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29th October 2010

Company Announcement Office
Australian Securities Exchange

QUARTERLY EXPLORATION AND ACTIVITIES REPORT

(For the period July 1st to September 30th 2010)

Weather conditions were difficult in the period impacting upon physical movement in certain locations at Fifield NSW. Nevertheless, exploration continued with programs and planning that advanced the knowledge of the mineralising system for Platinum (Pt) and Gold (Au). In particular, work programs were able to proceed to some extent at the Sorpresa fine gold area, where this project has taken a positive direction.

Planning of the bulk sampling program of the Platina Lead continued to make progress. This program is designed to assess Pt and Au grade contained within the lead structure and to also gain an understanding of the bedrock and gravel systems in general.

Highlights in the September Quarter at Fifield NSW Include the following:

- **Sorpresa fine gold project advancement including programs for soil sampling and auger drilling**
- **Review of Environmental Factors (REF) was submitted for permitting of bulk disturbance on the Platina Lead**
- **Six large scale trenches planned for Platina Lead structure to assess Pt & Au grade**

Post Quarter Announcements

- **Significant recent announcements by the Company concerning the Sorpresa fine gold area were made**
  - **The trench results confirm that Sorpresa represents an unexplored new gold area discovery**
  - **A 13m continuous trench sample (at 2m depth) gave a grade average of 3.5g/t Au, and was inclusive of:**
    - **A 9m section at average grade 4.9g/t Au (true width)**
    - **High values for 3 x 1m sections were seen at 10g/t Au and above, within this 13m section**
  - **The Au mineralisation is amenable to convential exploration and assay techniques**

Results at the Sorpresa fine gold area received by the Company after the quarterly period are considered significant. Please refer to the announcements made to the ASX of 13th October[1] and 28th October[2] 2010 and available on the Company website. See Appendix 3 for map summary of Sorpresa area.

Whilst it is still at an early stage, in the Company's opinion, the larger Sorpresa area is already established as a disseminated fine gold area of considerable promise. The mineralisation is amenable to both surface based geochemical prospecting and RC drill evaluation. This straightforward technical pathway greatly enhances the chance of economic success of this project area.

Poor weather combined with the positive post quarter developments at Sorpresa fine gold area, and the decision to use large scale trenches on the Platina Lead, means that the preliminary RC drill program that was originally designed will need to be

[1] ASX Announcement - 13th October 2010 Bedrock Assays Confirm Sorpresa Fine Gold Potential at Fifield
[2] ASX Announcement - 28th October 2010 Sorpresa Fine Gold Prospect Trench Produces Excellent Assay Results

modified to accommodate these changes. In effect, the large scale trenches will replace aspects of the drilling program, whilst additional drill targets are likely to be developed at Sorpresa.

The large scale trenches that have been designed to investigate the "open cut" commercial potential for Pt within the Platina Lead are mainly on the Company freehold. This will assess the alluvial system, comprising the multilevel gravel system, the un-mined and mined portions of the historic Platina Lead. This work is seen as complementary to the exploration being conducted on the large bedrock potential seen by the Company in the area.

The shallow nature of the target Platina Lead (15~20m below surface), coupled with the attractive Platinum price, makes this a worthwhile "Tier 2" commercial target. This is particularly the case, when the important underlying bedrock geology is taken into consideration which should provide further knowledge on the "Tier 1" primary source(s) of the Pt and Au contained within the Lead. Conceptual targets are shown for the Platinum areas at Fifield[3].

All the target areas previously announced by the Company in the last June 2010 quarterly report remain valid and will be tested appropriately in stages within the adjusted programs in the next few quarters.

The key overall objective of the Company continues to be "the establishment of potential open cut minable resource(s) within the 6km^2 zone of currently identified Pt and Au mineralisation noted within the Platina-Gillenbine, Ebenezer and Sorpresa project areas". These areas include both alluvial targets and the greater bedrock system. [4]

HIGHLIGHTS FOR THE SEPTEMBER QUARTER - FIFIELD NSW

Heavy rains and the wettest winter in 10 years impacted certain field activities. Machinery movements were limited in many areas, and as a consequence delays in certain exploration programs have occurred. A brief summary of features of the exploration in the last quarter is as follows:

