



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

David Crook, Managing Director
Investment Showcase
Surfers Paradise 21-22 June 2018



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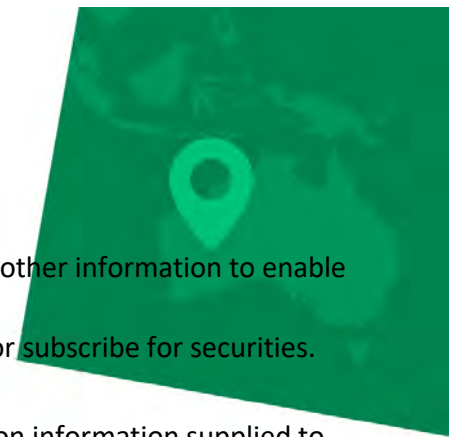
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Christina's Question: “Why should you invest in Pioneer?”

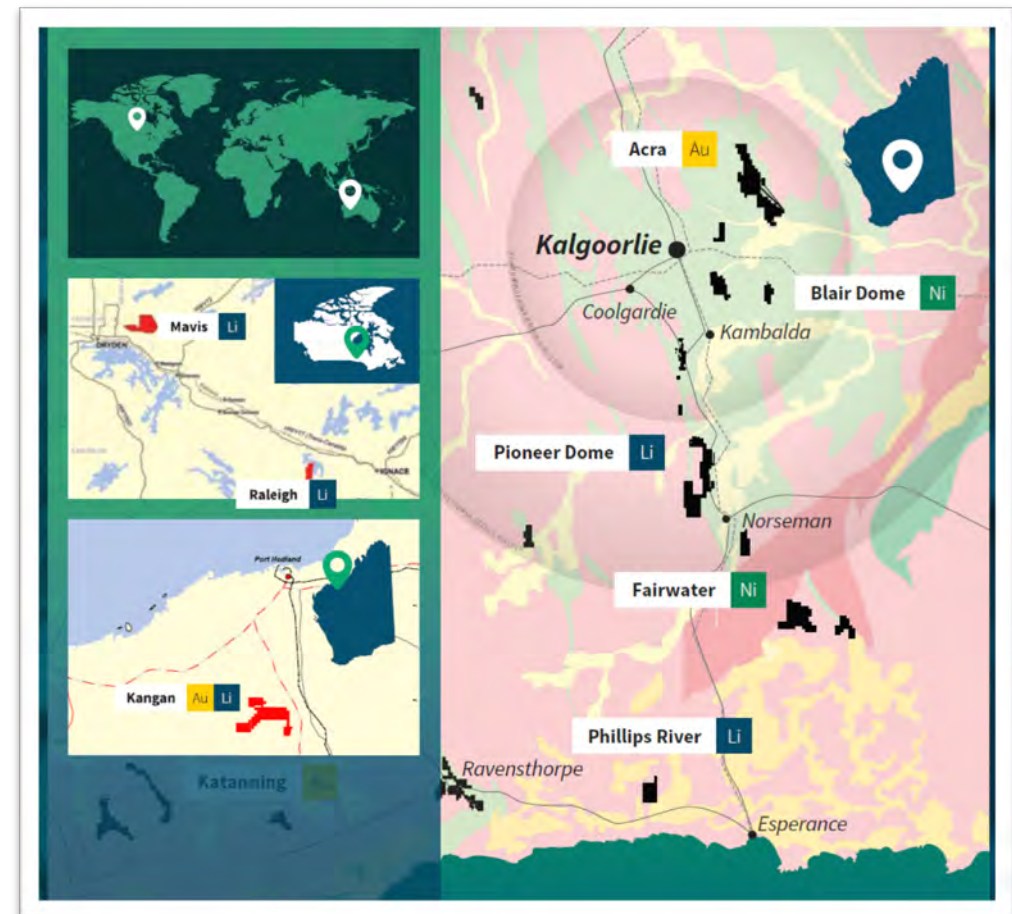


- Our survival for 14 years has meant that we understand our capabilities, and we've filtered a lot of ground. We are seeing the benefits of that now as interest is returning to the sector
- With good projects and better funding we can provide 'Bang for your Buck' – we have already completed 9,000m of RC and Diamond drilling this year.
- And we are approaching a sea-change point as we transition into a self funded company.

Key Assets Overview



Project	Location	Commodity	Ownership	Status
Pioneer Dome	Eastern Goldfields	Caesium	100%	Mine Plan in development
Pioneer Dome	Eastern Goldfields	Lithium, Tantalum	100%	Widespread lepidolite Spodumene indications Tantalum indications
Mavis Raleigh	Ontario	Lithium	Earning 80%	Spodumene intersected in Pioneer Drilling
Blair Dome	Eastern Goldfields	Cobalt/NiS	100%	Prospectivity for Cobalt
Acra	Kalgoorlie	Gold	80%	NST farming-in to project (up to 75%)



