Annual Technical Report 2019



MANAGING DIRECTOR'S LETTER

David Crook

The 2019 year is marked by two key events – the Company's successful first mining venture at the Sinclair Caesium Mine, followed almost immediately by the discovery of the Cade Spodumene Deposit and other spodumene targets.

The Sinclair Caesium Mine was completed on budget with a strong positive reconciliation of saleable ore containing the caesium mineral pollucite, delivering revenue to the Company of approximately \$18.5 million including full repayment of a project loan provided by the Company's offtake partner.

With exploration resuming thereafter, Company geologists identified and mapped spodumene pegmatites within the Pioneer Project - Dome North Area. The discovery was announced to the Market in June, with the first drill programme in August, which returned very creditable results.

While the Company's emphasis for much of the year involved permitting and operations at the Sinclair Mine, an active exploration schedule was maintained, with approximately 8,000m of drilling completed. Key projects were advanced and will continue to form the basis of exploration programmes going forward.

- The Dome North Area and Cade Spodumene Discovery: The discovery drill programme saw 29 RC drill holes completed with 21 intersecting pegmatite. Results included 25m at 1.61% Li₂O, 33m at 1.63% Li₂O, 23m at 1.36% Li₂O and 15m at 1.48% Li₂O amongst others. A beneficial characteristic is that the spodumene contains a low level of iron.
- Golden Ridge Nickel Sulphides: In 2018 a new discovery
 of nickel sulphides was made approximately 1.6km north
 east of the Company's suspended Blair Nickel Mine when
 drill hole GRRC38 returned 22m at 1.02% Ni and 475ppm
 Cu from 202m. Air core drilling, geological mapping
 and geochemical studies have generated targets for
 forthcoming drilling.
- Sinclair Caesium Mine: The Sinclair Mine was completed on budget in January 2019. ROM ore continues to be transported from site to Esperance where it is being containerised, with the last ore due to leave Australia in January 2020.

The Company also maintains a portfolio of joint venture projects with well credentialled farm-in partners.

- Acra Gold Project: Northern Star Resources Limited has earned a 75% Project Interest and continues to fully fund exploration programmes until a decision to mine.
- Kangan Project Gold and Lithium: A farm in and JV agreement with Novo Resources Corp and Sumitomo Corporation will fully fund gold exploration programmes until a decision to mine is made, with Pioneer retaining a 30% free-carried position.
- Balagundi Gold Project: A farm in and JV agreement where Black Cat Syndicate Limited may earn a 75% interest in the Project located at Bulong, near Kalgoorlie, WA

With respect to our personnel, following completion of the Sinclair Mine we have reverted to our core of very committed explorationists. I acknowledge the effort and thank the mining crew responsible for the success of the Sinclair Mine, and the people, past and present, who contributed to us getting there.

The exploration team has again delivered an exciting new project in the Dome North Area. We are now well funded, and we keenly anticipate an active 2020 as we advance the Cade and other spodumene targets.

Finally, I join with our Chairman to thank investors who have supported our Company during past years, and to welcome new shareholders. We look forward to conveying results of our exploration programmes as they progress in the year ahead.

On behalf of the Directors of Pioneer Resources Limited, I am pleased to present the Annual Technical Summary for 2019.

Yours faithfully

David Crook *Managing Director*



CHAIRMAN'S LETTER

Craig McGown

The past twelve months saw your Company achieve what few junior resource companies do, develop one of its own mineral discoveries into a very successful mining operation. The key outcome is that Pioneer is now a well-funded explorer with proven expertise in discovering and developing a mineral deposit within the lithium caesium tantalum (LCT) sphere.

In September 2018, mining operations commenced at the Sinclair Caesium Mine, located north of Norseman in Western Australia. The operation was completed on budget and without incident, and substantially more caesium bearing ore (pollucite) was extracted than had been geologically modelled. The first shipment of crushed pollucite occurred in January 2019 and the final shipment is scheduled for January 2020.

