



30th July 2009

Company Announcement Office
Australian Securities Exchange

QUARTERLY EXPLORATION REPORT

(For the period April 1st to June 30th 2009)

The Company continued its bulk sampling program designed to examine the system for coarse grain Platinum (Pt) and Gold (Au) within the Pit One area on the Company freehold at Fifield, NSW. The Pit One location is considered an important exploration component within the Company's key overall objective, "to try and establish a potential open cut minable resource within the 6km² zone of currently identified Pt mineralisation noted within the Platina-Gillenbine and Ebenezer project areas."¹

Activities for the period at Pit One included excavation and processing of the gravel systems, exposure of the underlying bedrock and substantial site and plant improvements. The Company is satisfied with the progress in the bulk sampling operations to date and the knowledge being gained.

The key expectations of the Pit One program involve a thorough assessment of the recovered Pt, Au and other heavy minerals and exposure of the underlying bedrock geology. Both of these aims are being achieved. Apart from a preliminary review of the bedrock geology, bedrock mining and testing has yet to be undertaken, but will occur once the gravel layer processing has been completed, including stockpiles.

The Company provides the following links for video of the work site area and discussion of the bulk sampling program on Pit One. (click the title whilst viewing on your computer screen and connected to the internet)

- Video 1 [Pit One Excavation of Pt gravel system in Panel C Fifield NSW - July 2009](#) (click title)
Video 2 [Panel A discussion on Pt gravel and bedrock Pit One Fifield NSW – July 2009](#) (click title)
Video 3 [Processing Plant operation and Pt concentrate production Fifield NSW – July 2009](#) (click title)



Examining clean precious metal concentrates where coarse (left) and fine (right) Pt and Au have been recovered, with selected material being refined (approx. 400g) or undergoing further petrological testing.

ACTIVITIES FOR THE QUARTER - FIFIELD NSW

Highlights of the Current Work Program

- ◆ **Two blocks are exposed (blocks A and C), within Pit One area, where the Pt bearing gravel layer has been substantially removed, and processed through the gravity plant (Appendix 3).**
 - Approx. 2,000 tonnes of gravel has been processed, producing approx. 1,500kgs of Ironstone concentrate, containing Pt and Au
 - An additional 500mt of gravel has been mined and stockpiled awaiting processing through the plant

¹ Appendix 1 and Appendix 2 for details of locations

➤ **A concentrate processing facility and operation has been established**

- *Approx. 400g of high value concentrate (HVC) of Pt & Au was submitted for refining*
- 250kgs of ironstone concentrate is stockpiled for further upgrading to HVC
- The plant requires a “clean out” to recover free Pt & Au trapped within the plant
 - This material will contribute to grade determination

➤ **The Ironstone concentrate recovered from “Pit One” has been undergoing metallurgical testing for Pt and Au recovery.**

- Examination of the Ironstone concentrate indicated free Pt and Au grains are present as expected
- Crushing and grinding tests on Ironstone also revealed that a portion of Pt and Au grains are encapsulated within certain Ironstone pebbles (the full extent is not yet known)
- A large proportion of the Ironstone is magnetically susceptible, and therefore provides a metallurgical pathway. A small magnetic separation circuit was established.

➤ **The gravity plant and circuit continue to be modified for improved efficiency.**

- The hopper capacity has been increased to 40 tonnes, with installation to be completed in August
- The plant throughput has exceeded 100 tonnes of gravel per 8 hour shift, but the plant is generally operated on an “as required basis” at this stage
- The ramp loading area was increased in size, to accommodate the larger (40t) hopper installation
- Major maintenance overhaul was undertaken, including upgraded motors, pumps and generators



