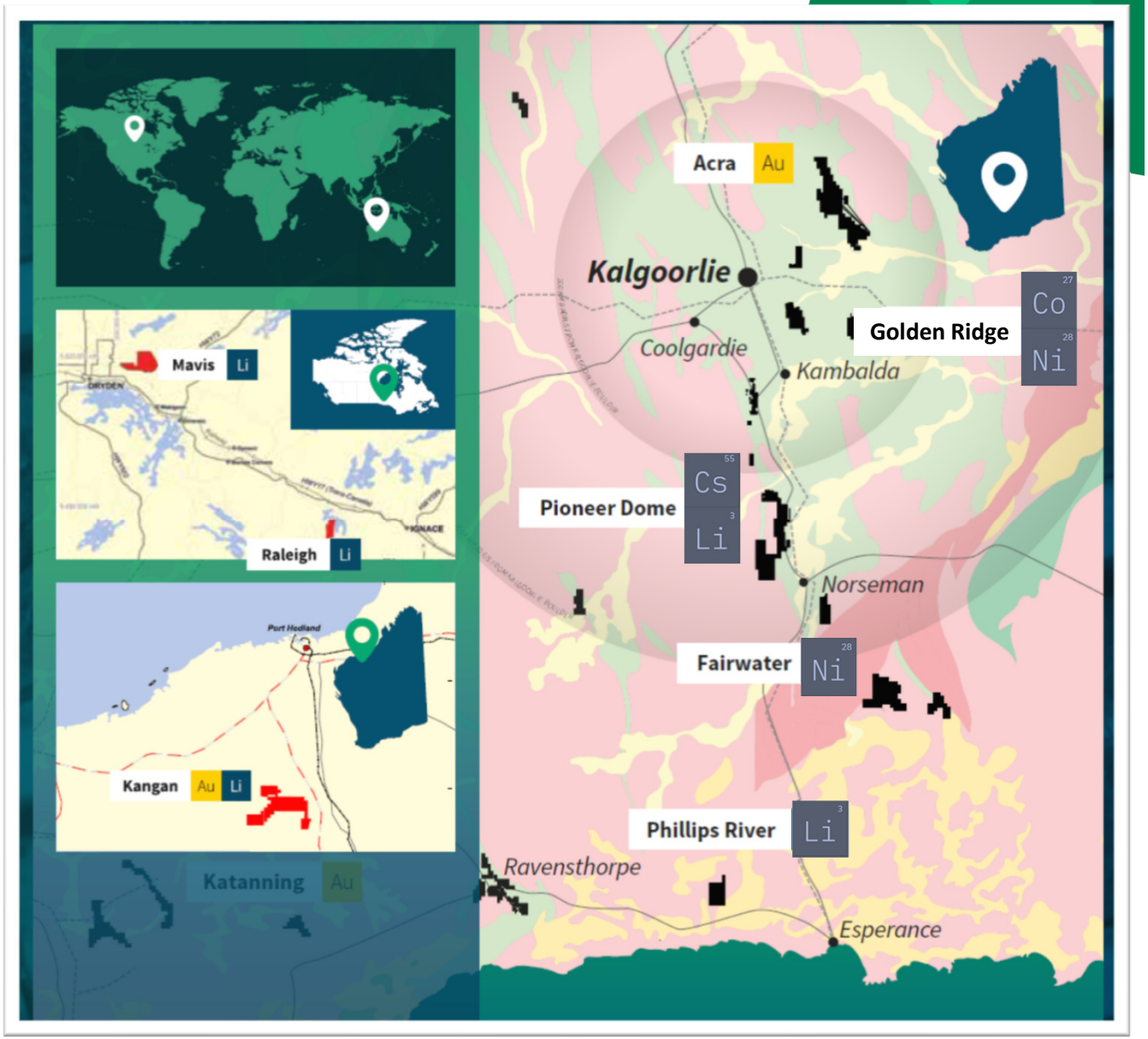
Pioneer Dome
Norseman
Incl. Sinclair Caesium deposit
Golden Ridge
Kalgoorlie
Mavis Lake
Ontario
Kangan
Pilbara



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Sinclair Zone Caesium Deposit Advancing Towards Production