- **Additional Auger drilling was conducted at Sorpresa fine Au prospect (with a subsequent trench)**
    - ***At the time of this report encouraging Au grade was encountered and is being pursued***
- **Six major trenching target areas within the Platina Lead have been determined for Pt and Au assessment**
    - The depths are planned to 15 metres from the surface, in lengths up to 100m, in complex earthworks
    - Five trenches will be placed on the historically mined section, one trench will be on an un-mined extension discovered by the Company
    - The REF has been submitted for review by authorities
- **Continued investigation of the further extension of the Platina Lead to the North of the Company Freehold**.
    - Further auger drilling was conducted in this regard approx 1.5km further north
- **A "Fine Au" component of the Platina Deep Lead Gravels and Shaft Dumps has emerged**
    - Fine Au is present at quite precise locations within the Deep Lead gravels to the south
    - Rock chips were assayed from this area and show definite elevated "Au in the rock" up to 1.2g/t
- **Further metallurgical trials and process examination for the different types of raw material feeds that are expected from the Platina Lead were undertaken.**

Searching for Platina Lead Extension
1.5km North of freehold within Sorpresa

[3] Appendix 5
[4] Appendix 4 for details of locations and mineralised context at regional and local scales

- **Additional mineralogy assessment was conducted on a range of materials including rock, mineral and metal grain samples, from the Platina Lead.**
    - This included use of the **Synchrotron facility** for high resolution imaging of Pt grain chemistry**.**
- **Equipment additions and modifications are being undertaken to the gravity plant in preparation for the Platina Lead bulk sampling**
- **Pit One was again flooded and no work was conducted here in the period**

(A summary of the work performed on each prospect in the period is shown in Appendix 4)

Platina Lead Assessment Six Large Scale Trenches Planned

The rationale for the large work program proposed was presented in detail within the last quarterly report and should be considered as an ongoing reference accordingly for the work being conducted on the Platina Lead.

Specifically, six trench locations have been finalized and permitting sought for these in the current quarter. It is expected that permits would be issued during the 4th quarter 2010. An explanatory discussion on the six trench program has been produced in video form and is available on the Company website www.rimfire.com.au **within the Presentations and Video Section**, titled "**Platina Lead Sampling Discussion Fifield NSW Sept 2010**".

The locations for the trenches are shown in the Appendix 1.

Exploration Work Program Planning at the Larger Sorpresa Gold Area

The Company will continue to accelerate the exploration program at Sorpresa over the coming quarters:

- Define the Au mineralisation extent and orientation at surface using more soil geochemistry assays, both on focused areas and on an overall larger scale
- Refine the Au in bedrock positions with lines of bedrock assays using rapid pass auger drill traverses
- Proceed to RC delineate the mineralisation as appropriate to the preceding results
- Diamond drill a typical section of the Au mineralisation at depth to better understand the geological setting

Recent work at Sorpresa fine gold area

Other Fine Gold Areas at Fifield

Given the encouragement at Sorpresa gold area, the Company will give further consideration to the fine Au that has already been located at the prospects Goldengreen, Ladera, Eclipse North and adjacent to the Platina Lead.

The Eclipse North area has undergone a small soil geochemistry follow up on an area that returned interesting Au values in previous rock chip examination done by the Company in 2008.

A critical re-examination of Rimfire's past sample work in general has highlighted that fine Au is not explainable as a trace component in the coarse Pt-coarse Au mineralisation. A new important style of fine Au mineralisation is strongly implied.

Summary of Exploration Planned at Fifield NSW for the Coming Period for Pt and Au

The Company outlines the major exploration activities at Fifield that it intends to undertake are as follows:

- **Pursue the Sorpresa fine gold area as discussed. This now a high priority activity.**

- **Once permitting is received, undertake large trenches (6) across the Platina Lead for Au and Pt assessment.**
    - Determine the commercially recoverable grade(s) in large sectional tests
    - Test the adjacent bedrock geology for the source of Primary Pt and Au
- **Complete the bulk sampling and exploration within the Pit One Area of both gravel and bedrock systems**
- **Complete the delineation of the Pt bearing gravel (approx. 2km x 0.5km) and tributary areas prospective for mining on the Company freehold and bulk sample this system further.**
- **Apply for additional Bulk sampling locations not on the Company Freehold (4 sites) for determination of Pt grades in bedrock.**
    - These areas are at ***Platina-Gillenbine and Ebenezer***, and would be undertaken with the knowledge gained from Pit One and elsewhere.
    - These new sites in most instances have considerable Pt grade already seen in previous trenching and auger drilling in the near surface positions. A conceptual target is shown **Appendix 5**
- **Advance the previously identified other fine Au potential with soil geochemistry grids and drilling as appropriate.**
- **Continue to advance process improvements with input from metallurgical expertise.**

Metallurgy Considerations for Platina Lead Sampling

<u>Project and Mineralisation Background – Fifield NSW</u>

The systematic exploration by Rimfire within the immediate Fifield region has continued to develop a wide variety of mineralised 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 width. 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 discovery of commercial mineralisation in the Company's view (Appendix 5). The recent work at the Sorpresa fine gold prospect reflects this view.

