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Gold Mineralisation Examined in more detail at Sorpresa Prospect **- Trench 31 Mapped and Sampled, Yielding High Grade Gold in Specific Geology**

The original and only trench opened at the Sorpresa Fine Gold prospect, trench 31, has now been extended slightly (5m) and mapped in “plan view”. The trench floor was cleaned and selectively sampled for gold in order to assist in the understanding of the gold distribution within specifically noted geology in the trench.

Whilst this particular work focus was aimed at the geological context for the gold contained within the mineralising system, the results are considered very significant indicating that the Sorpresa gold system has the capacity to yield very high gold grades. Two values, within specific geological units tested, yielded repeatable results above 70g/t.

This information is deemed important in helping to target relevant geology within the Sorpresa area and surrounding areas for highly prospective zones supporting gold mineralisation.

The previously reported assay results for trench 31 (28th October 2010) remain the definitive results for grade and width of the gold mineralisation at this location.

Executive Chairman, John Kaminsky proclaimed “Trench 31 is the first trench placed on the

Sorpresa area and it is providing such a wealth of information on the structural and geological components of the gold mineralisation operating at this location...the discrete geological units and the exceptionally high assays seen in some samples recently, re-affirms our belief that this system is very strongly Au mineralised...

...the fact that the Sorpresa area had not been discovered or mined previously, yet has the capacity to contain such elevated gold grades continues to encourage the Company that this area is very promising...

...the work programs at Sorpresa proceed as a high priority within the Company, as we move into 2011.”

Exploration is ongoing at the Sorpresa gold prospect where additional sampling activities include bedrock chemistry through auger traverses, rock chip examination of sub-crop, field mapping and extensive soil geochemistry sampling. The next stage soil geochemistry grid at Sorpresa is almost completed with full assay results pending.

Prospective target areas within the Sorpresa area are being tuned for deeper RC drilling.

Comments on the Trench 31 Geology Mapping with noted Gold Distribution at Sorpresa

◆ ***39 samples of varying sizes (2~15kg gross then sub-sampled) were selected within the floor of trench 31 based on visual geological interpretation***

- Samples were assayed to determine gold location within geology (values above 1g/t were repeat assayed)
- Good repeatability was achieved in assays, reinforcing the view that the Au is fine and disseminated
- A high grade of 86g/t was seen in sample R12, a mineralised, altered fine breccia
- A third of the selected samples had grades in excess of 3g/t

◆ ***The geology appears extremely dynamic with a high degree of geometric complexity***

- The variability in assay results at different sampling points within the trench floor (January 2011) and between the sections taken in the trench wall (October 2010) are most likely due to the 3-dimensional complexity of the system
- This geometric complexity is not unexpected in a high grade system such as this and does not present difficulties in assessment of the Au mineralisation



- Petrological study will be conducted on aspects of the geology sampled

◆ **The Au mineralisation at Trench 31 resides within a broad, partly brecciated fault line**

- This basic geology becomes more complex with parallel and cross cutting faults seen at Sorpresa
- The integrated use of soil sampling, bedrock geochemistry and trenching assists the understanding of the mineralisation structural orientation in plan view

Assay results and the methods used are included in **Appendix 1** for the geological samples taken within trench 31. The diagrams portray a combination of information as follows for Trench 31:

- Mapped geology of the trench floor with legend for the original 13m length and an additional 5m extension
- Photo of the floor of trench 31
- Geological sample areas in the floor of the trench with assay results for Au
- Original “wall sample assay grades” for the trench taken in October 2010

(It should be noted that the wall assays are continuous 1m sections, whilst the floor assays are specific geological units. The two locations (i.e. wall and floor) are also displaced geometrically, so cannot be simply correlated due to the complex 3dimensional shape of the mineralisation. The wall assays are shown for orientation of the reader.)

(Previous details already announced to ASX on 13th October 2010¹, 28th October 2010² and 15th December 2010³ provide important context to the ongoing programs at Sorpresa).

