



## ASX/MEDIA ANNOUNCEMENT

5 September 2008

Pioneer Nickel Limited today advised shareholders and investors that exploration drilling has resumed. The program amounts to approximately 10,000m of rotary and aircore drilling to detail and extend nickel and gold targets as well as a first pass test of the Mt Thirsty South Nickel-Cobalt Laterite Project.

Targets include:

***Golden Ridge JV Project*** (30km SE of Kalgoorlie. Pioneer 51% Nickel Sulphide).

- The new Leo Dam nickel sulphide prospect. Drilling is designed to investigate and infill a zone of nickel-copper-PGE anomalism which included:
  - **GRA0233 68m at 0.56% Ni, 403ppm Cu and 279ppb Pt+Pd.**

***Lignum Dam Project*** (55km NE of Kalgoorlie. Pioneer 100% Gold).

- The new Tregurtha gold prospect. Infill and extensional drilling will detail this very significant RAB drilling anomaly. Previous results included:
  - **SSB0412 29m at 2.02 g/t Au including 4m at 6.62g/t Au.**
  - **SSB0413 8m at 2.52 g/t Au.**
  - **SSB0400 4m at 3.34 g/t Au and others.**

***Mt Thirsty South Project*** (150km S of Kalgoorlie. Pioneer 100% Cobalt-Nickel-Manganese).

- Inaugural drilling to investigate the interpreted southern extension of the 29M tonne Mt Thirsty nickel-cobalt laterite resource held by Barra Resources Limited and Fission Energy Limited.

Drilling is expected to be completed before the end of September 2008, and results made available as they are received.

Copies of promotional posters for these prospects follow.

- ENDS -

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David Crook is a Competent Person as defined by the 2004 JORC Code and is a member of the Australasian Institute of Mining and Metallurgy. He attests that this announcement is based on, and fairly and accurately reflects in the form and context in which it appears, the information in supporting documentation relating to Exploration Results.