For Platinum, the major mineralisation target for exploration by the Company at Fifield remains focused on gravity recoverable coarse grain Platinum. The Platina-Gillenbine area is of particular importance in understanding and delineating the bedrock mineralisation.

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 with complementary bulk sampling is rapid and effective way to explore for 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 leads and surface soil mining (circa. 1890~1930). The major lead was the Platina Lead, worked at a depth from 12m to 25m over a length of 2.8km with a reported grade of approx. 15g/t gravity recovered Pt equivalent.

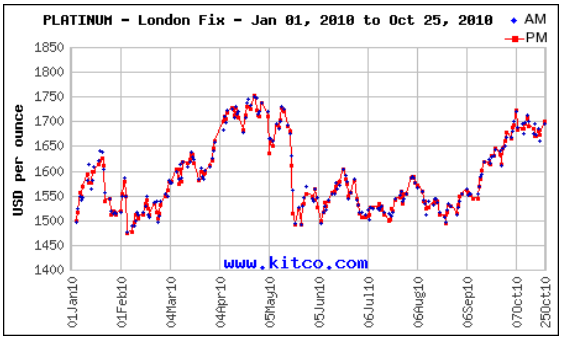
The northern extent of the Platina Lead was not able to be defined historically. This northern section represents an important component of the Pt bearing alluvial system, both with respect to its commercial potential and the exploration knowledge base the lead provides, in relation to the source area(s) for Pt entering the alluvial system along the full extent of the Platina

Lead. ***A further 500m of the Platina Lead has now been demonstrated to be present (2009), but this un-mined section has not yet been tested by the Company.***

The key overall objective of the Company continues to be "the establishment of potential open cut minable resource(s) within the 6km^2 zone of currently identified Pt and Au mineralisation noted within the Platina-Gillenbine, Ebenezer and Sorpresa project areas", which includes both alluvial targets and the greater bedrock system.

COMMODITY PRICING FOR THE JUNE 2010 QUARTER

The price of Platinum has fluctuated in the period, and was trading above the level of USD$1,650 per ounce during October 2010 (Kitco.com).



CORPORATE ACTIVITIES

Tenement Position

The Company received renewals for tenements EL6144 and EL6241.

Cash, Facilities and Investments

As at 30th September 2010 the Company had approximately $1,287,000 in cash.

Issued Capital

The issued capital at the close of business at 30th September 2010 was:

436,766,550 ordinary shares
124,790,443 Listed Options "RIMO" exercise @ 4 cents expiry 31st August 2011

