

Lefroy Resources Limited

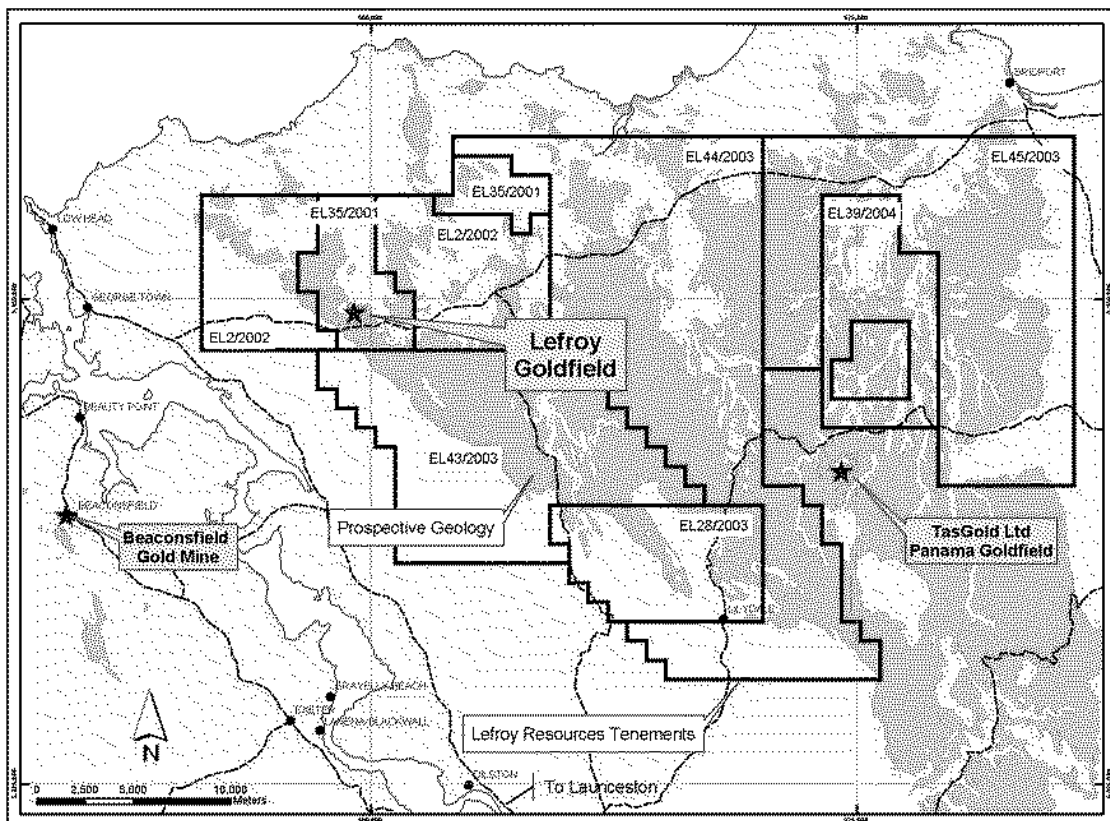
ACN 107 118 673

QUARTERLY ACTIVITY REPORT FOR THE PERIOD ENDED 31 DECEMBER 2004

HIGHLIGHTS

Lefroy Resources Limited ("Lefroy Resources" or the "Company") is pleased to advise that orientation RC drilling commenced during the December Quarter. RC drill hole LFC018 intersected high-grade gold bearing zones of quartz-sulphide veining beneath the Pinafore Reef, demonstrating that high-grade mineralisation continues below historic workings at the Lefroy Goldfield. The drill program will continue into the next Quarter.

The Company has continued to consolidate a substantial tenement package in the NE of Tasmania. The granting of three adjacent exploration licences during the December Quarter places Lefroy as the second largest single landholder the north east goldfields of Tasmania.



Lefroy Resources Limited Tenement Map, NE Tasmania.

TARGETED DRILLING

Structural Interpretation Completed

Due to the complex structural controls on mineralisation Lefroy Resources recognised the need for structural work to be carried out. The detailed structural model for mineralisation developed last Quarter was applied to the interpretation of high-resolution airborne geophysical data collected in September 2004. Resulting targets have been prioritised and are being tested using a combination of RC, soil geochemistry and RAB drilling.

DRILLING COMMENCED

Lefroy Goldfield Target Area

The Lefroy Goldfield extends for at least 5 kilometres through the old gold-rush town of Lefroy, 40 kilometres north of Launceston. The Lefroy Goldfield contains many historic workings and shafts with approximately 30 gold reefs which were mined and subsequently abandoned in the late 1800's.

Records indicate that the average mined grade of the field was in excess of 30g/t Au. These high-grade gold lodes and shoots are a primary target for the Company, which is focussing its initial efforts on delineating and drill testing targets around the old workings and their potential extensions.