Background Explanation on Exploration Approach and Work to Follow at Sorpresa

An exploration program of soil geochemistry and bedrock geochemistry using auger traverses, followed by more detailed assessment using limited trenching and RC drilling with conventional fire assays has enabled the discovery at Sorpresa to take place to date.

The exploration methodology going forward continues to focus on the following approach:

- **In general, soil geochemistry will be used as a broad scale and sensitive scoping tool for elevated Au (>5ppb)**
 - This low cost method works well in the residual soils at Sorpresa and can be deployed rapidly
 - Detailed mapping of soil types is an important part of this work
- **Auger traverses will test bedrock geochemistry associated with surface based Au anomalism in the soils**
 - This assists the understanding of geological association and 2D spatial definition of the Au mineralisation
- **Trenching will be applied to selected auger traverses and other areas as appropriate**
 - This provides continuous sections of geology to establish Au association to rock type and structure
 - The auger traverses can miss higher grade Au mineralised sections due to the discrete sampling method of the auger
 - Au grade can be established in large continuous sections, if present
 - Dip and orientation on Au mineralisation can be assessed to assist deeper RC drilling
- **Deeper RC drilling will be conducted once sufficient 2D data and orientation is established on the Au mineralisation**
 - This is necessary to be cost efficient, optimise intersections and minimise environmental impact
 - Some holes will be needed to gain greater geological insight and structural orientation
 - The goal is to intersect the higher grade Au mineralised zones and provide 3D orientation at depth



Trench 31 at Sorpresa

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](#)

³ ASX Announcement – [15th December 2010 Sorpresa Fine Gold Prospect Further Examined at Fifield NSW](#)

The Company will be trying to establish the correlation variability between auger traverse Au grades in bedrock and the true bedrock Au grades. Some trial and error will be a feature of this work, testing both high and low grade Au results in the augered bedrock, to help determine better defined bedrock targets for deeper RC drilling.

The approach being adopted represents conventional exploration. It should enable rapid exploration of Sorpresa over a large area, with focussed subsurface targets that are identified and tested quickly, in a fairly continuous manner.

Sorpresa Au and Base Metal Area – Background Summary

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.

The project area is located immediately south of the Township of Fifield NSW and sits within the well established, highly mineralised regional corridor, the Lachlan-Cadia Lineament⁴. This corridor includes the Riotinto owned North Parkes Copper-Au mine and the Newcrest owned Cadia Valley Au-Copper mines amongst others.

The larger Sorpresa area was covered with broad spaced lines of soil geochemistry earlier in 2010 (100m line spacings and 25m sample interval). This coverage was based on the early concept that the originally discovered Sorpresa style of mineralisation could be extensive, but unrecognised.

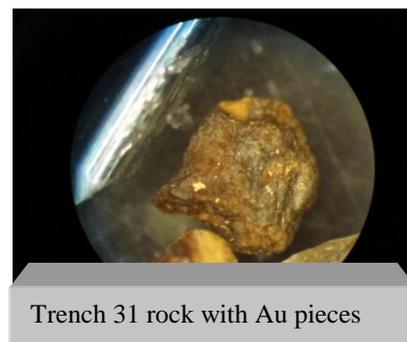
The assay data on the soil geochemistry combined with the October/December 2010 auger traverses and Trench 31 placed over selected Au anomalies within these soil results confirms that the larger Sorpresa area represents Au anomalism that is large and significant.

Mineralisation

As indicated by the soil geochemistry, the mineralisation seems to occur in three parallel lines dominated by breccia zones with associated disseminated sulphide gossan and alteration, but very low in vein quartz.

The mineralisation decomposes to soil, leaving little or no trace of its presence on the surface. The Au being both very fine and disseminated did not suit the miners of past eras even if it had been located. Modern exploration and processing techniques make this mineralisation an ideal style to pursue.