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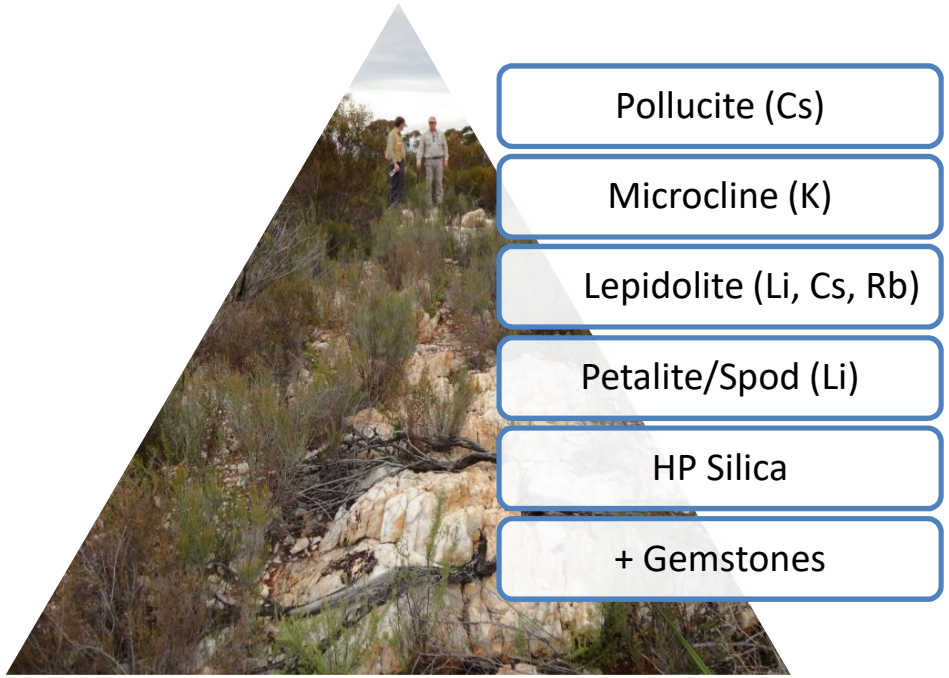
This gives us a list of Saleable Products



- ***Timetable – Aiming for startup July 2018:***
  - ☑ Mining Lease and Miscellaneous Licence: Granted
  - ☑ Project, Safety, Community System: Advanced
  - ☑ Detailed heritage surveys: Completed
  - ☑ Detailed resource drilling finished:
  - Drilling results awaited
    - Final Mine Design
    - Finalise Offtake
    - Final Approvals from DMIRS (Mines Department)
    - Commence Mining