Corporate Overview

Capital Structure

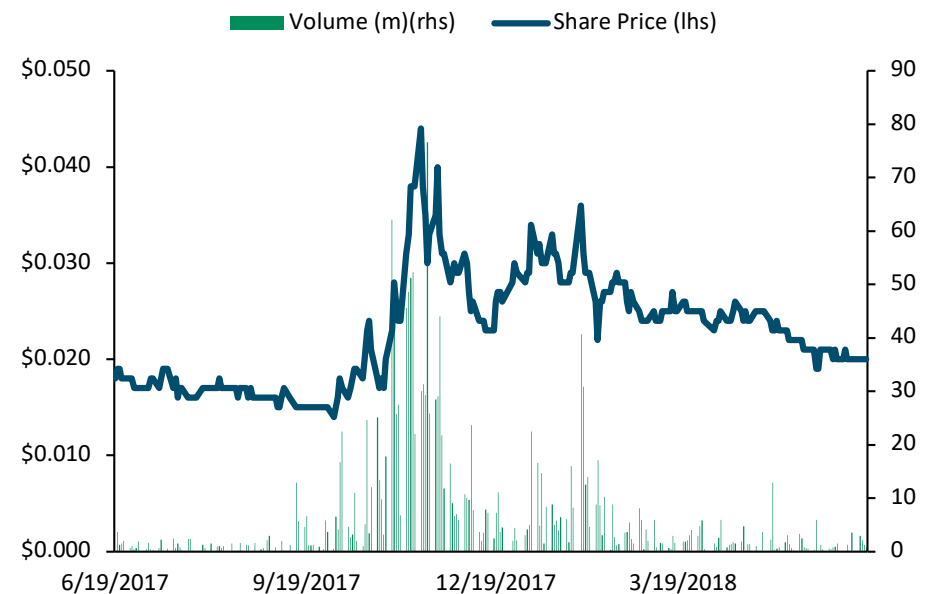
Share Price	\$0.021
Shares Outstanding (m)	1,449
Market Capitalisation	\$29
Cash (\$m) (approx. 31/03/2018)	\$3.76
Debt (\$m)	0.0
Options Outstanding (listed/unlisted(m))	44.3/16

Board of Directors

Craig McGown	Non-Executive Chairman
David Crook	Managing Director
Allan Trench	Non-Executive Director
Wayne Spilsbury	Non-Executive Director



12 Month Share Price chart



Pioneer's Strategy



Pioneer Dome

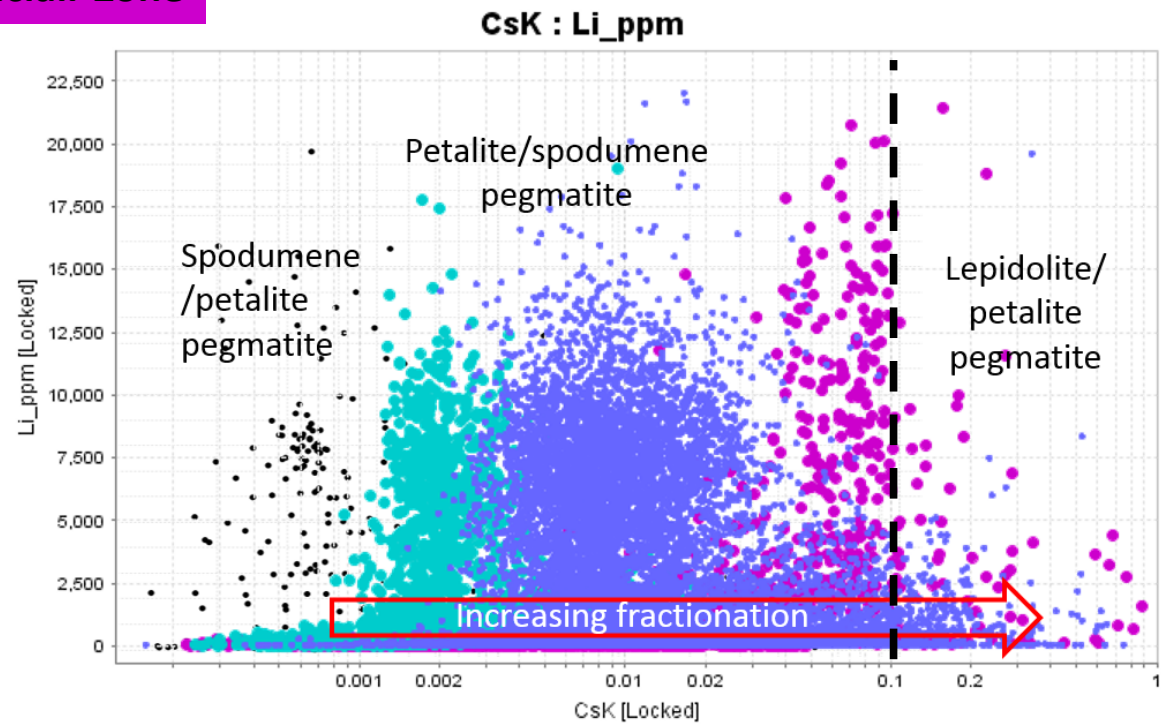
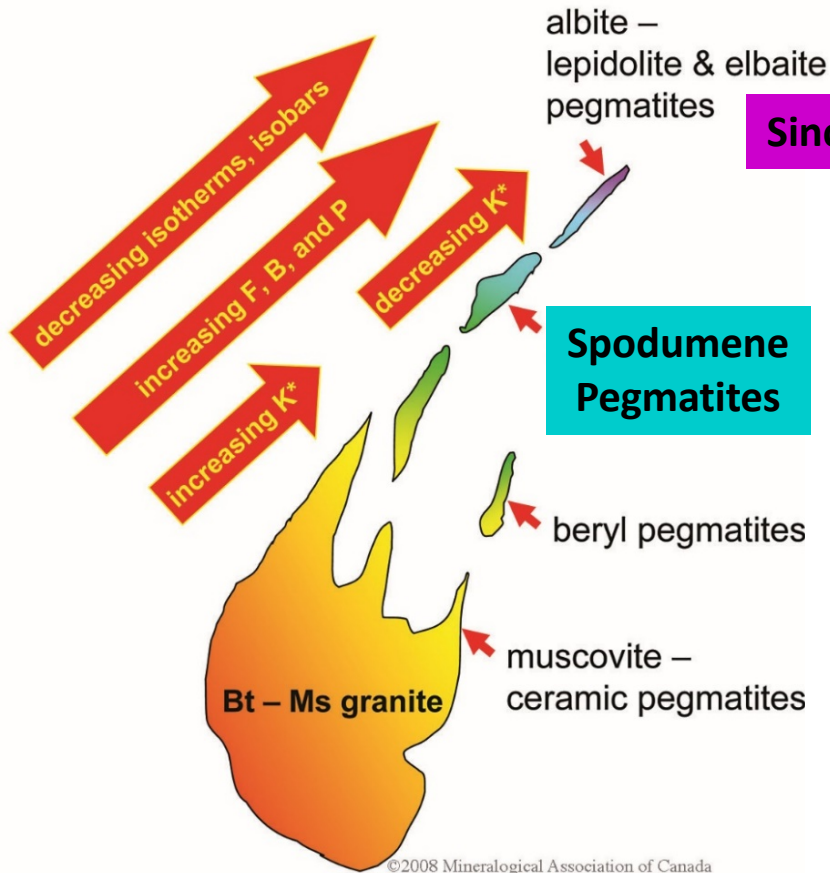
- ❑ ***Cash from Sinclair Zone Caesium Mine***
- ❑ ***Commercialise Co-Products i.e. Lepidolite, Microcline***
- ❑ ***Drill for further discoveries***
 - ❑ Drill Lithium (Spodumene and Lepidolite) Targets
 - ❑ Watch for Caesium vectors and drill for Pollucite
- ❑ ***Then.....***
 - ❑ Golden Ridge: - Drilling for Cobalt Resources
 - Further Drilling for Ni Sulphides
 - ❑ Mavis Lake, Raleigh, Canada: - Spodumene Results Returned this year