New ramp established to house a 40t hopper addition to the processing circuit

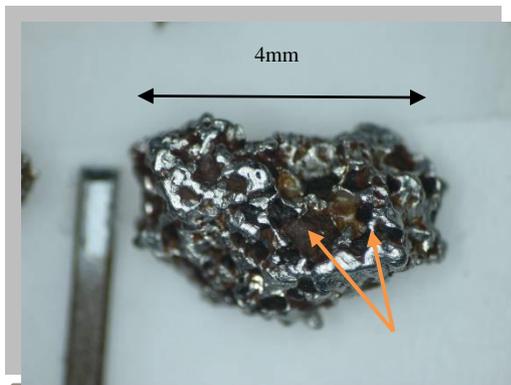
➤ **The larger area of available gravels on the Company freehold has been prioritized for examination on a broad scale**

- *Auger drilling will be used to delineate the full extent of the gravel system on the Company freehold on a strike of over 2km and an average width of 450m.*

➤ **Petrological examination is currently being undertaken on a range of materials recovered from the plant including rock, mineral and metal grain samples, including important composite materials.**

- This should assist further understanding of the genesis and character of the Pt and Au being recovered

Field observation and petrological review, under microscope, of the morphology of the coarse metal grains, indicates many Au and Pt grains appear to have a local provenance. Grains with longer travel histories are also present.



Abundant negative crystal impressions, Pt grain intergrown with primary igneous crystals and possible relict primary oxides



Short travelled Pt Grain, angular and indented with unidentified intergrown mineral inclusions

Near term goals for the Bulk Sampling program at Pit One

Inclement weather, plant procurement and fabrication issues with associated infrastructure development, have each been a contributing factor that has slowed trial mining and processing operations in the last quarter.

The plant and mining operation has not been designed at this point in time to be a continuous commercial program, but is able to process large scale samples as required, on an intermittent basis.

The Company is targeting a range of qualitative and quantitative outcomes within the next few months at Pit One area, as follows:

- Continue to improve mining and processing methods to minimize overburden dilution of the gravel processed and increase efficiency in handling and throughput. Water needs are also being assessed.
- Determine an approximate head grade for the Pt & Au within this particular section of the gravel system, but recognizing that gravel systems in general are likely to contain irregular grade.
 - Advance the metallurgy and characterization of the mineralisation (particularly the Ironstone material)
 - Establish broad parameters for the cashflow contribution of processing the gravel system
- Process the 0.4m section below the gravel layer, testing for alluvial Pt & Au trapped within crevices in the underlying bedrock.
- Having established a clear divide with the alluvial Pt & Au system in the gravel influenced layer above, examine the underlying bedrock, for “in situ bedrock Pt, Au and indicator minerals”.
 - Map the bedrock geology in large “plan view” exposures
 - Excavate vertical sections of bedrock for detailed sampling



Examination the bedrock floor in Panel A, showing the fault lines now exposed, consistent with Trench 24 & 24A observations previously. The bedrock system will be mined to a greater depth, then mapped and tested.

- Delineate larger sections of the Pt & Au bearing gravels and bedrock systems.
 - Open new mining blocks B, D and E to continue the bulk sampling
 - Use extensive auger drill traverses and additional trenches
 - Examine additional known gravels on the Company freehold, including historic tailings from the Platina Lead

Gravel Delineation Plan and Sampling over a larger area on Company Freehold

The Company intends to undertake an extensive auger drilling campaign on its freehold, identifying the Pt and Au bearing gravel system, suitable for bulk sampling. Key features of the program are as follows:

- An area of approx. 2km x 450m is believed to potentially hold Pt bearing gravel worthy of assessment
- 85 auger holes are planned, to depths of 3m ~ 4 m

- Pt and Au will be recovered by the Company at its own facility
- This program would take approx. 6 weeks to complete and it will start after the main gravity plant recommences operation

If results appear worthwhile, then bulk trenches would be undertaken (100m sections) to help provide input for a possible resource estimation of Pt and Au bearing gravels. This program would also provide valuable additional bedrock information to the Company.