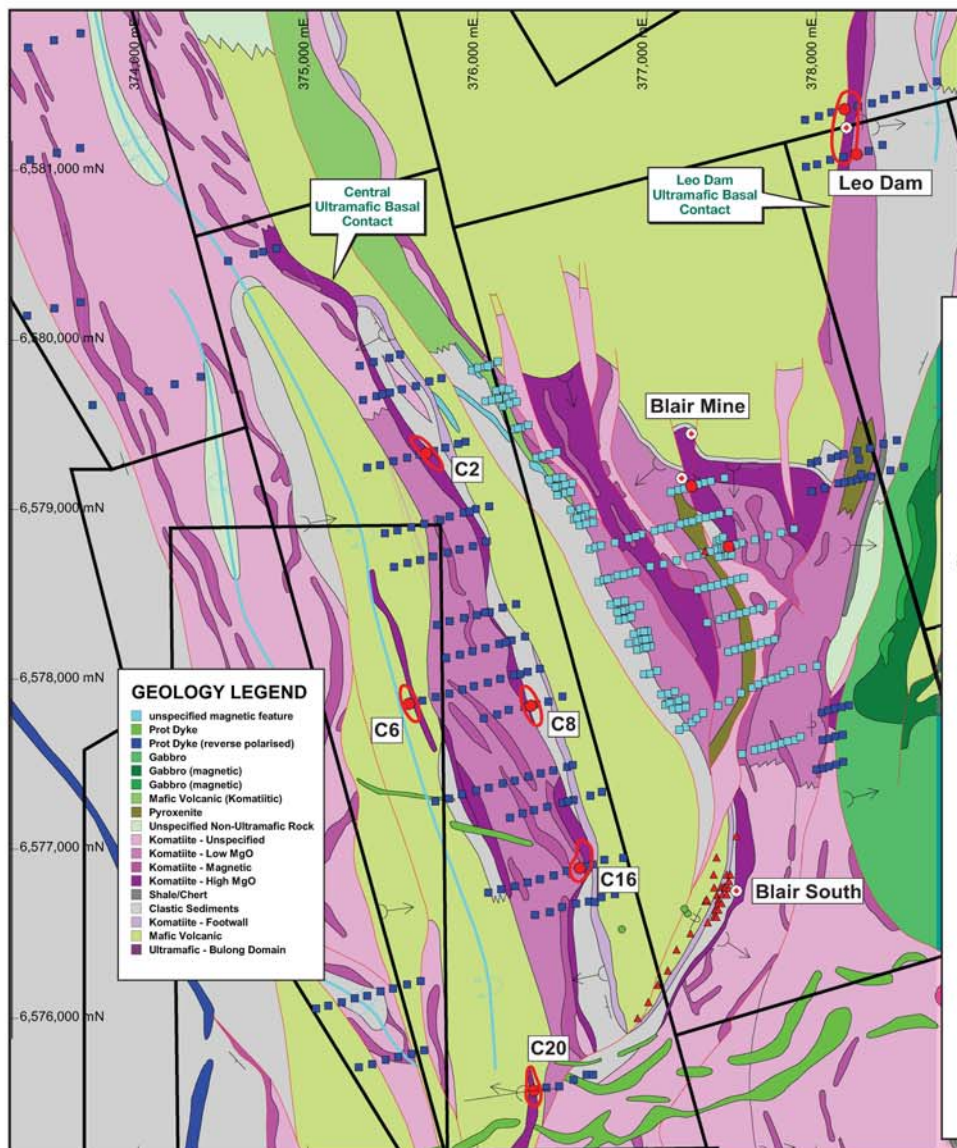


# Golden Ridge Project

"A core project delivering new targets using advanced geochemical modelling"

## Nickel

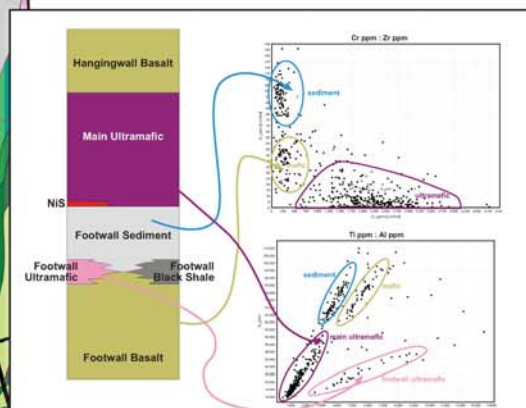
The Golden Ridge Project is located 30km south east from Kalgoorlie. The project covers prospective ultramafic stratigraphy surrounding the Blair Nickel Mine. The project is a joint venture between Pioneer and Australian Mines Limited (AUZ) with Pioneer holding 51%. The Blair Mine and immediate surrounds are excluded from the joint venture



**Detailed multielement analysis of drill data has allowed for the characterisation of the rock units within the project.**

This work has so far identified new areas of prospective basal contact at

- Leo Dam Ultramafic 2km long strike
- Central Ultramafic 5 km long strike



The collection of multielement assay data has allowed Pioneer to gain an understanding of the rocks in the GRJV that was unavailable to previous explorers in the area. This understanding has allowed Pioneer identify with confidence prospective basal contacts within the GRJV.

- By using the immobile elements Al, Cr, Ti and Zr Pioneer is able to characterise the rock units even for extremely weathered rocks.
- The units that comprise the basal stratigraphic package can be defined using Ti-Al and Cr-Zr plots.
- Using relative values of Al, Ti and Zr, Pioneer is able to discriminate prospective basal high MgO komatiite from low MgO komatiite in highly weathered aircore and RAB samples.

### Work Planned

- Continue to assess the stratigraphy and locate prospective basal contacts.
- 2000m aircore at Leo Dam to further define mineralisation and test for along strike Nickel mineralisation.
- 3500m aircore along the Central Ultramafic to further define the Ni-Cu-PGE anomalies and assess the embayment positions.
- SQUID fixed loop surveys to test the Leo Dam and Central Ultramafic.
- SQUID survey to define very-late-time anomaly identified west of Blair Mine.