Sinclair Zone Caesium Mine Timetable

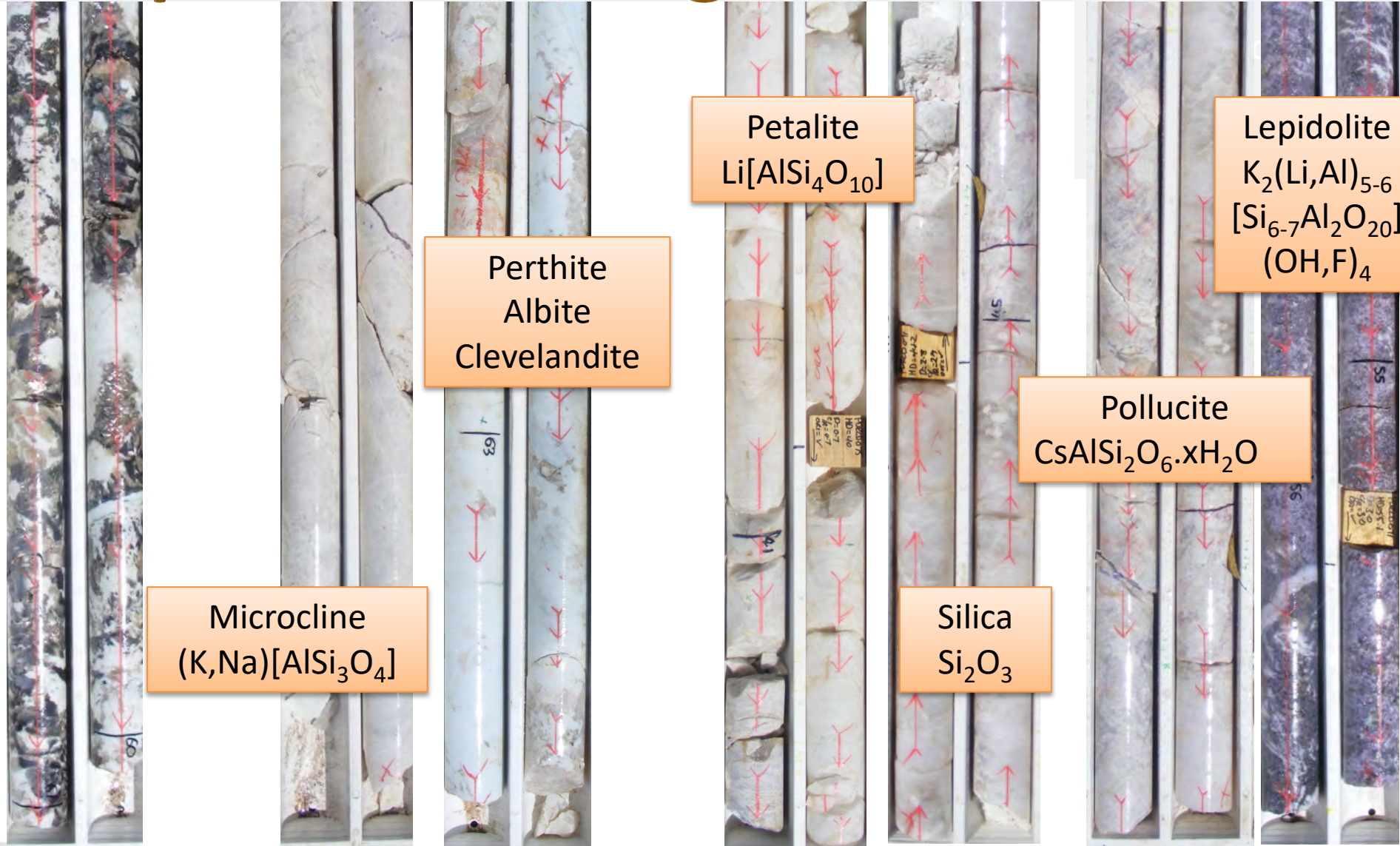


Offtake and Loan Agreement	Executed	Today
Mining Quotes	Processing	July
Mining Proposal - DMIRS	Under Review	July
Project Management Plan	Under Review	July
Crushing	Quote	July
Transport and Logistics	Negotiation	July
Commence Mining		3 rd Quarter

Charting Pegmatite Evolution



Complex 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
 $CsAlSi_2O_6 \cdot xH_2O$

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

GP2:

GP4:

GP6:

GP5:

GP7:

GP8:

GP9:

Pollucite – what is it



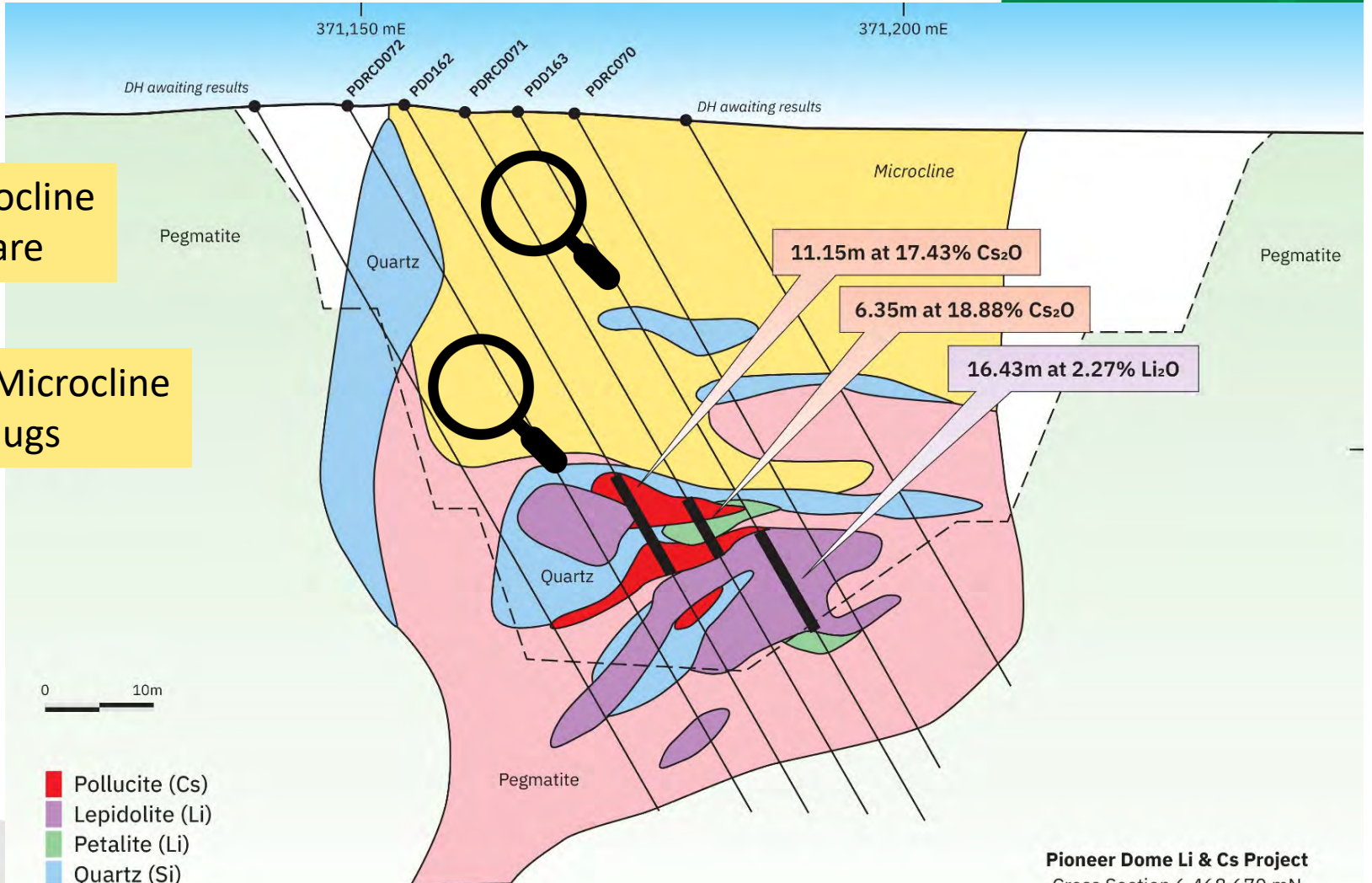
- Very rare
- forms in highly evolved LCT pegmatite core zone
- one of the last primary igneous minerals to crystallise
- range from fist-size to small pods
- co-exists with petalite, silica (and lepidolite)
- Known at approximately 110 localities worldwide
 - Two locations, Tanco Manitoba and Bikita, Zimbabwe represent ‘commercial-sized’ pollucite deposits
 - The remaining locations contain only a few grams of the mineral (Teertstra & Černý, 1997).