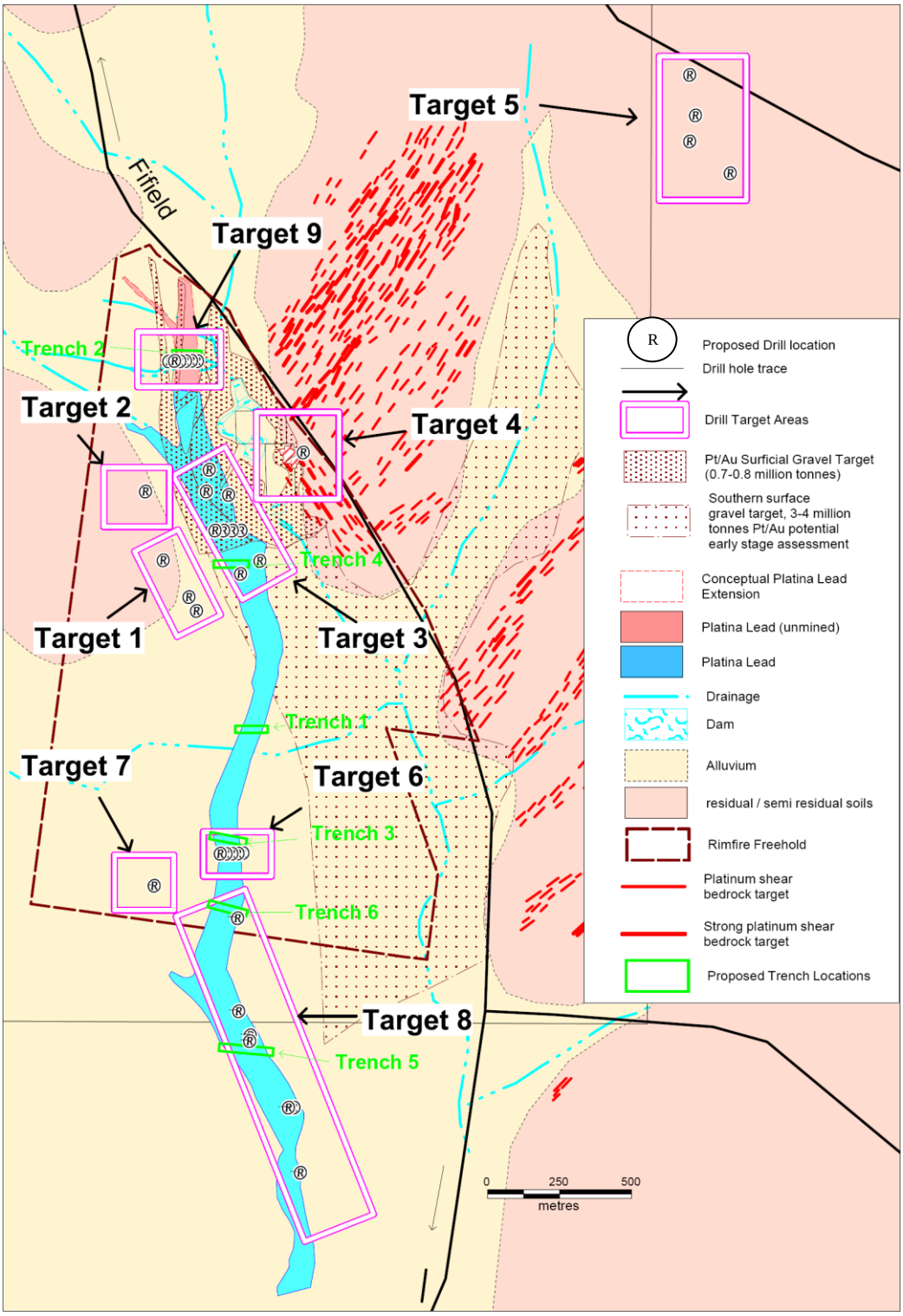
JOHN KAMINSKY
Executive Chairman

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, each with over 30 years experience in the mineral exploration and mining industry. Mr Plumridge is employed by Plumridge & Associates Pty. Ltd. and is a consulting geologist to the Company. He has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which is being undertaken to qualify as Competent Persons 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 their information in the form and context in which it appears.

Appendix 1

Rimfire Freehold (210 Hectares) Pt and Au System Determination

(Key Trench Sites (6 in green) awaiting Issue of Permit Application)



The map above denotes target areas that will be pursued with a combination of trenching and drilling in the Platina Valley location, principally centred on the Platina Lead structure.

Appendix 2

Target Areas defined within the Platina Valley to be pursed with RC/Bulk samples as appropriate
(these targets exclude the Sorpresa Area)

Draft RC/AC Drill Program Platina Area

Target Number	Target Type or Name	Proposed Depth (m)	Drill Type	Estimated Target Intersection (m)	Target Description and Reasoning for Test
1	Jurassic Lead	30	AC/RC	5	Drill the most magnetic part of **potential new Jurassic lead**. Detailed ground magnetics, Geology on bedrock, Platina Tresylva trend justify test
		30	AC/RC	5	
		30	AC/RC	5	
2	Magnetic Dyke	30	AC/RC	20	Magnetic dyke north of Potential Jurassic Lead, Platina-Tresylva trend. **Bedrock Pt target**, detail ground magnetics completed already.
3	Bedrock Platina Multi Directional Faulting Zone	60	RC	50	Multi directional fault zone, **potential Pt source area**. Positive air magnetics are orientated with Platina-Tresylva trend.
		60	RC	50	**Bedrock at ideal intersection area** of Platina-Tresylva trend with Platina-Gillenbine trend
		60	RC	50	**Air magnetic positive** in target area
		60	RC	50	4 holes on a major section through **potential Pt bedrock source target**. 30m between collars
		60	RC	50	
		60	RC	50	
		60	RC	50	
		60	RC	50	**Historic bedrock workings on air magnetic anomaly** located over multidirection faulting south leg
		60	RC	50	**Air magnetic anomaly with high Mg content** in Platina Lead
4	"Pit 1" Depth test	130	RC	100	**Bedrock depth test below Pit 1 shear zone for geology and Pt**. Shear zone dips 70°E. Hole intersects projected shear around 55m (vert). Hole is below surface position of shear zone 120m (vert).
5	Ladera Fine Au Propect	18	RC	18	**Cemented cretaceous gravel fine gold test for ore grade.** The 4 holes will test for general fine gold, fine gold on the bottom wash, the dip of the gravel, the geology of the bedrock floor
		18	RC	18	
		18	RC	18	
		18	RC	18	
6	Platina Lead White Rock Offset	26	RC	3	Traverse of holes to **guide pit location on Platina Lead**. Co-incides with Platina-Tresylva Trend
		26	RC	3	
		26	RC	3	
		26	RC	3	
		26	RC	3	
7	Gravity Feature	30	RC	15	**Bedrock Gravity positive in large gravity negative.** 0.15mgal. Anomaly is along the Platina-Tresylva trend from the South end of the Platina Lead.
8	Bedrock Test Platina Lead South	60	RC	50	Coarse Au & Pt in dumps
		60	RC	50	Fine Au along with some gossans in dumps
		60	RC	50	Good grade in PLD sample. Sheared rock in shaft dump.
		60	RC	50	
		60	RC	50	Intrusive area and high Mg along with a possible Platina-Tresylva shear zone
		60	RC	50	Gossanous-breccia located here.
		60	RC	50	Mineralised shear zone including vein quartz.
9	Platina Lead Pit locating Drill Holes	24	RC	3	Holes to guide pit locations on Platina Deep Lead North of 1890 commercial grade mining
		24	RC	3	
		24	RC	3	
		24	RC	3	
		24	RC	3	
		24	RC	3	
		24	RC	3	
		24	RC	3	
		24	RC	3	