The Au is very fine and disseminated through the breccia as confirmed with the Trench 31 sampling (October 2010) undertaken producing repeatable Au assays.



Interpreting Trench 31 within the Sorpresa area

- The high Au grade of Trench 31 confirms that the Sorpresa-Trench 31 corridor has a strength of gold mineralisation that is encouraging to the Company's opinion that this area is an unexplored gold field.
- Both tested areas of the currently known Sorpresa-Trench 31 corridor are centred on brecciated sediments, with fine gold contained in a strong mineralised zone with negligible vein quartz, 1.2km apart and open ended.
- The larger Sorpresa prospective gold area at December 2010 exceeds 1.7km x 0.4km and is essentially open ended⁵

The Company has noted many fine disseminated gold occurrences focused on sediments in the Fifield district over a number of years, of which Sorpresa is only one such area⁶.

Earlier Background (2008) on Sorpresa Area⁷

The Sorpresa prospect originally consisted of a relatively small Au and base metals in soil anomaly located near an historic shaft, after a rock chip from the shaft returned a value of 8.8g/t Au⁸. The prospect was RC drilled by Rimfire in 2008 and a body of Au

⁴ See Appendix 4 – Location maps

⁵ See Appendix 2

⁶ See Appendix 3

⁷ [Rimfire Exploration Report June Quarter 2008 pages 5~7](#)

⁸ [Rimfire Exploration Report March Quarter 2009, pages 4~5](#)

mineralization inferred from the analyses of the RC drill hole samples. The host to mineralization was also a brecciated sediment with an uncertain size and orientation. The Company was of the view at that time that this mineralisation may not have occurred in isolation and this has proven to be correct.

Explanatory video is provided by the Company for the purpose of better understanding the Sorpresa Area and style of work conducted. These videos can be found on the Company website at www.rimfire.com.au in the **Presentations and Videos** section.

Project and Mineralisation Background – Fifield NSW

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 geochemical 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 4).

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 assays, 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 deep leads and surface soil mining (circa. 1890-1930). The major deep 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 Company's key overall objective remains, "to establish a potential open cut minable resource(s) within the various project areas including the Sorpresa Gold area and also the 6km² zone of currently identified Pt mineralisation noted within the Platina-Gillenbine and Ebenezer project areas"⁹, which includes both alluvial targets and the greater bedrock system.

The spot closing metal prices as at 24th January 2011 in New York were Platinum USD\$1,813/oz and Gold USD\$1,334/oz (Reference [KITCO.com](http://www.kitco.com)).