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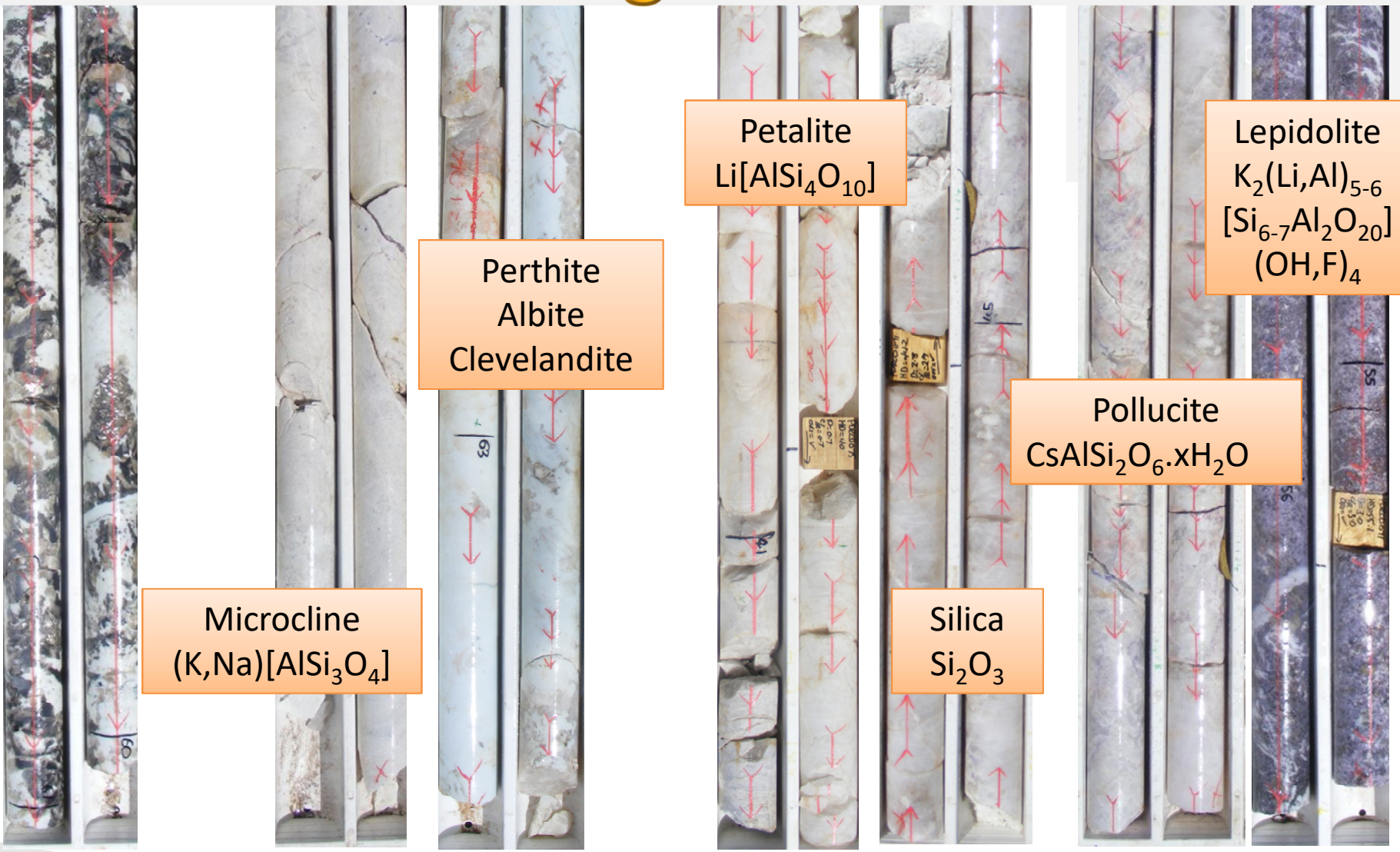
Sinclair Zoned Pegmatite more akin to Tanco



Microcline
$(K,Na)[AlSi_3O_4]$

Perthite
Albite
Clevelandite

Petalite
$Li[AlSi_4O_{10}]$

Silica
Si_2O_3

Pollucite
$CsAlSi_2O_6.xH_2O$

Lepidolite
$K_2(Li,Al)_{5-6}[Si_{6-7}Al_2O_{20}](OH,F)_4$

GP2: GP4: GP6: GP5: GP7: GP8: GP9:

Wall zone

Intermediate Zone

Highly Fractionated Core

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Caesium Is Used to Make Formate For Deep Sea Drilling

- The Caesium mineral “pollucite” is very rare
- The two main producers are:
  - TANCO in Canada,
  - Bikita in Zimbabwe
- Used to make lubricant in high temperature/high pressure oil and gas drilling

