

# Pioneer Resources Limited

## Annual Technical Report

*Reloaded / Refocused*



## Managing Director's Letter

### David Crook

#### On behalf of the Directors of Pioneer Resources Limited, I am pleased to present the Annual Technical Summary for 2014.

The last two years' annual themes of "Re-loaded" and "Re-Grouped" reflected the sale of the Company's Mt Jewell Gold Project and the subsequent project portfolio rebuilding phase.

The theme for 2014 is "**Re-Focused**" – reflecting the Company's implementation of an updated exploration strategy, targeting nickel, gold and base metals within its Western Australian projects portfolio.

The Company's project portfolio is designed to provide shareholders with exposure to the key commodities of gold and nickel, and now to zinc - a commodity that metal analysts are forecasting to increase in price as zinc supply becomes constrained as some major mines close.

Programs of soil geochemistry, geophysics and drilling have generated or confirmed a number of variously ranked targets for further evaluation. In particular, those at the Fairwater Nickel Project, the Juglah Dome VMS Project and the Acra Gold Project are considered to be the current exploration priorities. Highlights for the year included:

- **Fairwater Nickel-Gold Project, Fraser Ranges, WA (75% PIO):** A stand-out nickel target identified using soil geochemistry and aeromagnetic data. Electromagnetic (EM) surveying and drilling is planned in the months ahead;
- **Juglah Dome Gold and Base Metals Project, Eastern Goldfields, WA (100% PIO):** A new, copper-gold and lead-zinc anomaly, called the Dingo Dam Prospect, was identified. The geochemistry is suggestive of a volcanogenic massive sulphide (VMS) environment.

- **Acra Gold Project, Eastern Goldfields, WA (100% PIO):** Ongoing drilling at priority targets continues to produce high-grade assay results;
- **Golden Ridge Nickel Project, Eastern Goldfields, WA (100% PIO):** A Mineral Resource of 222,710t of nickel sulphide ore with a grade of 2.92% Ni remains in place at the Blair Nickel Mine. The focus now is to unravel the complex near-mine geological structure, where further mineralisation may exist.

An overview of the Projects' status is provided overleaf.

During the year your Company expended a total of \$2.95 million on its operating activities, including drilling, geochemistry and other exploration activities, taxes and bonds. This was offset by the third instalment, of \$1.2 million, from the \$8 million sale of the Mt Jewell Project to KalNorth Gold Mines in 2012, meaning that the Company was able to restrict its Capital Raising initiatives to an SPP which raised \$0.4 million. In line with the Company's commitment to its exploration programs, 76% of actual expenditure was allocated to on-ground activities.

On your behalf, I would like to acknowledge our valued personnel and consultants: Melinda O'Ryan, Nick Coetsee, George Burgess, Don Huntly, Nigel Brand, Fiona Edison, Chris Jephcott, Ben Jones and Helen Sanders plus our other contractors and suppliers who have all contributed to the Company's operations during the year.

It is their dedication to Pioneer that has resulted in this year's success and laid the foundations for the further advancement of our project's in the year ahead, for the benefit of our shareholders.

Yours faithfully

**David Crook**  
Managing Director

## Golden Ridge Project

The Golden Ridge Project, which includes the dormant Blair Mine, is 100% owned by Pioneer. It is located 30km south east of Kalgoorlie and covers an area of 163km<sup>2</sup>.

Pioneer's aim, when acquiring the Blair Mine, was to provide shareholders with exposure to an anticipated rise in the nickel price. This year has seen the nickel price perform strongly.

During the year, the Company completed:

- A (remaining) Mineral Resource Estimate for the Blair Mine, of 222,710t at 2.92% Ni (in sulphides) for 6,510t<sup>3</sup> of contained nickel;
- Drilling: 4 holes comprising 1,008m RC and 195.5m of core;
- Detailed fixed loop EM survey covering 1.2km x 0.5km of the near-mine stratigraphy.

With the quantification of the remaining drilled-out mineralisation within the Blair Mine, the Company is looking to identify new, near-mine nickel targets to build a resource base of 20,000t of contained nickel at approximately 3.0% Ni. On achievement, the Company will assess the merits of reopening the mine.