EXPLORATION SUMMARY FOR OTHER AREAS IN THE QUARTER

The dominant activity in the quarter was the Fifield bulk sampling and related site improvement work. Negligible exploration was undertaken elsewhere on the Company's Fifield tenements.

The Trevallyn diamond prospect at Bingara NSW has been reviewed and selected samples from the garnet anomalism previously identified in late 2008 will undergo determination with petrology and micro probing.

SUMMARY EXPLORATION PLANNED AT FIFIELD FOR THE JUNE QUARTER 2009

In the September quarter 2009, the Company intends to continue to perform the following activities at Fifield:

- Finalise plant and site improvements, in preparation for more continuous processing of gravels and bedrock
- Extend the bulk sampling and trial mining within the Pit One Area and including the MC306 area aiming at 2,000 to 3,000mt of processed material in the period
- Estimation of Pt grade of the gravel system and some of the bedrock
- Place additional trenches as required at the Pit One area, to assist geology orientation and mining blocks
- Use of gridded auger drilling to help delineate extensions in Pt bearing gravel areas prospective for mining
- Apply additional petrological study to selected samples to enhance the genetic understanding of the platinum system.

Project and Mineralisation Background – Fifield NSW

The systematic exploration by Rimfire within the immediate Fifield region has continued to develop a wide variety of mineralisation prospects. Each prospect has a strong surface expression, a highly relevant geological context and favourable development criteria.

There is a significant variation in mineralisation styles at Fifield, which includes Au, Pt and Cu/Base Metal prospects, with these occurring across a zone of less than 10km. This observation also provides further support to the interpretation of the region as being a complex volcanic rift setting, with evidence for multiple, polymetallic mineralisation events associated with sub-volcanic intrusives, shearing and brecciation at various scales.

Accordingly, the exploration shows that metal zoning remains an important feature of the regional geology at Fifield. The under explored Fifield area represents an excellent exploration setting for commercial mineralisation discovery in the Company's view (Appendix 1).

The major mineralisation target for exploration by the Company at Fifield remains focused on coarse grain Platinum. The Platina-Gillenbine area is of particular importance in understanding the bedrock mineralisation (Appendix 2).

A key feature of the exploration landscape at Fifield NSW is the minimal outcrop available for examination. However, in many instances the depth to bedrock is less than two metres, so a combination of soil geochemistry, auger drilling and trenching to bedrock is an ideal way to prospect for the evidence of significant mineralisation. These activities are also relatively low cost to undertake.

Historic Pt mining at Fifield yielded in excess of a reported 20,000 oz of Pt from the deep leads and surface soil mining (circa. 1900~1930). The soil mining activity has disturbed the most exposed areas of the land surface, thus requiring a customized soil sampling technique in many instances. The large scale of the Pt mineralisation at Fifield has meant that the Company has needed considerable near surface sample processing to define representative areas of bedrock Pt.

COMMODITY PRICING FOR THE MARCH 2009 QUARTER

The price of Platinum was again lower in the period, but was trading in a higher range generally of approximately USD1,050~USD1,250 per ounce ([www.Kitco.com](http://www.kitco.com)). At the time of this report the price was trading at USD1,196 per ounce (NY Ask 24th July). In Australian Dollar terms Platinum was trading at approx. AUD1,400 ~1,500 per ounce level, in the period.



CORPORATE ACTIVITIES

Tenement Position

The Company received renewal in the period for the key tenement EL5534 at Fifield NSW.

Cash, Facilities and Investments

As at 30th June 2009 the Company had approximately \$1.351 million in cash.