These are called 'Complex Pegmatites' with good reason



A-Grade Microcline
Sanitary ware

Hi Rubidium Microcline
Sparkplugs



0 10m

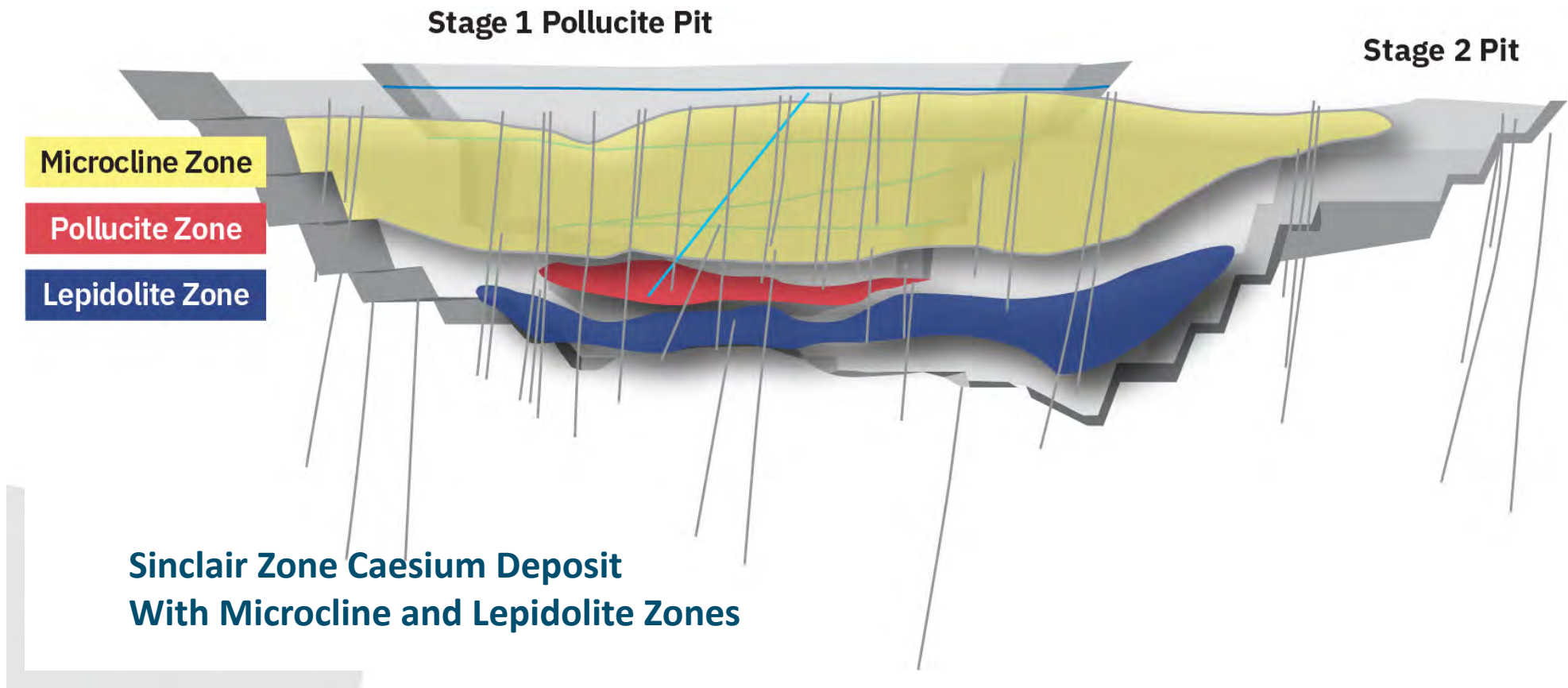
- Pollucite (Cs)
- Lepidolite (Li)
- Petalite (Li)
- Quartz (Si)
- Microcline (K)



Pioneer Dome Li & Cs Project
Cross Section 6,468,670 mN
Looking North

This is what the Sinclair Mine Could Look Like

- The World's 3rd largest known Pollucite deposit
- Overlain by two grades of Microcline
- Underlain by Lepidolite and Petalite