JOHN KAMINSKY
Executive Chairman

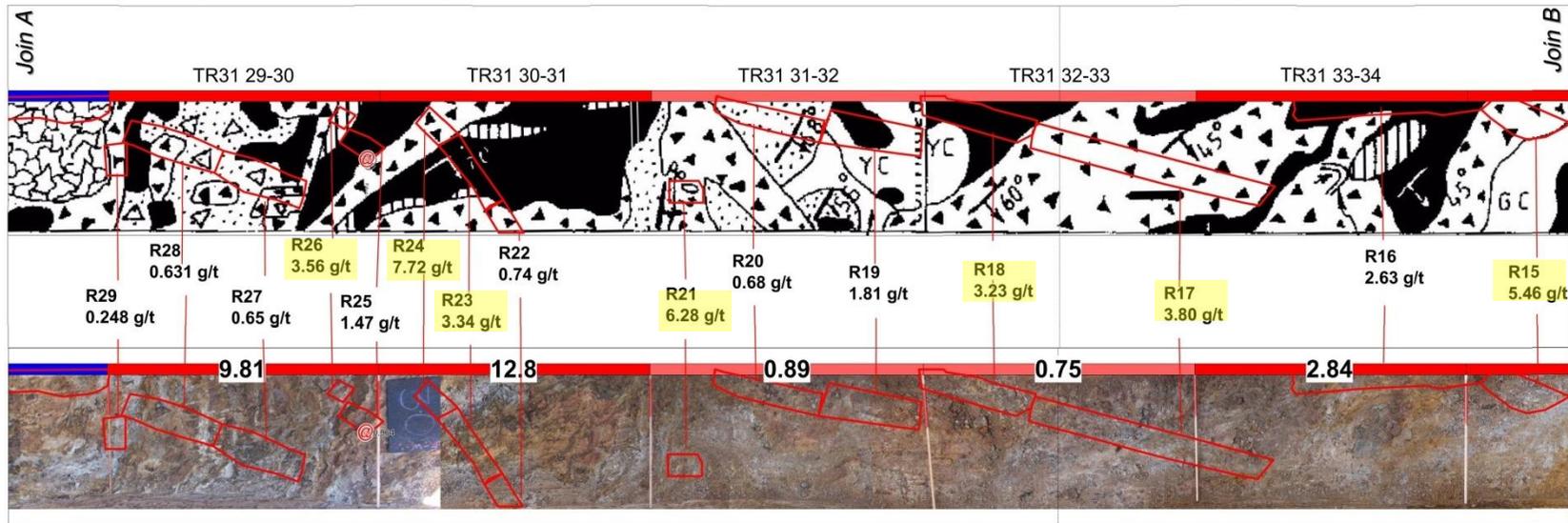
The information in the report to which this statement is attached that relates to Exploration Results is compiled by Mr Colin Plumridge, who is a Member of The Australian Institute of Mining and Metallurgy, each with over 40 years experience in the mineral exploration and mining industry. Mr Plumridge 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.

⁹ Appendix 4 for details of locations

Appendix 1

Sorpresa Trench 31 Floor Sampling (January 2011) into Bedrock - Gold Assays and Mapped Geology

Assays were carried out by independent laboratory, ALS Laboratories, using standard Fire Assay Methods for Gold, namely Au-AA22 (for Au values below 1g/t) and Au-AA26 (for Au values above 1g/t). The sample charge size for assay was 50g. Location details for samples are shown below in red and includes the geological reference.