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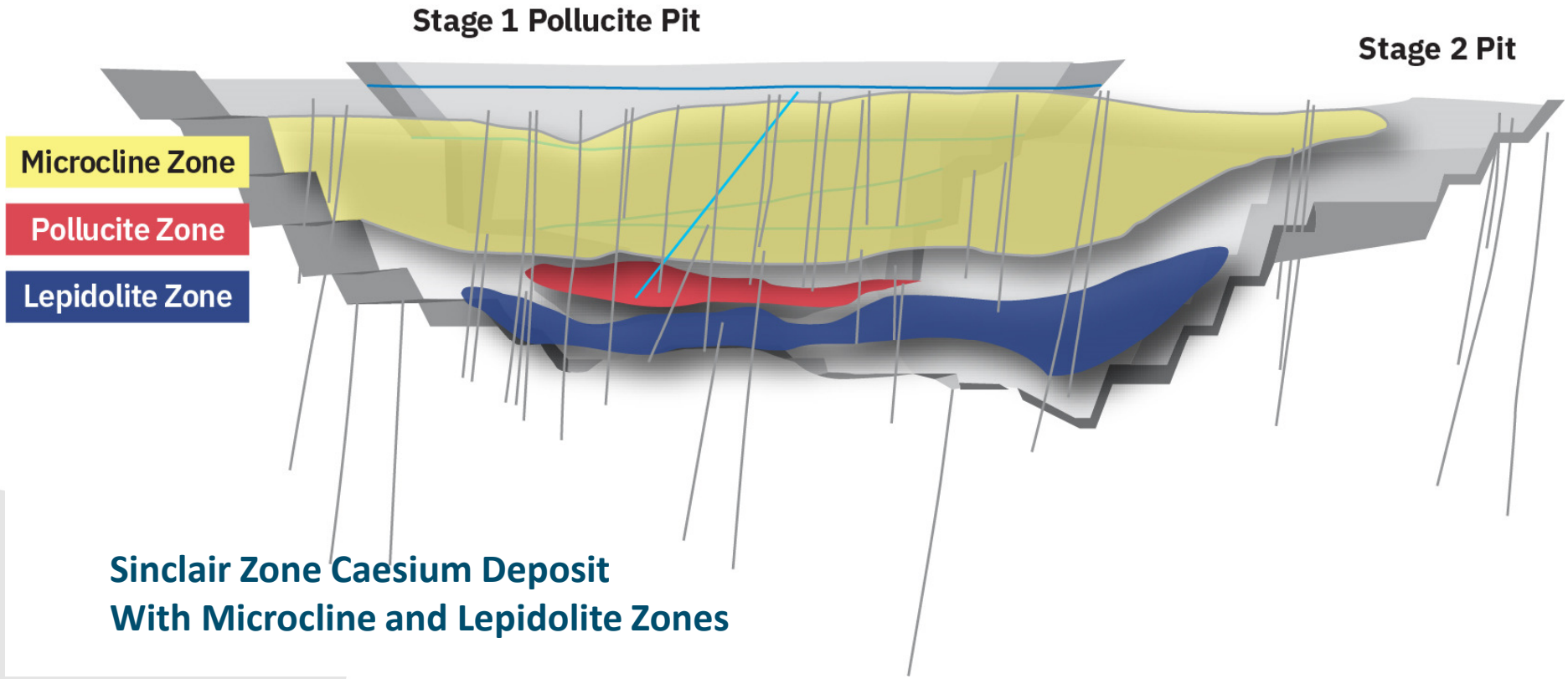
This is what the Sinclair Mine Could Look Like

- ***Discovery in October 2016,***
- Measured Mineral Resource of **10,500t pollucite grading 17.1% Cs_2O**
- **The World's 3rd largest known pollucite deposit (pre depletion of others)**