### Wide spaced air core drilling completed during the year has identified six new targets.

<b>Leo Dam</b>	47m at 0.61% Ni, 327ppm Cu, 228ppb PGE 2m at 0.35% Ni, 500ppm Cu, 186ppb PGE
<b>C2</b>	11m at 0.35% Ni, 118ppm Cu, 32ppb PGE
<b>C6</b>	14m at 0.29% Ni, 202ppm Cu, 43ppb PGE
<b>C8</b>	13m at 0.54% Ni, 378ppm Cu, 71ppb PGE
<b>C16</b>	5m at 0.34% Ni, 717ppm Cu, 71ppb PGE
<b>C20</b>	5m at 0.45% Ni, 126ppm Cu, 58ppb PGE 4m at 0.355% Ni, 184ppm Cu, 58ppb PGE

# Lignum Dam Project

**"A greenfield discovery on Kalgoorlie's door step stacks up"**

## Gold

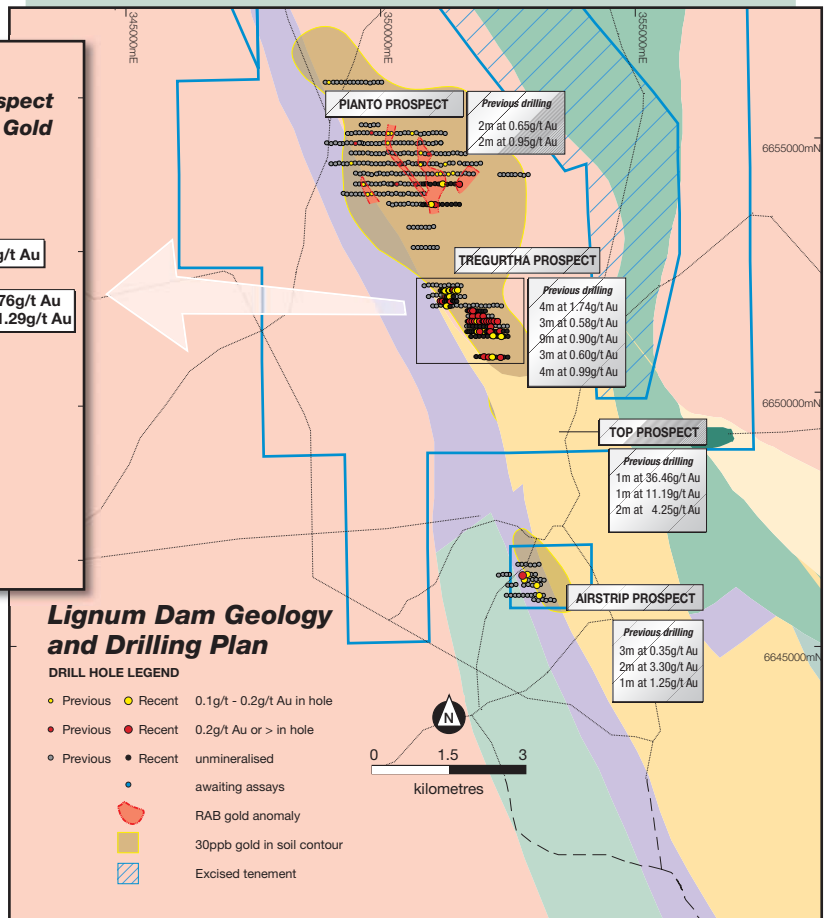
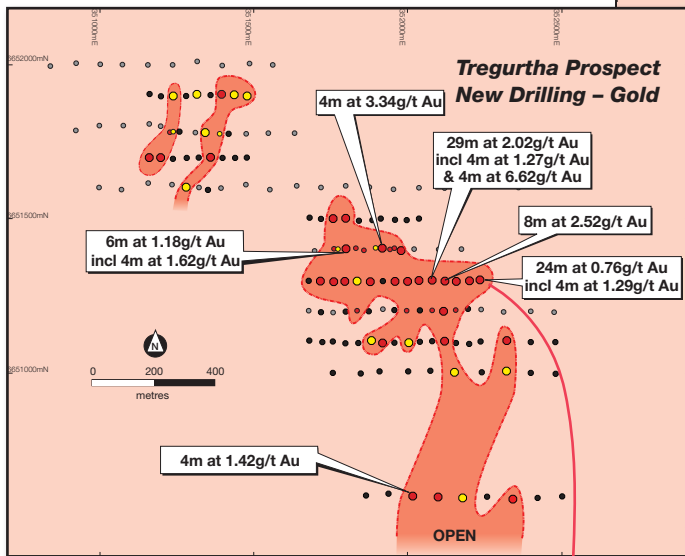
The Lignum Dam Project is located 55km NE of Kalgoorlie. Pioneer has a 100% interest in the project. Lignum Dam is part of the Silver Swan North West Project which is being explored for gold, nickel and base metals. The project is located 21km NE from the Paddington Mill, 35km NNW from the Kanowna Belle Mill.