Issued Capital

The issued capital at the close of business at 30th June 2009 was unchanged:

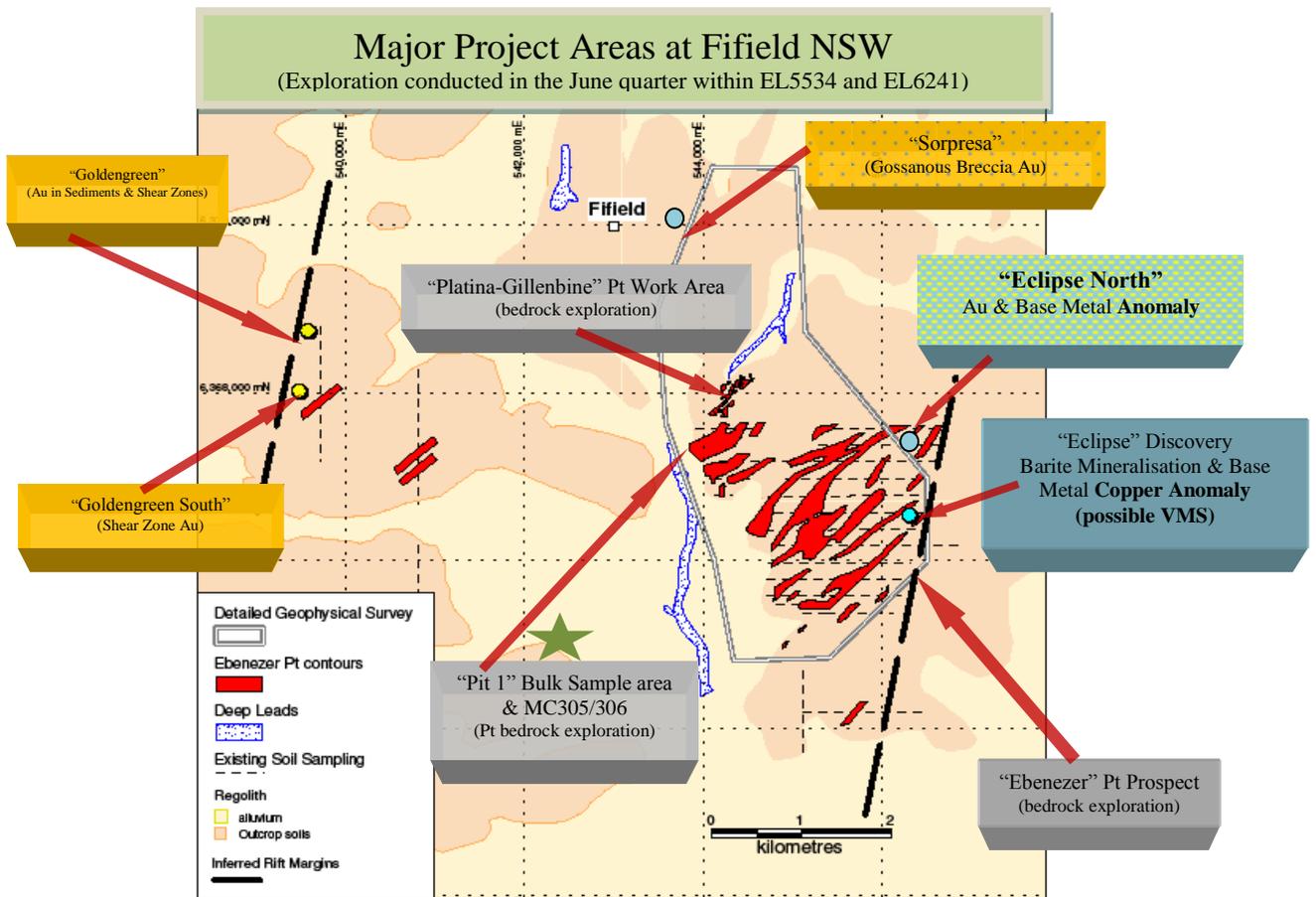
311,976,107 ordinary shares; 7,500,000 unlisted call options ex @ \$0.12 expiring 30th September 2010