Sinclair Zone Caesium Deposit
With Microcline and Lepidolite Zones

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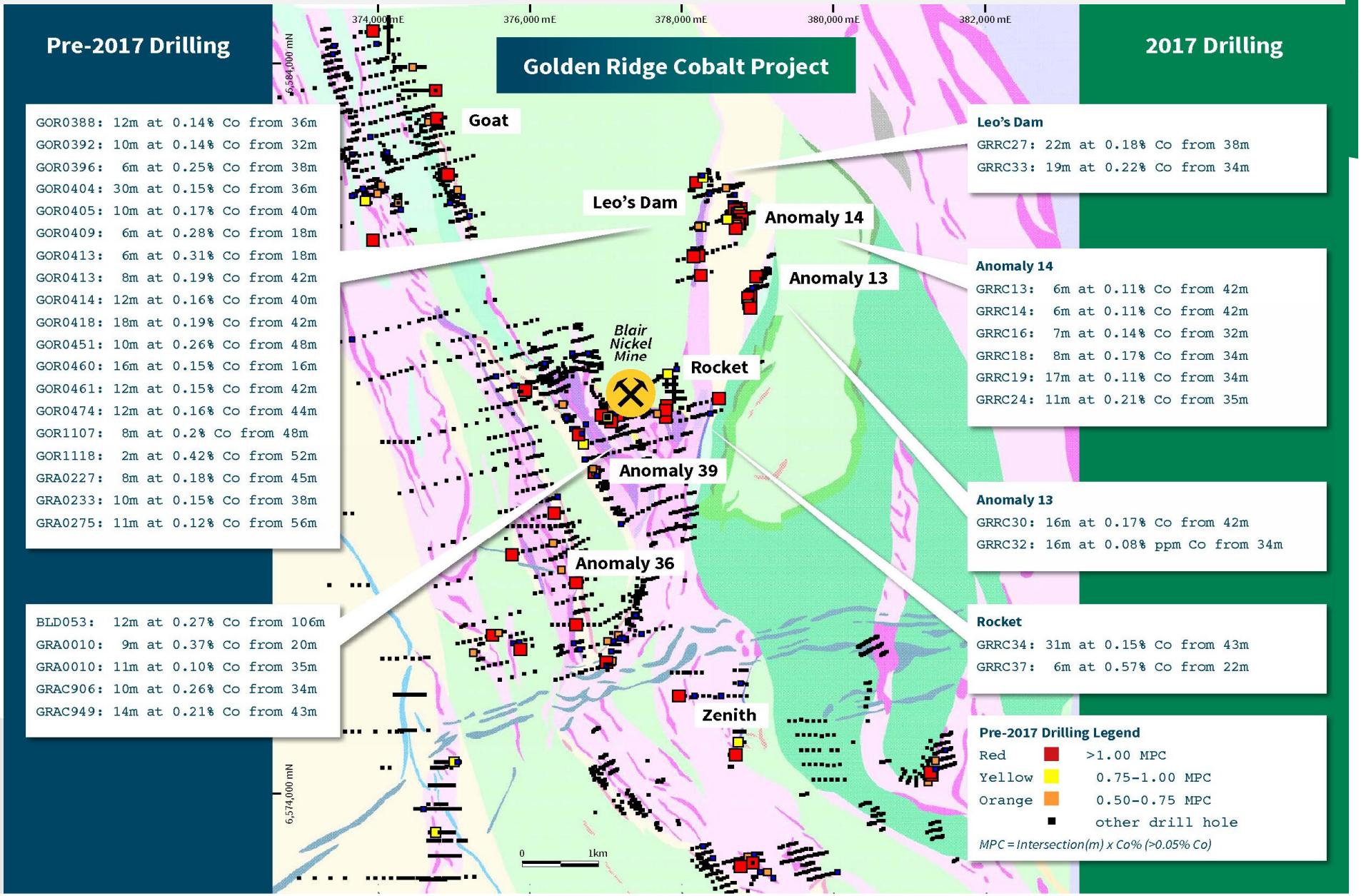
What's Next: Golden Ridge – Cobalt/Nickel



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How Does Golden Ridge Compare

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

Reported Lateritic Cobalt Deposit Size			
Company	Tonnes (mt)	Grade* Co	Location
Ardea ($103m)	805	0.05 %	Kalgoorlie, WA
includes	64	0.13 %	
CleanTeq ($727m)	109	0.10 %	Syerston, NSW
GME ($64m)	108	0.06 %	Leonora, WA
Conico/Barra	32	0.12 %	Norseman, WA
Platina	9	0.15 %	Owendale, NSW
Augur	16	0.05 %	Homeville, NSW
Cougar	10	0.07 %	Leonora, WA
Australian ($233m)	89	0.11 %	Sconi, QLD

Refer respective Company websites for details
Grades appropriately rounded from reported Co grade