*Despite the early stage of exploration the results are very exciting and targets are still "open".*

- Drilling over the majority of area still 400m X 80m.
- New structural and geochemical targets are still being generated.

### Two styles of gold mineralisation identified to date

- Shear zones in altered granodiorite – Tregurtha, Pianto, and Top. Similar setting to the Golden Cities and Federal Deposits.
- Sheared mafic – granite contact – Airstrip. Similar to the Mulgarrie Deposit.

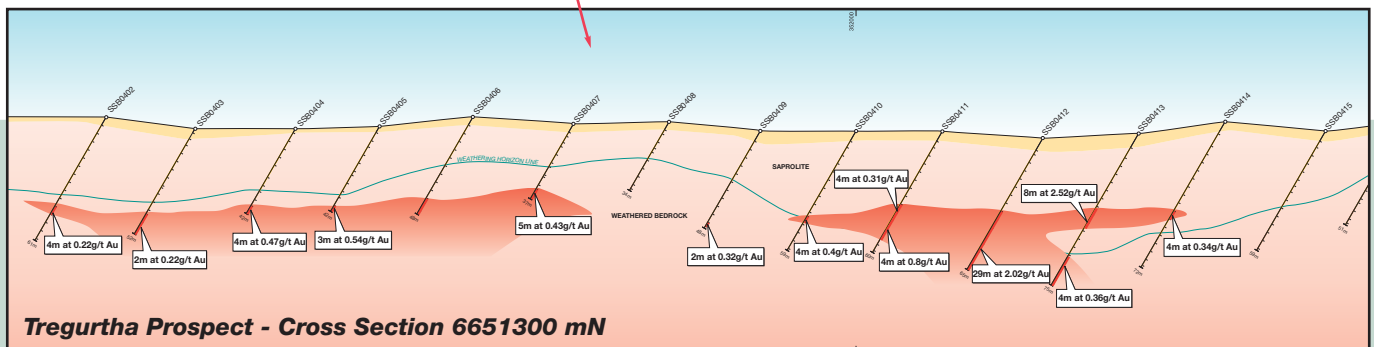


### Tregurtha Prospect The most advanced target

- Gold mineralisation associated with sericite – haematite – chlorite alteration with minor quartz veining within the granodiorite.
- 450m strike based on RAB drilling on 100m X 40m over main area.
- Reconnaissance 80m spaced line 400m south of main drilling shows mineralisation still present.

### Lignum Dam Geology and Drilling Plan

- DRILL HOLE LEGEND**
- Previous • Recent 0.1g/t - 0.2g/t Au in hole
  - Previous • Recent 0.2g/t Au or > in hole
  - Previous • Recent unmineralised
  - awaiting assays
  - RAB gold anomaly
  - 30ppb gold in soil contour
  - Excised tenement