This outstanding achievement was made possible due to the tireless commitment of the Pioneer team and contractors, and with full support of stakeholders including native title holders the Ngadju People, the Department of Mines, Industry Regulation and Safety, the Dundas Shire and our offtake partner, Sinomine Specialty Fluids.

The success of the Sinclair Mine means that Pioneer is now a well-funded explorer with \$5.6 million in the bank (as at 30 September 2019) and further cash to be received from the remaining pollucite shipments. The Company has no debt and has developed the internal capability to undertake another mining operation when it next arises.

In keeping with the Company's strategy to preferentially target battery metals within its exploration portfolio, and now utilising the Company's leading-edge expertise in LCT pegmatite exploration techniques, the Cade and other spodumene pegmatite prospects were discovered in June 2019 within the northern-most tenement of the Pioneer Dome Project – the Dome North Area. The Company remains committed and well-funded to significantly advance these prospects.

The Company has also been advancing its geological understanding at the Blair/Golden Ridge Nickel Sulphide Project and is positioned to commit to drilling and geophysical surveys at new targets in and around the Leo's Dam Prospect.

Your Company also continues to have exposure to gold via a portfolio of free-carried joint ventures and royalties in the Eastern Goldfields, Wheat Belt and West Pilbara of Western Australia.

Shareholder, your Company is in very good shape. It has a portfolio of excellent, advanced exploration projects covering lithium, nickel and gold and the financial resources to undertake meaningful exploration programmes, each with the potential to be a Company Maker. To drive the project exploration strategy is Pioneer's dedicated, skilful and committed team led by Managing Director, David Crook.

I look forward to more success over the next twelve months in pursuit of your Company's Battery Metals strategy.

My fellow board members and I are committed to seeing Pioneer continue to grow in share price and in reputation. I look forward to your continued support and to keeping you updated on our progress.

Yours sincerely

Craig McGown

Non-Executive Chairman
Pioneer Resources Ltd



COMPETENT PERSONS STATEMENT

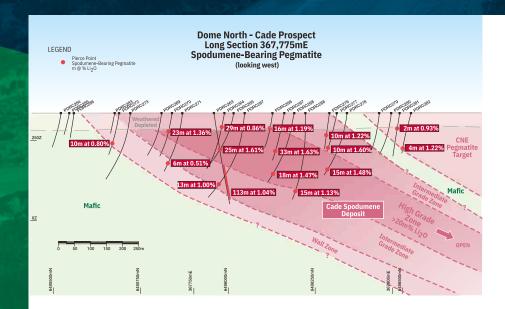
The information in this report that relates to Exploration Results is based on information supplied to and compiled by Mr David Crook. Mr Crook is a full time employee of Pioneer Resources Limited. Mr Crook and is a member of The Australasian Institute of Mining and Metallurgy and the Australian Institute 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 gives consent to the inclusion of the matters presented in the report in the form and context in which they appear.



PIONEER DOME, SINCLAIR CAESIUM MINE, CADE SPODUMENE DEPOSIT

PIONEER 100%, LITHIUM, CAESIUM, POTASSIUM FELDSPAR, TANTALUM, NICKEL SULPHIDE



The Company's namesake
Pioneer Dome Project is a highly
prospective, multi-commodity
project located approximately
130km south of Kalgoorlie and
200km north of the port of
Esperance.

The Sinclair Caesium Mine was completed within budget and ore has been progressively exported throughout the year. Pioneer is now a well-funded explorer with sufficient free cash to rapidly advance the Company's new, significant spodumene discovery.

The Pioneer Dome North Area and Spodumene Pegmatites

In June 2019 Company geologists reported that mapping, with rock sampling, had identified two spodumene-bearing pegmatites in the Dome North Area. This is the first time that spodumene, a major source of lithium, has been identified within the Pioneer Dome Project.

By August the inaugural drilling programme had tested targets beneath the two discovery outcrops, on panels of holes spaced on a nominal 160m x 80m grid. Both pegmatites are mineralised

with spodumene, and the drilling revealed a significant deposit of the mineral at the Cade Pegmatite.