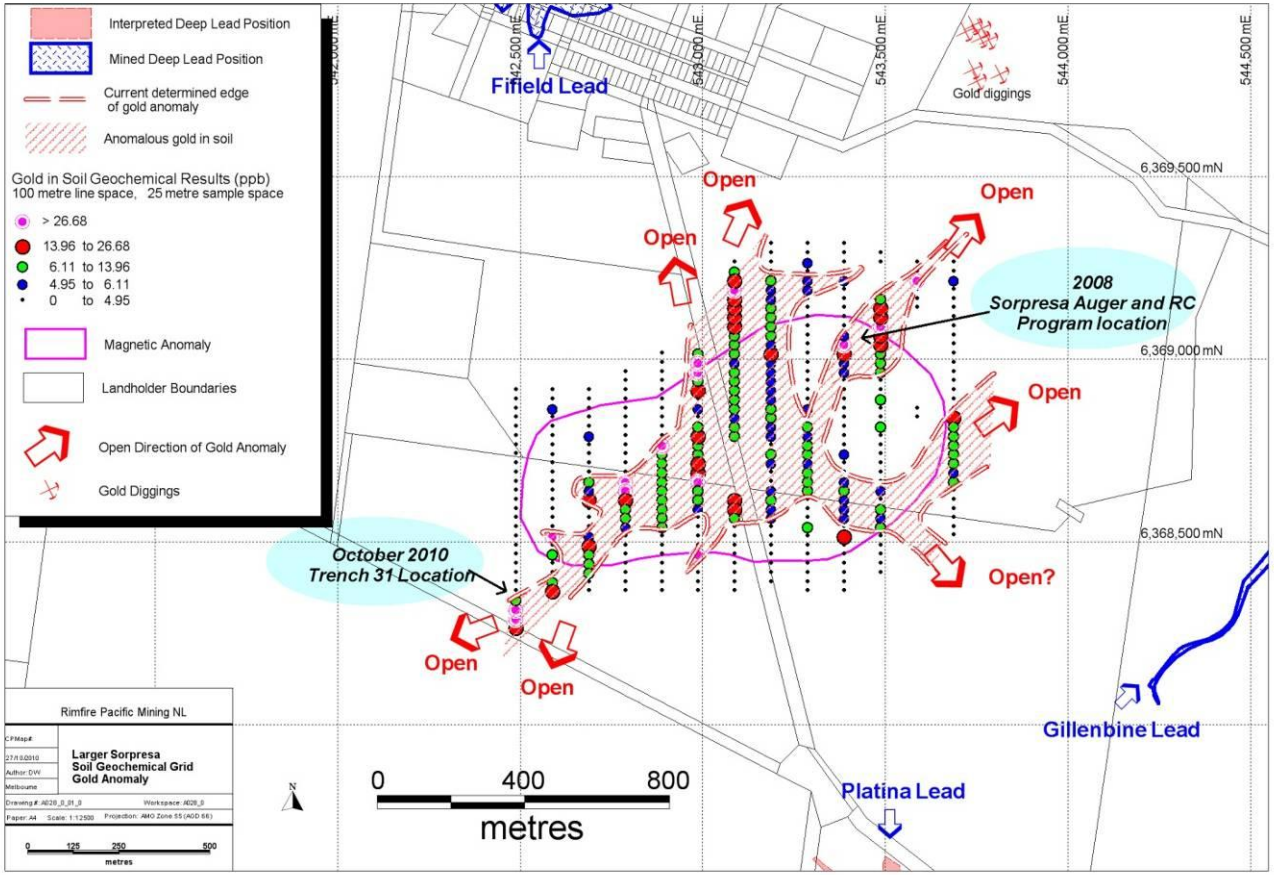
The drill program is a draft of a series of targets to pursue and help define the Platina Lead Channel, and explore other relevant exploration targets in the vicinity of the Platina Valley. This drill program will be modified to accommodate 6 trenches, as a replacement for certain drill locations. All the targets remain valid, only the method of testing will be altered.