### An initial review of the Blair Mine resulted in:

- A plan to change from conventional decline and stope mining, which may result in significant savings for ore haulage from the lower levels of the mine;
- Confirmation that the portal and at least 3km of decline remains dry and in good order, substantially reducing anticipated refurbishment costs. Current water table depth is unknown but is deeper than 350m below surface. Air quality was good to this depth; and therefore
- The cost-saving option of drilling from the decline to test panels of un-mined mineralisation within 100m of the decline (but several hundred metres below surface) may be feasible.

Nickel sulphides have been intersected in drilling at the N10 and Area 57 Mine surfaces, 100m west of the Blair Mine. A recent EM survey provided new geological and structural information for this near-mine area, and yielded two targets that warrant drilling.

## Juglah Dome Project

Pioneer recently discovered an exciting new copper-gold and lead-zinc anomaly at the Juglah Dome Project. The target has geochemical characteristics of a VMS system, and is presently evident over a strike length of 1.2km. The new target is called the Dingo Dam Prospect.

The Company owns 100% of the Juglah Dome Project, which covers an area of 159 km<sup>2</sup>, 57km south east of Kalgoorlie.

During the year, the Company completed:

- Soil geochemistry: 2,287 samples were taken resulting in the definition of the Dingo Dam Prospect. Another 2,005 samples were taken to appraise nearby tenements, generating a nickel target at the Juglah South Prospect.

While at a very early stage, encouraging features of the Dingo Dam Prospect include:

- An outcropping Cu gossan with surrounding anomalous Cu, Au, Bi and As vectoring elements in soil geochemistry; and
- 200m south along strike, a Pb-Zn geochemical anomaly with supporting Cd-Sb and Hg vectoring elements.

Zones with these geochemical assemblages may indicate a 'volcanogenic massive sulphide' setting at the Dingo Dam Prospect.

Follow up rock chip sampling of the Cu-Au gossan delivered values to 1.1% Cu and 3.90g/t Au, with elevated silver<sup>2</sup>.

Programs of further geochemistry, mapping and drilling are currently being planned.

**Note 1.** (Blair Mine) Refer to a Company announcement to ASX dated 28 November 2013.

**Note 2.** (Juglah Dome) Refer to a Company announcement to ASX dated 14 July 2014.

**Note 3.** (Acra) Refer to the Company announcements to ASX including: Quarterly Activities Report ending 31 December 2013 dated 31 January 2014, and "Drill Results from Acra Gold Project" dated 16 April 2014.

**Note 4.** (Fairwater) Refer to a Company announcement to ASX dated 21 July 2014. The Company is not aware of any new information or data that materially affects the information included in these Announcements. The information within this report as it relates to geology and mineralisation was compiled by Mr. David Crook who is a full time employee of Pioneer Resources Limited, a member of The Australasian

Institute of Mining and Metallurgy (member 105893) and is a Competent Person as defined by the 2012 JORC Code, having five years experience which is relevant to the style of mineralisation and type of deposit described in the Report. This person consents to the inclusion of this information in the form and context in which it appears in this report.



## Acra Project

Pioneer is continuing its staged drilling programs at the Acra Gold Project. The Acra Project is located 60km north east of Kalgoorlie, covering an area of 617 km<sup>2</sup> and is 100% owned by Pioneer.

During the year, the Company completed:

- Structural mapping: highlighting the Carmelia South - Mountain Maid area as a priority area for gold mineralisation;
- Soil geochemistry: 2,880 samples were taken in the Gindalbie-Acra Project areas;
- A fixed loop EM survey: This provided guidance ahead of drilling at the Kalpini South Prospect.
- RC drilling: 21 holes for 2,767m. Results confirmed the presence of steeply dipping shoots of gold mineralisation at the Kalpini South Prospect.