The Cade Spodumene Deposit is a tabular pegmatite dyke with a strike length exceeding 700m, and up to 35m thick. The dyke extends down plunge beyond 300m.

Outlook

The Dome North Area will be advanced rapidly, with field crews currently collecting geophysical and geochemical base-line data ahead of further drilling programmes.

The Company is aware that the price for spodumene is currently depressed, however metal forecasters anticipate a recovery in price within 2-3 years. Pioneer will therefore continue to drill, study, permit and advance offtake discussions for the Project so that decision points can be considered ahead of the lithium price recovery.

The southern Yilgarn area is recognised as very well endowed with spodumene deposits, with production facilities at Bald Hill Mine (Alita Resources Limited) located 60km northeast of the Pioneer Dome Project, the very large Mt Marion

Deposit (Mineral Resources Limited/ Gangfeng Lithium) located 75km to the north and Liontown Resources Limited are advancing the Buldania spodumene deposit 60km southeast of Pioneer's project.

Further west and south, the Earl Grey Deposit (175km west, Covalent Lithium Pty Ltd) and the Mt Cattlin Mine (240km southwest, Galaxy Resources Limited) occur.

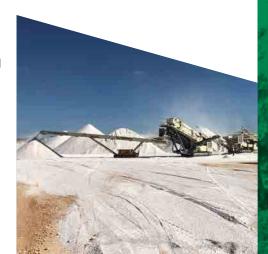
Sinclair Caesium Mine

Mining at Sinclair commenced in September 2018, 2 years after the discovery drill hole was completed. The Mine was completed on budget in January 2019 and caesium production exceeded the pre-mine model.

A total of 482,000 BCM of material was removed from the Sinclair Pit, including approximately 3,965 BCM of pollucite ore and 4,446 BCM of low-grade material.

Approximately 10,000 tonnes of predominantly ROM pollucite ore will have been exported when the ROM stockpiles are exhausted.

When complete, pollucite sales from the Sinclair Mine are expected to have totalled approximately A\$18.5 million, inclusive of A\$6.7m (US\$4.8m) which was applied to fully repay a project loan provided by the offtaker.



GOLDEN RIDGE PROJECT (INCLUDES THE BLAIR NICKEL MINE)

PIONEER 100%, NICKEL SULPHIDES

Drilling Results

Cade Spodumene Deposit:

- PDRC265: 25m at 1.61% Li₂O from 122m
- PDRC267: 33m at 1.63% Li₂O from 116m
- PDRC268: 18m at 1.47% Li₂O from 207m
- PDRC270: 23m at 1.36% Li₂O from 50m
- PDRC277: 10m at 1.60% Li₂O from 116m
- PDRC278: 15m at 1.48% Li₂O from 206m
- PDRC287: 13m at 1.00% Li₃O from 248m
- PDRC288: 15m at 1.13% Li₃O from 271m

From the CNE target, located immediately northeast of the Cade Deposit:

PDRC282: 4m at 1.22% Li₂O from 125m

and from the Spodumene 1 Target included:

- PDRC275: 10m at 1.08% Li₂O from 101m
- PDRC291: 10m at 1.00% Li₂O from 48m

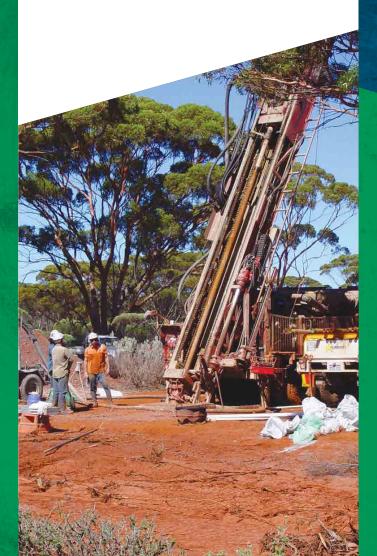
The Golden Ridge Project (including the Blair Nickel Mine) covers an area of 121 km² of the Blair Dome, located 30 kilometres south east of Kalgoorlie, WA. The suspended Blair Nickel Sulphide Mine closed in 2008 during a time of depressed nickel prices having produced 1.26mt of nickel ore at 2.62% Ni.