A program that incorporates some drilling goals for the nearby Sorpresa Au area may also be combined with this program.

Appendix 3

The Larger Sorpresa Area Anomalous Gold Zone

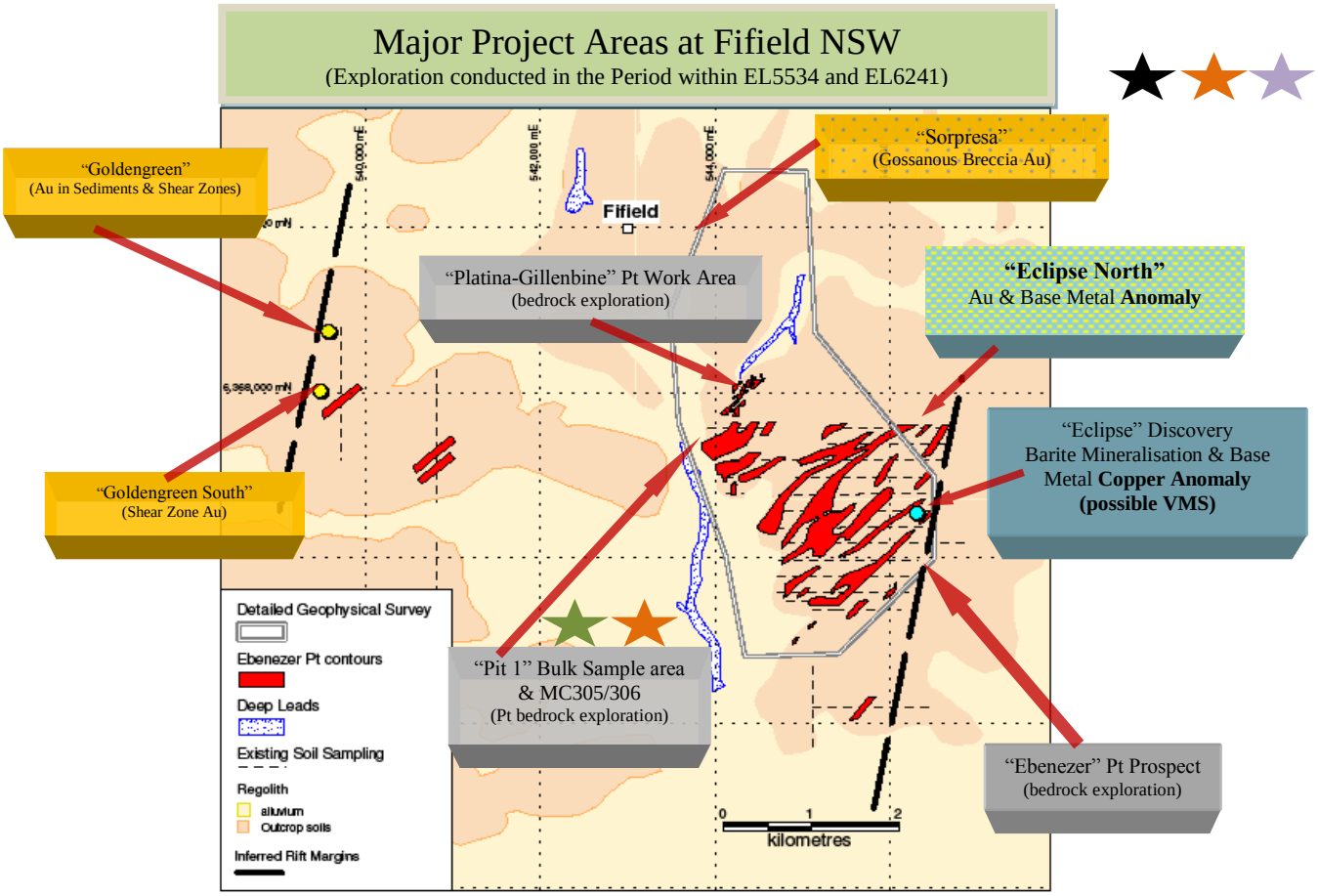
(Soil Geochemistry Lines with Trench 31 Location and RC Program (2008) Context)



The results achieved at Sorpresa (in 2008 and inclusive of the current period) in the various soil geochemistry programs, which were subsequently confirmed as being representative of significant gold mineralisation through auger drill traverse, Trenching and RC drilling in various locations lends the Company to believe the system is a coherent, previously undiscovered gold area of significant size and potential.

