Lefroy Resources Limited

ACN 107 118 673

# ANNOUNCEMENT
# April 7 2005

## Exploration Program Increased
## Diamond Drilling Commenced at Lefroy

**Lefroy Resources Limited (LEF) has stepped-up exploration at the Lefroy Goldfield with additional drilling below high-grade gold bearing quartz–sulphide veining discovered in January and February 2005. The Company has increased the program by approximately 2,000 metres of RC (including diamond pre-collar drilling) and 1,000 metres of diamond-tail drilling at the Pinafore and Native Youth Reefs.**

**Diamond drilling commenced at the Pinafore Reef on the 5th of April.**

Orientation RC drilling in January and February confirmed that high-grade gold bearing quartz-sulphide veining continues below the old workings. Results to date have provided promising grades and ore-zone thicknesses. Further encouragement is provided by the relative size of the mineralised structures; old workings at the Pinafore and Native Youth Reefs strike for over 400 metres, indicating each prospect could support a substantial gold deposit.

**DRILLING HIGHLIGHTS**
**(Previously Reported)**

**Pinafore Reef:**

**LFC018: 6 metres @ 5.38g/t**
**including 1 metre @ 20.58g/t**

**LFC018: 7 metres @ 2.66g/t**
**including 1 metre @ 8.39g/t**

**LFC023A: 4 metres @ 12.0g/t**
**including 1 metre @ 42.36g/t**

**LFC025: 10 metres @ 1.72g/t**
**including 1 metre @ 2.83g/t**

**Native Youth Reef:**

**LFC021: 10 metres @ 3.03g/t**
**including 3 metres @ 4.99g/t**

**LFC022: 14 metres @ 3.38g/t**
**including 3 metres @ 8.13g/t**

**INTERPRETATION OF RESULTS**

**Pinafore and Chum Reefs**

The Pinafore and Chum Reefs were mined prior to 1904 for approximately 55,000oz and 39,000oz of gold respectively, at recovered grades averaging 30-60g/t. The high grade gold-bearing quartz-sulphide "lodes" forming each reef run parallel, and are located only 150 metres apart (Figure 1.).

The reefs were mined to a depth of approximately 130 metres and then abandoned when gold recovery became too difficult for the primitive mining and processing techniques that existed at the time. Reports from the 19th century record occurrences of high-grade ore well below the old workings, that were never mined or even recognised. This is reflected in the following excerpt from an 1883 Government Mines Report:

Suite 5, 589 Stirling Hwy
Cottesloe 6011, WA
Ph: +61 (8) 9286 1622
Fax: +61 (8) 9286 1633

*….“too much reliance is being placed upon the very unreliable and misleading results obtained by washing quartz and ‘panning’ until the ‘free’ gold remains. By those means the auriferous sulphurets are discarded, though they carry most of the gold at the deep levels.”*

Drilling in January and February 2004 successfully intersected high-grade gold-bearing quartz–sulphide veining below old mine workings at the Pinafore. This result marks a fundamental step forward in the exploration of the Lefroy Goldfield, establishing for the first time that historic mining at Lefroy ceased in good grade with mineralisation continuing below the old workings. It was indeed the first example of high-grade ore seen at Lefroy in modern times. Drill testing the Chum Reef was unsuccessful with holes deviating and missing their targets.

Further drilling at the Pinafore has confirmed the Reef over a minimum strike length of 170 metres (open east and west), on a line of historic workings that can be followed for over 400 metres. Grades and ore-zone thicknesses returned are highly encouraging (above), and there is great potential for the Reef to be further extended along strike and at depth.

**Native Youth & Morning Star Reefs**

Located near the centre of the Lefroy township, the Native Youth Reef was historically mined for 25,000oz from 2.4 metre wide “lode-splay”, striking over 400 metres and averaging 30-60g/t. The Native Youth is located approximately 1,000 metres south of the Pinafore Reef (Figure 2.).