In 2018 the Company announced that drill hole GRRC38, at the Leo's Dam Prospect located 2.4km NE of the Blair Mine, returned 22m at 1.02% Ni (as nickel sulphides) and 475ppm Cu from 202m.

Drilling during 2019 totalled 60 aircore holes for 4,142m, and results extended the key target at Leo's Dam to over 1 kilometre in length. Geological mapping has also been updated in this area.

Drilling and EM surveys are scheduled for completion at the Leo's Dam and other nearby targets.





MAVIS LAKE LITHIUM PROJECT

PIONEER 51% (SPODUMENE)

The Mavis Lake Lithium Project is situated 19 km east of Dryden, Ontario, Canada. The Project is located close to relevant commercial and transport infrastructure.

Drilling undertaken in 2017 and 2018 demonstrated that the system is well mineralised with spodumene.

Pioneer holds 51% project equity with its local JV partner, International Lithium Corp. (TSXV:ILC), holding 49%. Pioneer can earn up to an 80% interest by incurring C\$8.5 million in exploration by 2025.

Drilling intersections included:

- MF17-39: 17.90m at 1.47% Li₂O from 80.00m
- MF17-49: 26.30m at 1.70% Li₂O from 111.9m
- MF17-50: 16.55m at 1.45% Li₂O from 74.55m and 23.10m at 1.36% Li₂O from 122.00m
- MF18-58: 28.95m at 1.14% Li₂O from 116.8m
- MF18-51: 23.30m at 1.09% Li₂O from 76.8m
- MF18-53: 55.25m at 1.04% Li₂O from 82.75m
- MF18-54: 18.20m at 1.27% Li₂O from 94.8m and
- MF18-55: 12.35m at 1.41% Li₂O from 135.14m



GOLD JOINT OPERATIONS: ACRA, KANGAN, BALAGUNDI

PIONEER VARYING % INTERESTS

Acra Gold Project

The Acra Gold Project covers an area of 340 km² and is located 60 km north east of Kalgoorlie, WA. Pioneer identified a 20 km long gold target zone and in October 2016, the Company entered into a Joint Venture Agreement with gold miner Northern Star Resources Limited (ASX: NST, "Northern Star") under which Northern Star has earned a 75% interest in the Project. Pioneer has a 25% free-carried interest up to DMIRS approval of a mining proposal submitted by Northern Star.

Kangan Project - Gold and Lithium

The Kangan Project is located 80 km south of Port Hedland in the emerging West Pilbara gold precinct of WA. It comprises two granted exploration licences and one exploration licence application covering an area of 268 km². The eastern-most tenement application abuts the Wodgina Lithium Mine tenements. The Kangan Gold and Lithium Project is prospective for sediment/ conglomerate-hosted gold as evidenced by rock chips of up to 2.73g/t gold from previous exploration. The Company has entered into a Farmin & Joint Venture with Novo Resources Corp. (TSXV:NVO) and Sumitomo Corporation, whereby those two parties can jointly earn a 70% interest in the gold rights and Pioneer will retain a 30% free carried interest up to a decision to mine. Pioneer retains 100% of the non-gold rights, including lithium.

Balagundi Gold Project

A Farm-in & Joint Venture agreement was signed with Black Cat Syndicate Limited (ASX: BC8) on 27 July 2019. Balagundi is located adjacent to Black Cat's Bulong Gold Project. Upon Black Cat meeting the farm-in expenditure requirements, Pioneer will retain a 25% carried-free interest up to completion of a bankable feasibility study.



Corporate

Non-Executive Chairman

Craig McGown

Managing Director

David Crook

Non-Executive Director

Wayne Spilsbury

Non-Executive Director

Allan Trench

CFO / Company Secretary

Timothy Spencer

Financial

ASX code: PIO

Market capitalisation (at \$0.016): **A\$24m** 12 month trading range: **\$0.010-\$0.022** Cash (30 Sep 2019): **A\$5.6 million** Current shares on issue: **1,509 million**

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