Caesium Formate

- lubricant in high temperature/high pressure oil and gas drilling,
 - Ensures faster completion times and
 - higher production rates
- The two main producers of Pollucite:
 - TANCO mine, CABOT Canada, produces sufficient ore to generate approximately 8,400bbl CsFm and a lesser amount of Cs chemicals
 - Bikita Mine in Zimbabwe (sporadic, and supplies the Cs chemical market)
- CABOT Specialty Fluids:
 - 2010-2014 (5 years) EBITDA averages US\$37 million, or \$312 million between 2004 and 2016
 - CsFm rented to oil companies including Shell, Total, Statoil, ExxonMobil and BP, used in 30 wells per year (2008-2009)



Offtake Announcement



- **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.**

Binding offtake and loan agreement

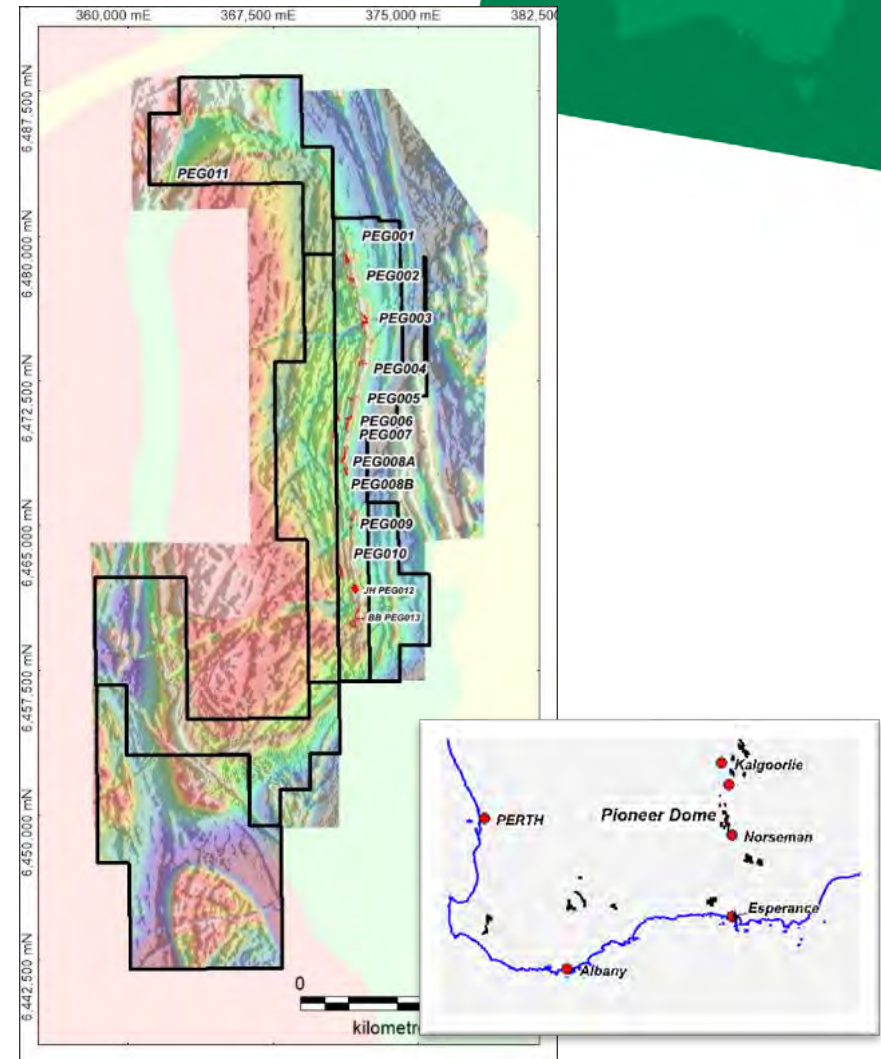


- Cabot is a leading global specialty chemicals and performance materials company with a market capitalisation of US\$4 billion;
- US\$4.8 million interest-free loan facility will fully fund mining operations;
- Loan to be offset through the delivery of DSO pollucite, or by cash settlement; and
- Offtake agreement provides for the sale and purchase of 100% of the pollucite mined from proposed Sinclair Mine.