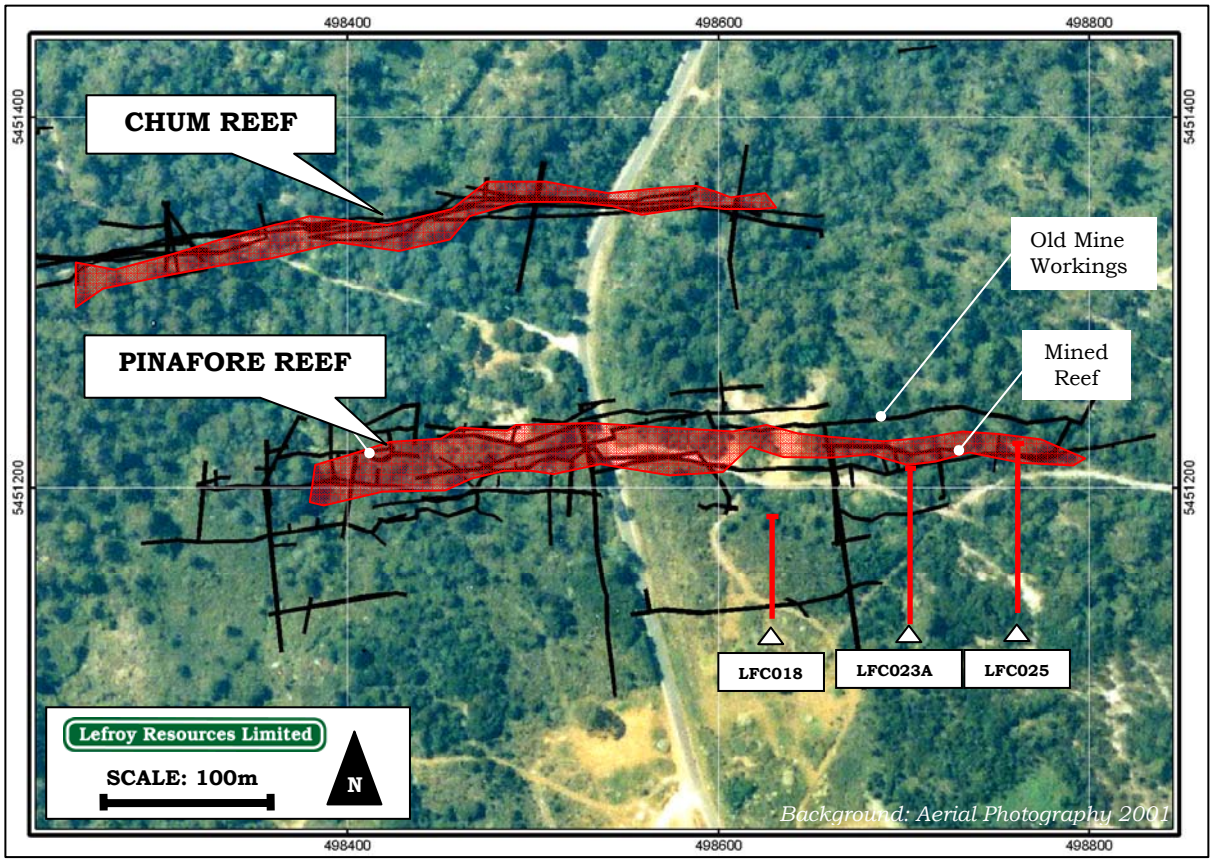


**Figure 1. Aerial photograph showing Pinafore and Chum Reef ore stopes (red) and drives (black) projected to surface. RC drill holes LFC018, 023A & 025 are shown. Both Reefs remain open along strike and at depth.**


Suite 5, 589 Stirling Hwy
Cottesloe 6011, WA
Ph: +61 (8) 9286 1622
Fax: +61 (8) 9286 1633

RC drilling in January intersected shallow and extensive quartz-sulphide veining below old workings carrying gold grades ranging up to 13.51g/t. RC drill hole LFC022 passed through timbered drives indicating that the ore-zone (reported in March) may represent hanging–wall and foot-wall mineralisation only, with the main high-grade "gold-lode" removed by historic mining activity at this level. Despite having the primary "lode" removed grades and ore-zone thicknesses are highly encouraging.

The Morning Star Reef is located 260 metres north of the Native Youth. It was discovered at surface and mined down to approximately 130 meters prior to 1884. Although only producing approximately 13,000oz of gold the Morning Star represents an important target due to its potential to meet with the Native Youth at depth; it has long been recognised at Lefroy that the meeting of two reef "splays" frequently results in spectacular grades and an overall increase in ore-zone thicknesses.

## CONCLUSION

The relative size of the reef structures tested at Lefroy is highly encouraging. Prior to 1900 high-grade gold bearing quartz-sulphide ore was mined from structures striking over 400 metres (Figure1.). These mineralised zones have many similarities to the 1.8 million ounce Tasmania Reef (Beaconsfield Gold Mine), located 20 kilometres from Lefroy. Beaconsfield strikes for approximately 350 to 450 metres, and has grades and ore-zone thicknesses that are highly comparable with Lefroy. The Beaconsfield ore is very similar to Lefroy and mineralisation is thought to be the same age.