Drilling by the Company has intersected gold mineralisation at four prospects to date<sup>3</sup>, and further work is planned for others including:

- **Carmelia South:** An area first drilled by Pioneer in 2013, returning strong, shallow results (3m at 3.68g/t from 42m, 3m at 4.34g/t from 45m, 4m at 2.48g/t from 60m), is now ready for RC drilling;
- **Mountain Maid, King Edward, Josephine, and Evelyn Gladys:** 3km x 1.5km area with old gold workings and modern nugget patches;
- **Kalpini South, Rainbow, Deep River:** Previous drilling in the 1980s-90s intersected anomalous gold in a 5km long corridor;
- **Jubilee East:** RC drilling will further test mineralisation intersected by Pioneer in 2013, including: 13m at 2.84g/t from 27m, 4m at 8.1g/t from 34m and 2m at 9.03g/t from 43m;
- **The Matrix:** 2km gold-arsenic geochemical anomaly and recent nugget patch.

## Fairwater Project

The Company holds a 75% interest in the Fairwater Nickel Project, located 70km south east of Norseman. Targets are located in interpreted Proterozoic-aged rocks 100-130km south west of Sirius' (ASX-SIR) major Nova and Bollinger nickel deposits.

During the year the Company reported a new, stand-out nickel target (FWNi003), identified from soil geochemistry assay results<sup>4</sup>.

Work completed included:

- Soil geochemistry: 4,221 samples were taken;
- Heritage Protection obligations completed;
- 3 fixed-loop EM surveys completed.

The FWNi003 target has caused analogies with Sirius's Nova and Bollinger Deposits to be drawn, as outlined following:

- **Similar Geometry:** An oval structure with a more magnetic core occurring within a Proterozoic-aged geological terrain;

- **Age Implications:** Regional tramline stratigraphy is disrupted by the oval structure, suggesting it is younger in age than the surrounding rock units, and therefore possibly an intrusive unit;
- **Geophysics:** Aeromagnetic images of the FWNi003 oval structure shows multiple internal magnetic bodies with coincident anomalous Ni and Cr – the geochemical signature of a sub-surface mafic-ultramafic rock unit. Also, anomalous Cu and PGE values coincide with magnetic features. Cu and PGE are considered pathfinder elements for magmatic Ni-Cu deposits;
- **Scale:** The FWNi003 oval structure is evident for a strike length of 8km, a similar scale to the Nova and Bollinger structure which has a 5km strike length;
- **Regional Structure:** The postulated mafic-ultramafic body lies within 4km of a major regional thrust fault. This is recognised as an important relationship.

Work approvals are being sought ahead of field work commencing. Ground EM surveys and drilling is planned.

**EM** means electromagnetic, a geophysical survey technique used to locate conductive rocks which may host nickel sulphide mineralisation. There are a number of configurations of transmitters, receivers and processing available depending on the application.

**g/t** means grams per tonne (used for precious metals) and is equivalent to ppm.

**ppm** means 1 part per million by weight.

**RAB** means rotary air blast, a cost-effective drilling technique used to geochemically sample weathered rock.

**RC** means reverse circulation, a drilling technique that is used to return uncontaminated pulverised rock samples through a central annulus inside the drill pipes. RC samples can be used in industry-standard Mineral Resource statements.

**VMS** means volcanogenic massive sulphide, a mineralisation genesis style that may host Pb, Zn, Ag and Cu.

**Ag** means silver.

**As** means arsenic.

**Au** means gold.

**Cd** means cadmium.

**Cu** means copper.

**Hg** means mercury.

**Ni** means nickel.

**Pb** means lead.

**PGE** means platinum group elements

**Sb** means antimony.

**Zn** means zinc.



## Chairman's Letter Craig McGown

**It is my pleasure to present the Pioneer Resources Limited Annual Report for the year ended 30 June 2014, and again take the opportunity to thank all shareholders for their continued support.**

The past year has been one of considerable activity and progress for your Company, and I welcome this opportunity to share with you some of the details of our developments.

On the project level, the Company has been evaluating its portfolio of strategically located, high quality exploration assets, which provide our shareholders with exposure to the key commodities of nickel and gold, plus zinc and copper.