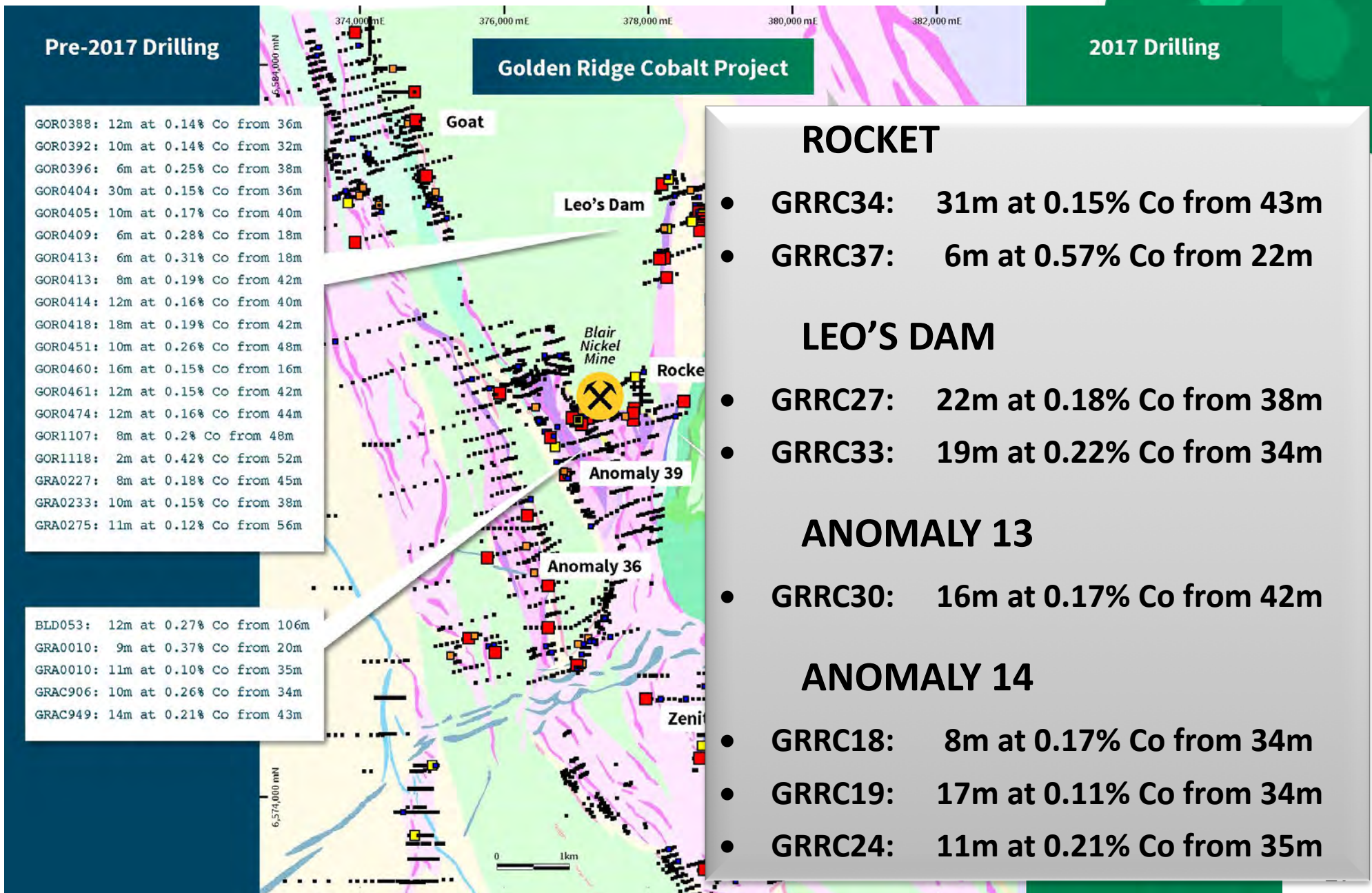
Lithium and Caesium

We've Just Started

- Lithium (**Spodumene / Petalite**) intersected in drilling: Conventional lithium exploration model to be followed
- **Lepidolite** widespread
 - PEG009 Farm-in agreement with Lepidico (ASX: LPD) **Gives L-Max[®] exposure**
 - Much Chinese lithium derived from lepidolite
- One of the few significant Pollucite deposition environments known – so why not more?
- Key agreements and infrastructure in place with road, rail, gas and water all passing through the tenements