JOHN KAMINSKY
Chairman

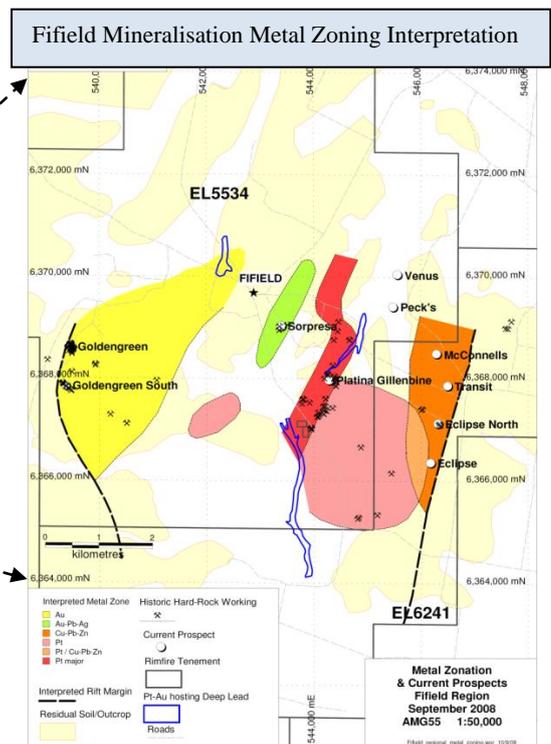
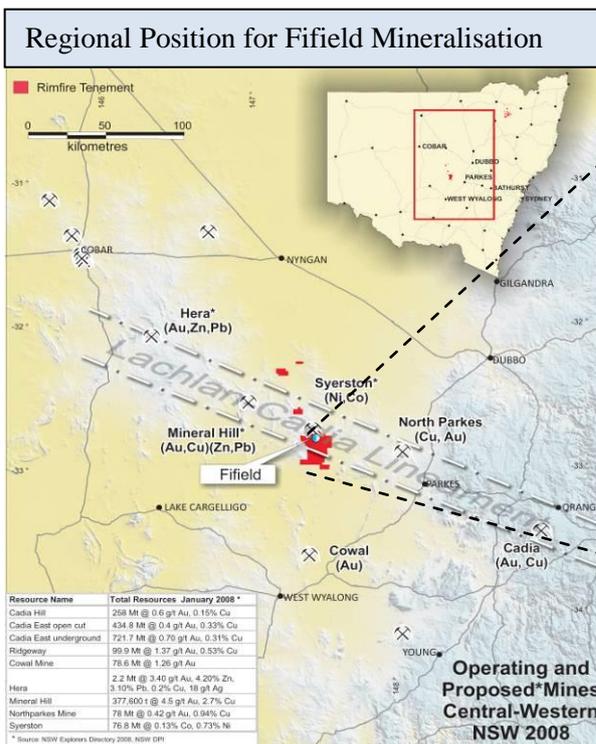
The information in the report to which this statement is attached that relates to Exploration Results is compiled by Mr Colin Plumridge, who is a Member of The Australian Institute of Mining and Metallurgy, with over 30 years experience in the mineral exploration and mining industry. Mr Plumridge is employed by Plumridge & Associates Pty. Ltd. Mr Plumridge has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which he is undertaking to qualify as a Competent Person as defined in the 2004 edition of the "Australian Code for Reporting of Mineral Resources and Ore reserves". Mr Plumridge consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