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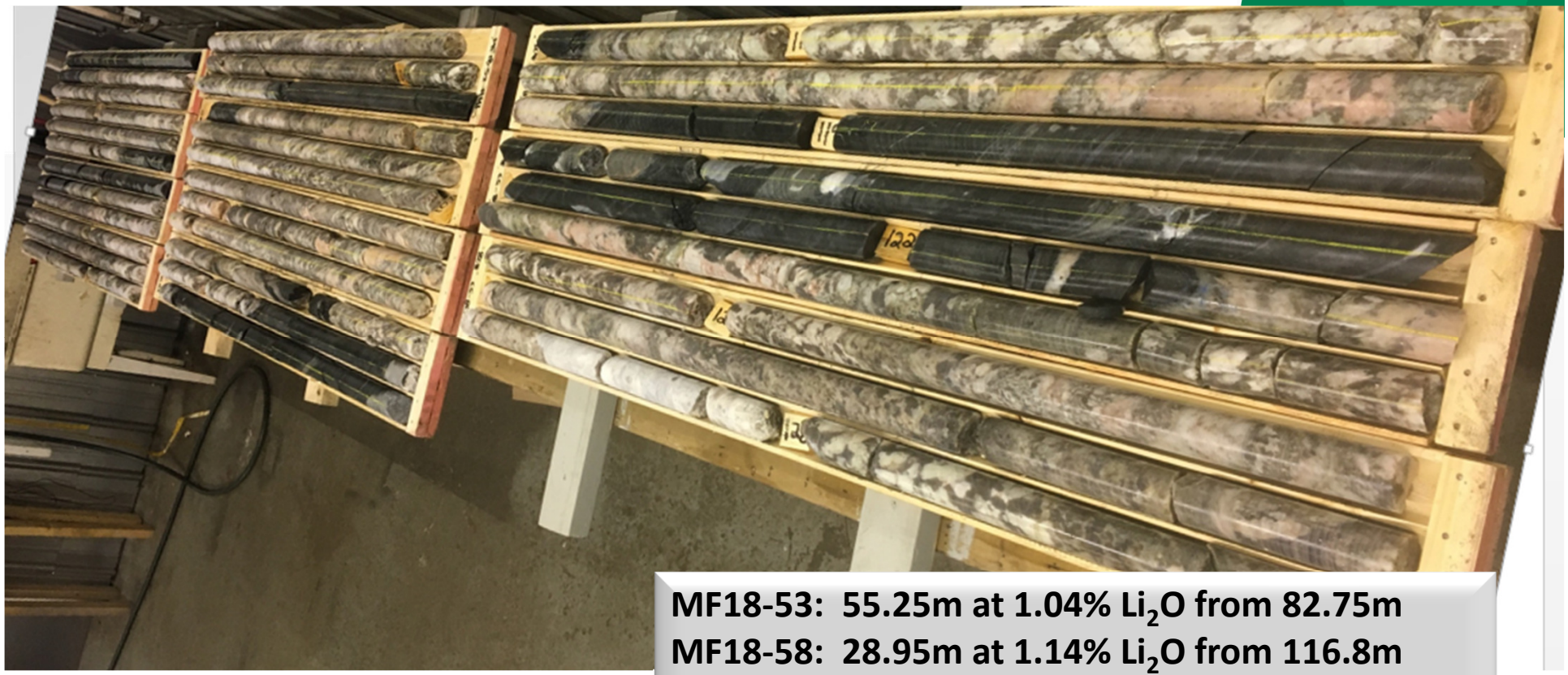
Mavis Lake – Lithium (Spodumene)



MF18-53

MF18-53: 55.25m at 1.04% Li_2O from 82.75m
MF18-58: 28.95m at 1.14% Li_2O from 116.8m
MF18-51: 23.30m at 1.09% Li_2O from 76.8m
MF18-52: 13.45m at 1.17% Li_2O from 149.95m
MF18-54: 18.20m at 1.27% Li_2O from 94.8m and
6.10m at 2.33% Li_2O from 139.25m
MF18-55: 12.35m at 1.41% Li_2O from 135.14m

* All widths reported are drill core widths and have not been converted into true width.

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Pioneer's Timetable and Value Proposition

- ***Mining Sinclair Zone Pollucite (Caesium) Deposit - 2018***
- ***Commercialise Co-Products (Lithium, Potassium (Microcline))***
- ***Drill for further Pioneer Dome Discoveries***
  - Lithium Targets – Vector for Smaller Caesium Targets
- ***Then…..***
  - Golden Ridge: - Cobalt, Nickel Sulphide
  - Mavis Lake, Raleigh, Canada

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References

- **References**

Projects

- Golden Ridge/Blair Dome: Refer Company's announcements to ASX dated 18 November 2013 (Blair Resource Estimate), May 2014, 27 January 2015, 18 May 2015, 20 July 2015, 13April 2017, 23 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 2016,7 February 2017, 8 February 2017, 10 March 2017, 11 April 2017, 23 January 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 (Sinclair Measured Resource Statement), 20 June 2017, 22 August 2017, 9October 2017, 17 January 2018, 21 February 2018
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- Internal documents by Brand N. W. of Geochemical Services Pty Ltd
- Plus Company quarterly reports.

Pegmatites

- London, D. (2008): Pegmatites. *The Canadian Mineralogist Special Publication 10*.

Microcline

- Charles River Associates (May 10, 2013). Potassium Feldspar Study: Market Assessment Report to I-Minerals, May 10, 2013

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

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Contact us

+61 8 9322 6974

pioneer@pioresources.com.au

Ground floor, 72 Kings Park Road, West Perth WA 6005

PO Box 1787, West Perth WA 6872

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