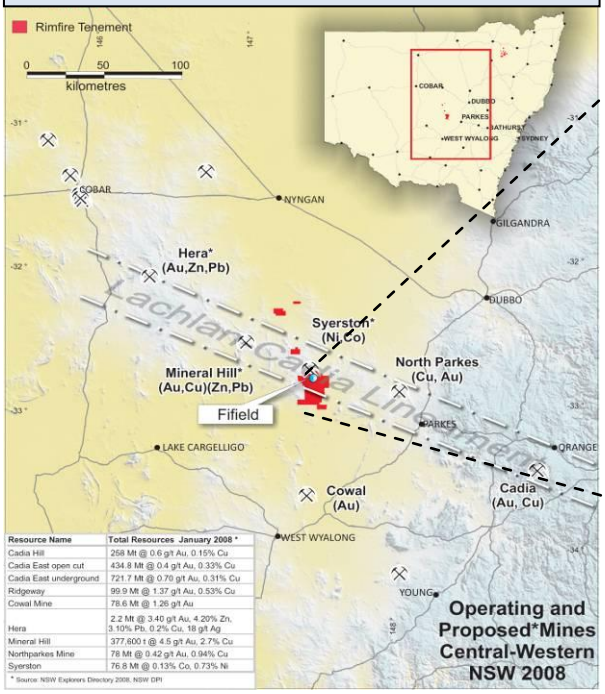
Appendix 4

Project Areas Fifield NSW and Metal Zoning Interpretations



Bulk sampling *Auger drilling* *Trenching* *Mapping* *Geochemistry*

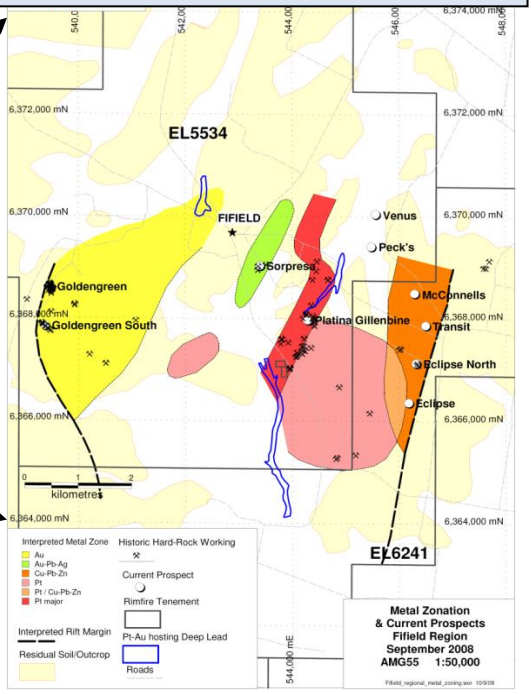
Regional Position for Fifield Mineralisation



Resource Name	Total Resources January 2008 *
Cadia Hill	258 Mt @ 0.6 g/t Au, 0.15% Cu
Cadia East open cut	434.8 Mt @ 0.4 g/t Au, 0.33% Cu
Cadia East underground	721.7 Mt @ 0.70 g/t Au, 0.31% Cu
Ridgeway	99.9 Mt @ 1.37 g/t Au, 0.53% Cu
Cowal Mine	78.6 Mt @ 1.26 g/t Au
Hera	2.2 Mt @ 3.40 g/t Au, 4.20% Zn, 3.10% Pb, 0.2% Cu, 18 g/t Ag
Mineral Hill	377,600 t @ 4.5 g/t Au, 2.7% Cu
Northparkes Mine	78 Mt @ 0.42 g/t Au, 0.94% Cu
Syerston	76.8 Mt @ 0.13% Co, 0.73% Ni

* Source: NSW Explorers Directory 2008, NSW DPI

Fifield Mineralisation Metal Zoning Interpretation



Appendix 5

Table of "Conceptual Platinum Targets" Developed as At March 2010 Fifield NSW (*)

Conceptual Target Area	Grade Range Assumption (HVC Mixed Pt/Au unless stated otherwise)		Range of Mineralised Tonnage (t) or Area (sqm)		Total Target Ounces Potential Range		Assumed Depth and thickness	Basis for Overall Assumption
	High	**Low**	**High**	**Low**	**High**	**Low**		
Modern Near Surface Gravel on Freehold Area 1	0.4g/sqm	0.3g/sqm	1.1 million sqm	0.9 million sqm	13,600	11,100	1~2m below surface	Bulk Sampling at Pit One and Gravel Auger program.
Platina Lead Extension (500m) "on freehold only"	15g/t "recovered' historic reported average grade in 1890's "worked section" No grade estimate is established yet in the "unworked section"		78,000 tonne	45,000 tonne	37,000	21,000	1.25m to 1.75m mineralised zone in a width of 40~50m at a depth of 10~15m	Historic records, modern work programs, trenching, auger
Platina Lead (2.8km)	15g/t "recovered' historic reported average grade in 1890's "worked section' Estimate Residual, on "non-selective mining" **between 2g/t and 4g/t**		441,000 tonne	225,000 tonne	57,000	14,500	1.25m to 1.75m mineralised zone in a width of 40~50m at a depth of 12~25m	Historic records, modern work programs, trenching, auger, shaft dumps
Platina-Gillenbine Bedrock	0.5g/t Pt	0.3g/t Pt	30 Million tonne	20 Million tonne	450,000	200,000	From surface to 40m or 60m, along strike of 1.3km, width of 200m	Historic surface mining and Company work programs to 2m depth