APPENDIX 1

Project Areas Fifield NSW and Metal Zoning Interpretations

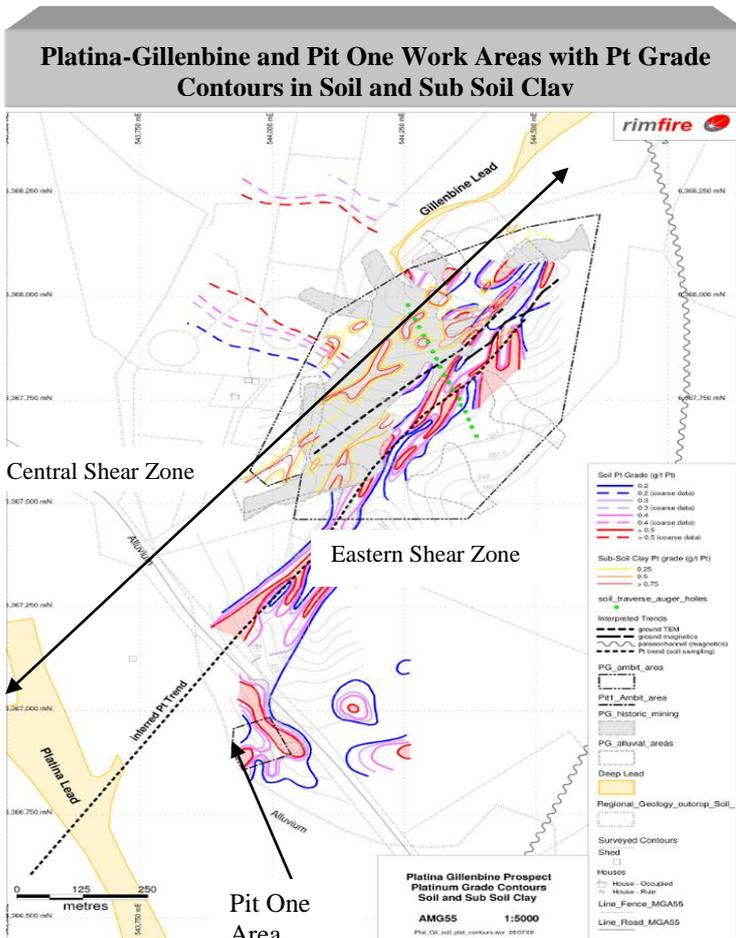


★ Bulk sampling



APPENDIX 2

Platinum Exploration Program – Background to Bulk Sampling of Bedrock on Company Freehold



The “*Eastern Shear Zone*” Pt surface anomaly was established ² as a *continuous feature over a strike length of 1,000m*. It extends into the Company owned freehold land area. The Pt contours within the residual soil are parallel in orientation with the subsoil Pt anomaly at Platina-Gillenbine, now named the “*Central Shear Zone*” (which was defined in 2006 ³).

The “*Pit One*” sampling area appears geologically influenced by the Eastern Shear Zone. Accordingly, the Pit One area is being extensively evaluated with auger drilling and trenching for the significance and orientation of the Pt position in the bedrock at this location.

Background on Geological context and importance of Pit One Area and Bulk Testing Phase

Within early October 2008, the Company had made a significant discovery concerning the geological control of the Pt mineralizing system at Fifield, on its freehold.

The intersection of complex, clearly identifiable vein structures, containing Pt, Au and a key pathfinder element Chromite (Cr) occurred in Trenches 20, 24, 24a, Tr26 and Tr26a.



Base of Trench 24a Showing Pt bearing veins



Part of wall section Tr26 with vein exposed

The Company believes that this could be representative of the entire mineralised Pt system observed at Fifield within the Platina-Gillenbine and Ebenezer project areas⁴ and is an important milestone with respect to Pt exploration at Fifield. “Pit One” is considered an important area, linking the shear zone system, at Platina-Gillenbine to the gradation of the near surface bedrock position to the alluvium covered valley containing the Platina Deep Lead system, historically mined 100 years ago.

² ASX Announcement 16-10-2008 link <http://www.rimfire.com.au/PDF/KeyGeologicalControlDiscoveredforPlatinum.pdf>

³ ASX Announcement 13-12-2006 link http://www.rimfire.com.au/PDF/Pt%20Update%2013_12_2006%20Final%20ASX.pdf

⁴ This combined area is approximately 6km² including Ebenezer and Platina-Gillenbine

APPENDIX 3

Pit One and MC305 &306 Bulk Sampling Area