**The mineralised structure hosting the Pinafore Reef is clearly of sufficient magnitude to host a million-plus ounce resource, and the potential for the adjacent Chum Reef to produce a "twin" deposit makes this prospect highly attractive.**

**In addition orientation drilling at the Native Youth Reef, despite having primary "lode" removed, shows grades and ore-zone thicknesses that are extremely prospective. The shallow (100 metre) depth of the Reef and its potential to join with the adjacent Morning Star Reef makes the Native Youth an important target.**

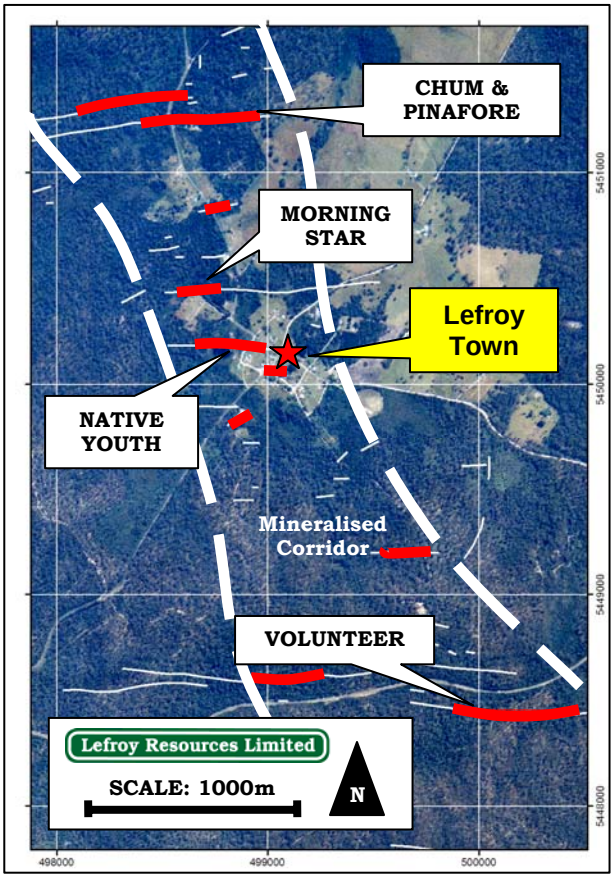


**Figure 2. Aerial photograph showing Lefroy Goldfield key prospects (red) and mineralised structures (white).**

Both the Native Youth and the Pinafore Reefs form part of the Lefroy Goldfield, characterised by around 30 close spaced gold-bearing reefs. Drilling has shown that at least 3 reefs have the potential to produce a substantial economic resource. These results mark the successful testing of the northern portion of the Goldfield.


Suite 5, 589 Stirling Hwy
Cottesloe 6011, WA
Ph: +61 (8) 9286 1622
Fax: +61 (8) 9286 1633

The southern section, containing the single biggest historic reef (the Volunteer Reef), remains largely untested. The close proximity (1000 metres) of the Pinafore/Chum and Native Youth/Morning Star, highlights the potential for the Lefroy Goldfield to produce multiple economic deposits amenable to campaign mining (Figure 2.).

**PROGRAM SUMMARY**

The Pinafore and Native Youth Reefs are located within the historic Lefroy Goldfield in north east Tasmania. The Lefroy Goldfield was mined for approximately 200,000 ounces of gold at spectacular grades (30-60g/t) in the late 19th century.

Lefroy Resources Limited commenced orientation drilling of the Goldfield in November 2004, and has completed 29 RC holes for 4570 metres. Drilling targeted 11 prospect areas over an area striking approximately 3 kilometres, through the old gold-rush town of Lefroy (Figure 2.). Significant mineralisation has been successfully identified at three high-grade reef targets, below historically mined gold "lodes", confirming that high-grade gold continues beneath the old workings at Lefroy.

**As a result of these positive results the Company has stepped-up drilling, increasing the 2004 budgeted program by approximately 2,000 metres of RC (including diamond pre-collar drilling) and a further 1,000 metres of diamond drilling. This drilling will continue on with planned orientation work and follow up on significant results at the Pinafore and Native Youth Reefs.**

Drilling will be followed by detailed soil geochemistry and down-hole geophysical survey work. Metallurgical ore characterisation work has commenced with samples from LEF018 at the Pinafore Reef and structural interpretation of diamond core is planned.

For further details contact,

John Canaris
Chief Executive Officer
Lefroy Resources Limited
Suite 5, 589 Stirling Hwy
Cottesloe 6011, WA
Ph: (08) 9286 1622
Fax: (08) 9286 1633
john@lefroyresources.com.au

**RC drilling at the Native Youth Reef, February 2005.**


Suite 5, 589 Stirling Hwy
Cottesloe 6011, WA
Ph: +61 (8) 9286 1622
Fax: +61 (8) 9286 1633