Orientation drilling at the Lefroy Goldfield has been designed to test several mineralisation styles within a corridor striking through the old Goldfield. The Company commenced its 5000 meter RC drill program in November 2004, completing 18 holes for 2543 metres by the end of the Quarter. This first phase of the program, despite being hampered by hole deviation, returned promising results from 2 prospects located approximately 800 meters apart. Best results from the prospects are as follows:

Pinafore Reef

Hole ID	*Easting	*Northing	Dip/ Azimuth	From	To	Interval	**Au g/t
LFC018	498600	5451125	-60/345	137	144	7	2.66
(including)	" "	" "	" "	139	140	1	8.39
LFC018	498600	5451125	-60/345	183	189	6	5.38
(including)	" "	" "	" "	187	188	1	20.58

Morning Star Reef

Hole ID	*Easting	*Northing	Dip/ Azimuth	From	To	Inter- val	**Au g/t
LFC012	498700	5450360	-60/000	183	188	5	1.48
(including)	" "	" "	" "	183	184	1	2.93
LFC013	498700	5450370	-60/000	174	176	2	1.30
(including)	" "	" "	" "	175	176	1	1.51

*Coordinates in GDA 94, UTM Zone 55

**Cut off Grade 1.00g/t

SUMMARY OF DRILL RESULTS

Pinafore Reef

The Pinafore Reef was mined prior to 1900 for approximately 50,000 Oz of gold, at grades reported as being around 30g/t. Gold was recovered from a main reef and splays containing gold-bearing quartz-sulphide, and mined down to a depth of approximately 120 metres.

Hole LFC018 successfully targeted down dip extensions of the main reef, and has been interpreted to have intersected both the main reef and a previously unknown hangingwall splay containing significant gold mineralisation, approximately 60 meters below the historic mines (Figure 1. -Schematic Cross Section). Follow up drilling will target further extensions and other down dip extensions from the main reef.

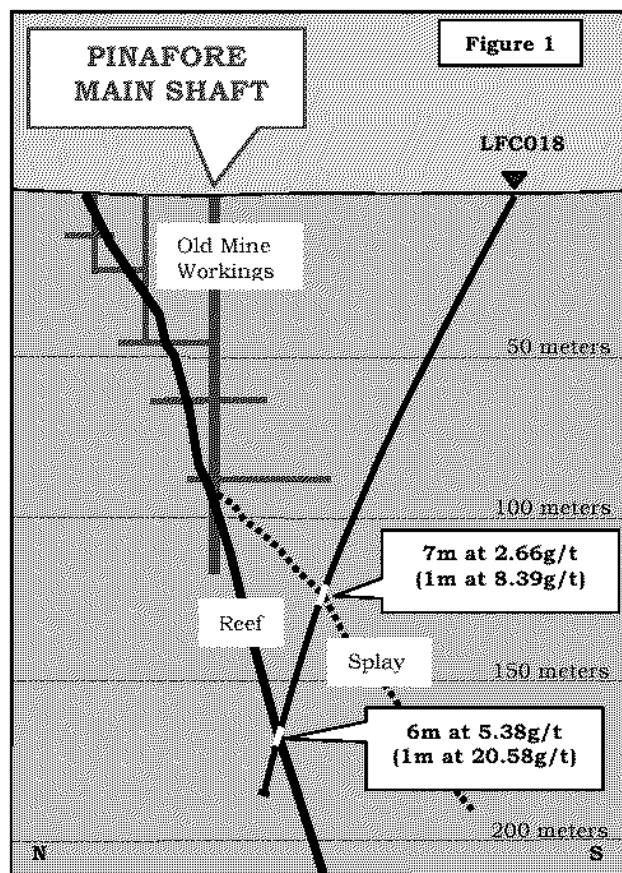
This result demonstrates that high-grade mineralisation continues below historic workings at the Lefroy Goldfield. The result marks the successful testing of one of approximately 30 individual reefs that are known within the Goldfield.

Morning Star Reef

The Morning Star Reef was discovered at surface and mined down to approximately 130 meters prior to 1884. It produced approximately 13,000 Oz of gold at around 20-30g/t. Gold was recovered from a single west plunging "lode".

LFC0012 and 013 targeted the west plunging down dip extensions of the main reef (Figure 2. - Overlain on long-section from 1884). Whilst both holes deviated and missed their primary target they did intersect a well developed shear zone containing quartz-sulphide and low-grade gold mineralisation. Mineralised shear zones at the Lefroy Goldfield host the high-grade gold "lodes" that characterize the goldfield, and are the primary target for the Company. Follow up drilling is planned for 2005 targeting high-grade reefs.

Drilling of a further 2,500 meters is scheduled to commence in January 2005. This drilling will follow up on significant results from the first phase of the program and test 5 new target areas. Problems associated with hole deviation have now been addressed by the drilling contractor, which will ensure an improved result for the second phase of the program.