Then: Golden Ridge – Cobalt 2018 Results





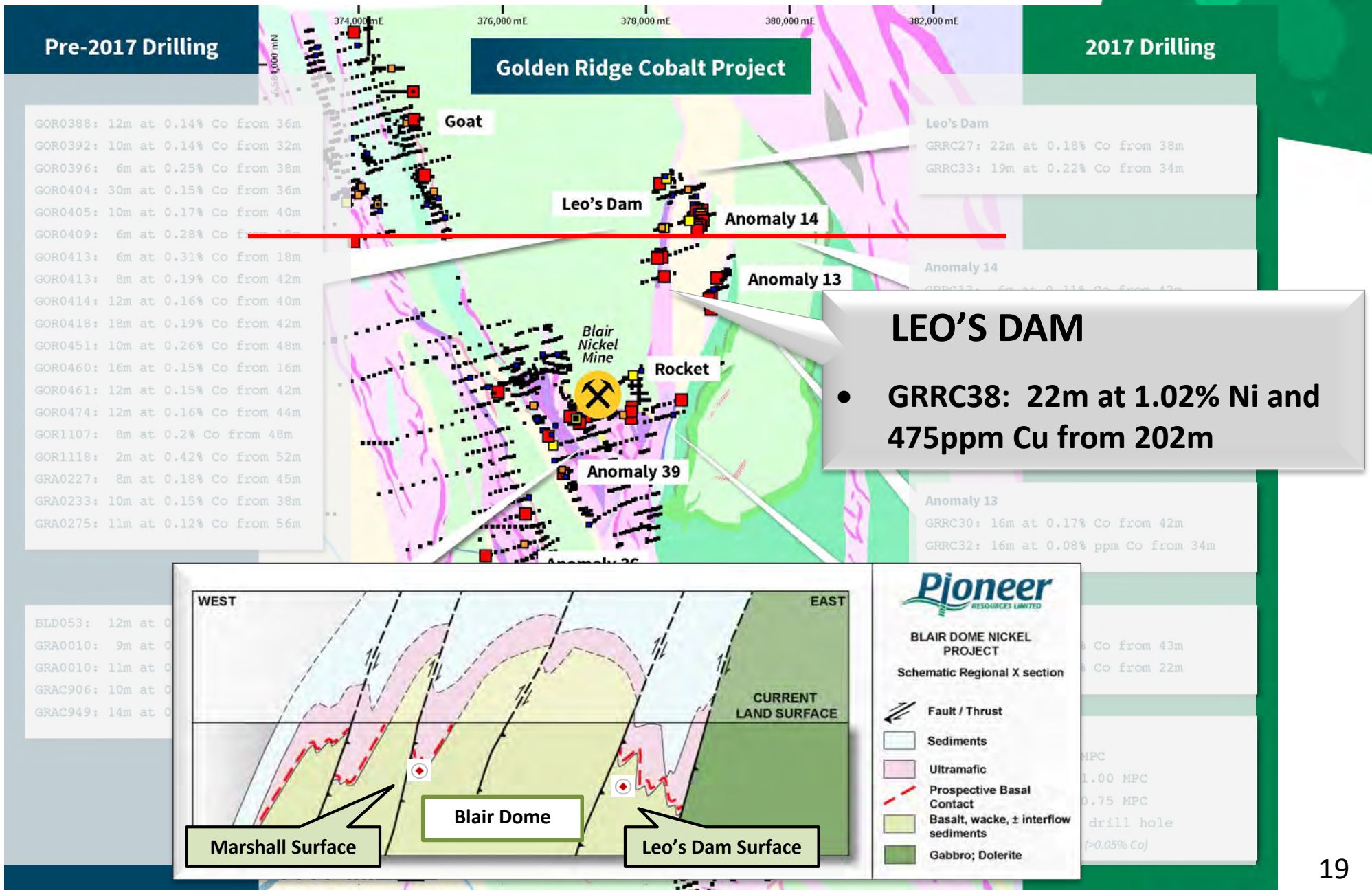
Comparable Cobalt Projects

Rocket	
BLD053: 12m at 0.27% Co from 106m	
GRAC949: 14m at 0.21% Co from 43m	
GRAC906: 10m at 0.26% Co from 34m	
GRRC34: 31m at 0.15% Co from 43m	
GRRC37: 6m at 0.57% Co from 22m	
Anomaly 14	
GOR0451: 10m at 0.26% Co from 48m	
GOR0404: 30m at 0.15% Co from 36m*	
GOR0409: 6m at 0.28% Co from 18m	
GOR0413: 6m at 0.31% Co from 18m*	
GOR0418: 18m at 0.19% Co from 42m*	
GRRC24: 11m at 0.21% Co from 35m	
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	

Reported Lateritic Cobalt Deposit Size			
Company	Tonnes	Grade*	Location
	(mt)	Co	
Ardea \$94m	805	0.05%	Kalgoorlie, WA
includes	64	0.13%	
CleanTeq \$816m	109	0.10%	Syerston, NSW
GME \$60m	108	0.06%	Leonora, WA
Conico/Barra \$36m	32	0.12%	Norseman, WA
Galileo \$41m	9	0.15%	Norseman, WA

Grades appropriately rounded from reported Co %

GR/Blair Dome – Nickel Sulphide 2018



Mavis Lake – Spodumene 2018 Results

MF18-53



2018 Drilling Results

MF18-53: 55.25m at 1.04% Li₂O from 82.75m

MF18-58: 28.95m at 1.14% Li₂O from 116.8m

MF18-51: 23.30m at 1.09% Li₂O from 76.8m

MF18-52: 13.45m at 1.17% Li₂O from 149.95m

MF18-54: 18.20m at 1.27% Li₂O from 94.8m and

MF18-54: 6.10m at 2.33% Li₂O from 139.25

MF18-55: 12.35m at 1.41% Li₂O from 135.14m



* All widths reported are drill core widths and have not been converted into true width. Appropriate rounding of Li₂O values applied.

Value Proposition



Pioneer Dome Strategy

- ❑ ***Cash from Sinclair Zone Caesium Mine - 2018***
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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, 13 April 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, 7 February 2017, 8 February 2017, 10 March 2017, 11 April 2017, 23 January 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 (Sinclair Measured Resource Statement), 20 June 2017, 22 August 2017, 9 October 2017, 17 January 2018, 21 February 2018, 19 April 2018, 20/21 June 2018
- Kangan: WAMEX A No, 26936, 79608, 81531, Note 1. The Continent of Ur and the Beginning of the Crustal Gold Cycle–Hennigh, Q.T., IGC35, September 1, 2016, Note 2. Company announcement to ASX dated 6 October 2017, 24 October 2017.
- 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 is not aware of any new information or data that materially affects the information included in this Report



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