**Tregurtha Prospect - Cross Section 6651300 mN**

### Work Planned

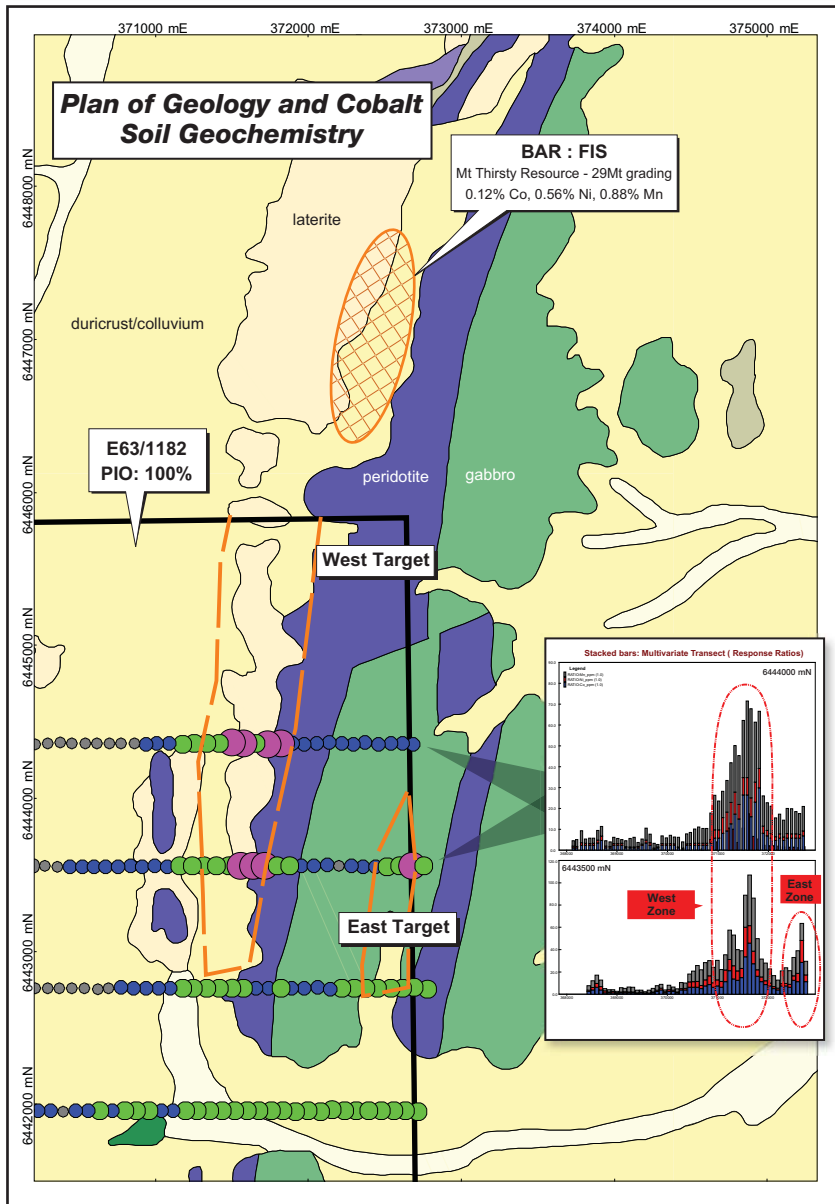
- Close off Tregurtha Prospect with more RAB drilling to south and west.
- RC and diamond drill test of Tregurtha Prospect.
- Infill RAB drill Pianto Prospect to 100m X 40m.
- Infill RAB drill Airstrip Prospect to 100m X 40m.
- SAM ground geophysical survey over all three prospects.
- Auger geochemistry over untested areas.

# Mt Thirsty South Project

“Maximising the value of the Company’s extensive land bank”

## Cobalt - Nickel - Manganese

The Mt Thirsty South Project is located 20km NNW of Norseman, WA. Pioneer has a 100% interest in the project. The project is immediately along strike from the Mt Thirsty Joint Venture Project (“MTJV”) (Barra Resources Limited and Fission Energy Limited).



- Key tenement granted July 2008.
- Interpretation of aeromagnetics, soil geochemistry and field checking has identified two laterite zones of interest. These are interpreted as the pervasively weathered extension of the olivine cumulate-textured peridotite which hosts the MTJV’s deposit.
- The western zone has a strike of 3km and the eastern zone is 1.2km long.
- Pioneer is planning to commence reconnaissance 400m X 80m RAB drilling over both zones in September 2008.
- Infill RC drilling will be undertaken over mineralised zones.



### Why Cobalt Laterite

- High value product – cobalt price has risen from \$28 to \$44 US/lb in last 12 months.
- By-product credits for nickel and manganese.
- Advances in extractive metallurgy for lateritic ore styles indicate that moderate temperature, ambient pressure leach using a weak acid solution could be commercially viable.