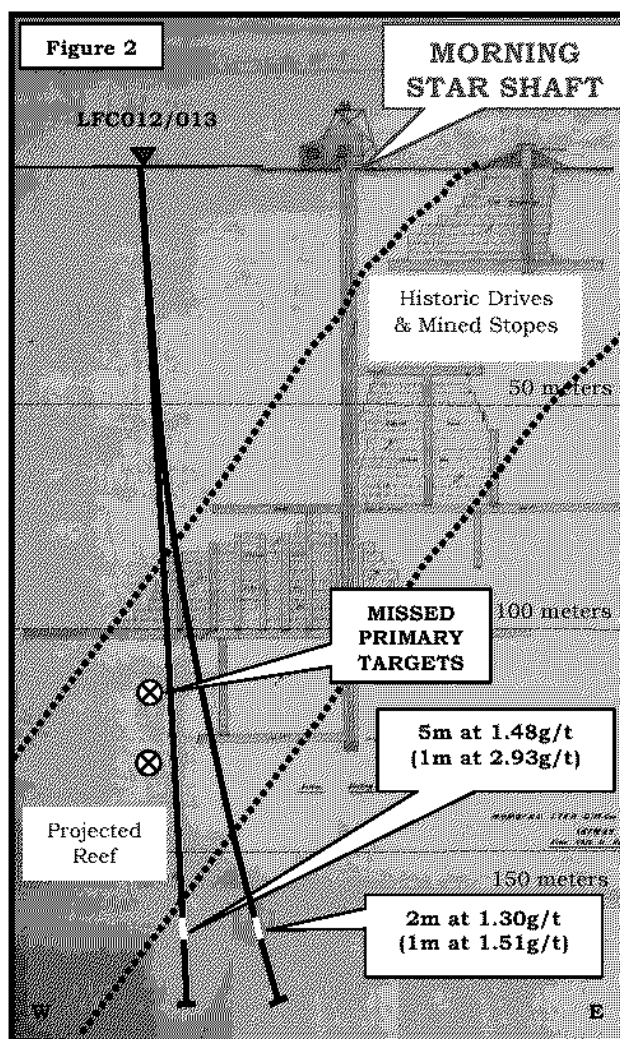
TENEMENT CONSOLIDATION

During the quarter the Company continued to consolidate its land holding with the granting of three exploration licences; EL43/2003, EL44/2003, EL45/2003. EL28/2003 remains in application. The Company's total landholding (including application) is over 770 square kilometres, placing Lefroy Resources as the second largest single landholder in the area. A summary of tenements held is given below:

REGIONAL SUMMARY

The NE Gold Province of Tasmania has produced more than 600 gold deposits and occurrences from which there has been historical production in excess of 1.7Moz of gold. The Company's exploration land package consolidates at least three separate mineralised structures. The Lefroy Goldfield, located 20 kilometres from Beaconsfield, occupies the western most mineralised structure and remains the Company's most important Prospect by way of historic production (approximately 200,000oz).

The Company's extensive land package extends east to cover potential northern strike extensions from the Lisle/Golconda Goldfield held by TasGold Ltd (see Tenement Location Map on cover page). In addition, Lefroy Resources tenements follows the long-strike continuation of prospective geology south-east into the Bangor Prospect (EL Application 28/2003).



Tenement ID	Area (Km2)	Prospect Area Name	Status
ML16M/91	0.31	Lefroy Mining Lease	Granted (to Nov 2005)
EL35/2001	42	Lefroy Project Area	Granted (to Oct 2008)
EL2/2002	55	Pipers River Project Area	Granted (to Oct 2008)
EL43/2003	139	Den Ranges Project Area	Granted (to Oct 2009)
EL44/2003	239	Lebrina Project Area	Granted (to Oct 2009)
EL45/2003	186	Nabowla Project Area	Granted (to Oct 2009)
EL39/2004	52	Ferny Hill Project Area	Granted (to Sep 2009)
EL28/2003	58	Bangor Project Area	Application

Bangor Aeromagnetic Feature

The Bangor aeromagnetic 'low' was originally identified in State Government open file regional geophysical data. To verify the authenticity of the source, several flight-lines were collected over the feature in a north-south direction, as part of the Company's airborne survey conducted in September 2004. The Bangor aeromagnetic 'low' has been interpreted from this work as a real feature that has a broad, very weakly subdued response. It likely results from alteration along a regional east-west structural zone that is similar in size and orientation to the structure controlling mineralisation at the Volunteer Reef, within the Lefroy Goldfield. The Volunteer Reef is most likely the single largest producing Reef in the area.

It is anticipated that the successful exploration model and methods developed at the Lefroy Goldfield will be implemented across the extent of the Company's landholding, to explore and test mineralised regional structures.

CORPORATE

Financial Position

At the end of the Quarter the Company had a cash balance of \$4.6 million.

Issued Capital

Lefroy Resources Limited has 35,875,001 ordinary shares on issue, including 21,375,001 quoted on the Australia Stock Exchange. During the quarter 17,937,500 options expiring 31 March 2006 exercisable at 25 cents were allotted and officially quoted on the Australia Stock.

Company Secretary

The Company would like to advise that Mr Anthony Samaha has resigned as joint Company Secretary. The Company has also appointed Jade Styants as Company Secretary.

For further details contact,

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