Our nickel exposure is captured by the Fairwater Project in the Albany-Fraser province, in south eastern Western Australia, and the Golden Ridge Gold Project in WA's eastern goldfields. In the gold space, we continued to progress our targeted drilling programs at the Acra Project, also in the eastern goldfields – with very promising success.

More recently, the Company has discovered a significant new copper-gold and lead-zinc anomaly at the Juglah Dome Project in the eastern goldfields region. This exciting new target is called the Dingo Dam Prospect, and has a strike length of over 1.2km. The Company is highly encouraged by initial exploration results at the project, and will undertake further work as a matter of priority over the coming months.

Similarly, at the Company's nickel assets significant progress was achieved during the year. A stand-out new nickel target was identified at the Fairwater Project, and this is planned to be the subject of further exploration and a first phase of drilling. At the Golden Ridge Project, the Company confirmed a JORC-compliant Mineral Resource estimate, and will now seek to identify additional targets in the area with a view to expanding its total Resource inventory.

The Company is focused on targeting commodities that are likely to have strong demand moving forward, and to add value to these projects through our exploration activities – and the work at our nickel projects and the Dingo Dam Prospect are prime examples of this model.

Financially, your Company remains well funded to pursue its goals and objectives, and it will continue to adhere to a prudent and considered approach to its exploration programs and capital management.

In line with our commitment to exploration I am pleased to report that 76% of the Company's expenditure for the year was "on-ground", which is reflected in our exploration progress.

I would like to acknowledge the outstanding contribution made by our Managing Director, David Crook, and his exploration team as well as the other consultants engaged by the Company. In combination, the team at Pioneer has delivered another a strong year, and I commend them for their focus and commitment.

I would also like to thank my Board and Company Secretaries for their positive input and contribution into the successful operation of your Company.

I, and the entire Pioneer Resources team, remain focused on delivering shareholder value through our targeted exploration activities, and I look forward to sharing news of our progress with you in the year ahead.

Yours sincerely

**Craig McGown**  
Chairman

**Pioneer Resources (ASX: PIO) is a well funded junior exploration company with a portfolio of strategically located gold, nickel and base metal projects in sought after mining regions in Western Australia.**

The Company aims to discover and develop high value mineral resources from within its project areas, to create value for shareholders.



## Capital Structure

|  |                        |
|--|------------------------|
| ASX code                               | <b>PIO</b>             |
| Mkt capitalisation                     | <b>A\$10m</b>          |
| 12 month trading range                 | <b>A\$0.03-\$0.008</b> |
| Cash & cash receivables (30 June 2014) | <b>A\$2.47m</b>        |
| Current shares on issue                | <b>611.5m</b>          |
| Current Options on issue               | <b>58m</b>             |

## Investment Highlights

- Focused portfolio of quality exploration assets in established mining regions in Western Australia
- Pioneer recognises that share price leverage is greatest at the time of a significant new discovery. Exploration programs are designed accordingly
- Offers shareholders exposure to key commodities;
  - Fairwater Nickel Project in Fraser Ranges
  - Golden Ridge Nickel Project in Eastern Goldfields
  - Dingo Dam VMS (Pb, Zn, Cu, Au) Prospect at Juglah
  - Dome Project in Eastern Goldfields
  - Acra Gold Project in Eastern Goldfields
  - Ashburton Zinc Project in Pilbara region

## Board & Management

|  |  |
|--|--|
| <b>Craig McGown</b><br>Non-Executive Chairman    | <b>Allan Trench</b><br>Non-Executive Director    |
| <b>David Crook</b><br>Managing Director          | <b>Julie Wolseley</b><br>Joint Company Secretary |
| <b>Wayne Spilsbury</b><br>Non-Executive Director | <b>Susan Hunter</b><br>Joint Company Secretary   |

## Contact Details

**David Crook**  
Managing Director, Pioneer Resources  
T: +61 8 9322 6974  
E: dcrook@pioresources.com.au

**James Moses**  
Media and Investor Relations, Mandate Corporate  
T: +61 420 991 574  
james@mandatecorporate.com.au



ASX Code: PIO