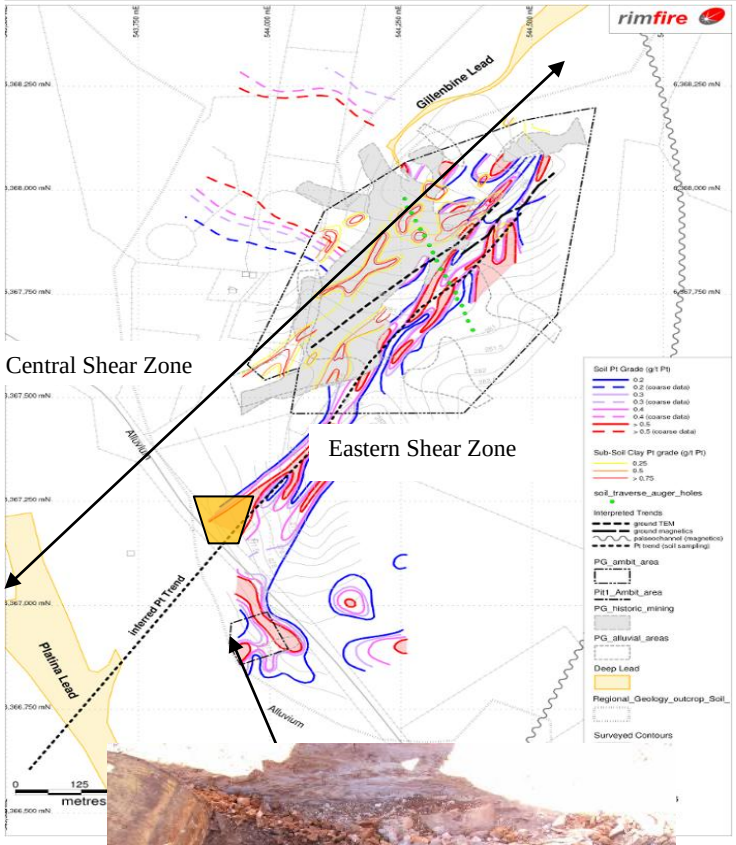
(*)Qualification - "The potential quantities and grades in the referred table are conceptual in nature, that there has been insufficient exploration to define a Mineral Resource, and that it is uncertain if further exploration will result in the determination of a Mineral Resource."

sqm = square metre ; m = metre ; g = gram ; t = tonne

Appendix 6

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

Platina-Gillenbine and Pit One Work Areas with Pt Grade Contours in Soil and Sub Soil Clav



Base of Trench 24a Showing Pt bearing veins

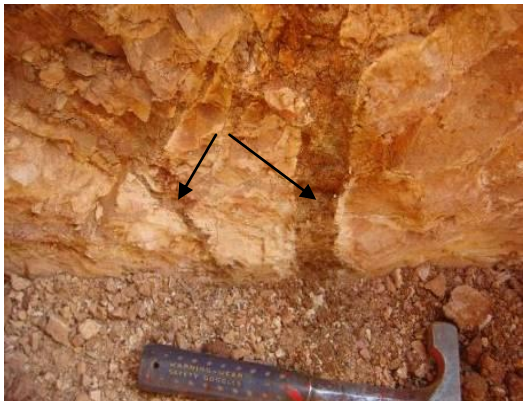
The ***"Eastern Shear Zone" Pt surface anomaly*** was established [5] as a ***continuous feature over a strike length of 1,000m.*** It extends into the Company owned freehold land area**.** The Pt contours within the residual soil are parallel in orientation with the subsoil Pt anomaly at Platina-Gillenbine, now named the ***"Central Shear Zone"*** (which was defined in 2006 [6]).

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**.**



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 areas[7] 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 Lead system, historically mined 100 years ago.

[5] ASX Announcement 16-10-2008 link

[6] ASX Announcement 13-12-2006 link

[7] This combined area is approximately 6km^2 including Ebenezer and Platina-Gillenbine