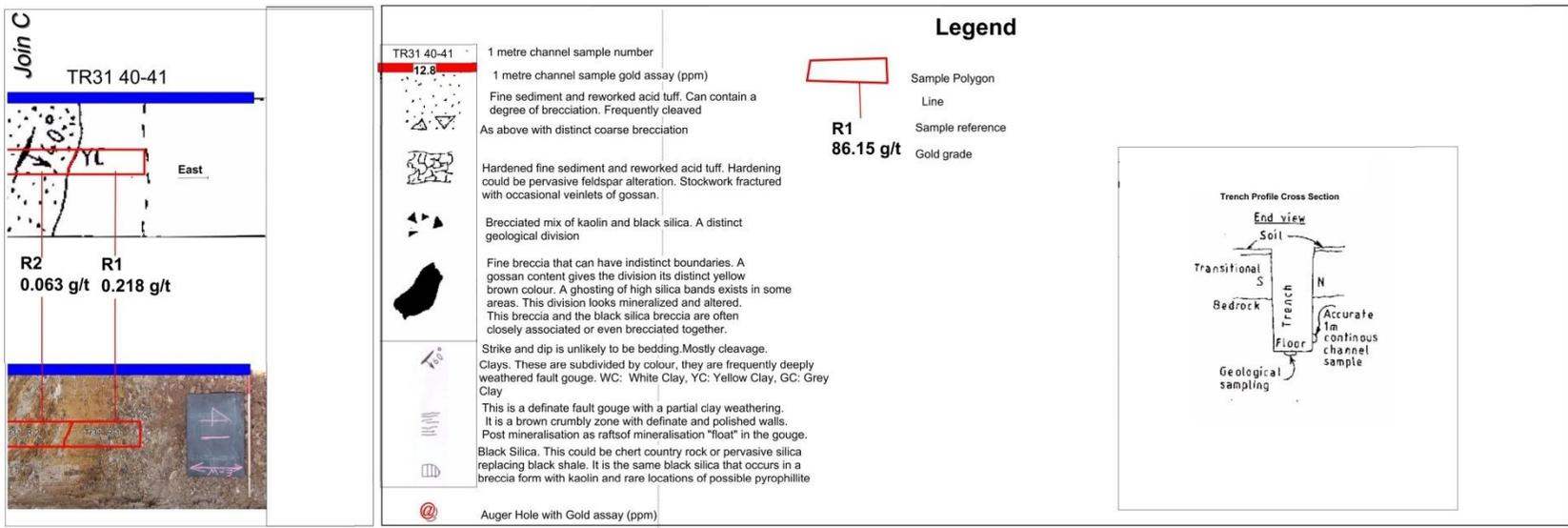


Wall Assay Section Grades Oct 2010

Mapped Geology

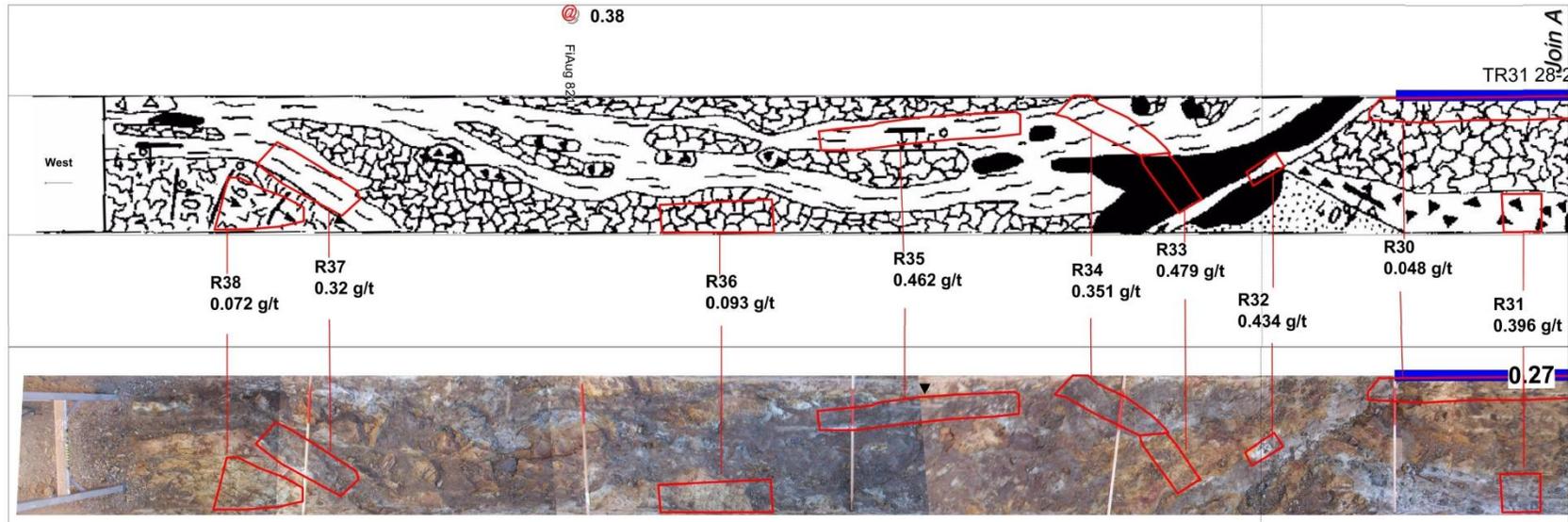
Assay of Geology

Photo Geology



Appendix 1 (part 2)

Sorpresa Trench 31 Floor Sampling (January 2011) into Bedrock - Gold Assays and Mapped Geology

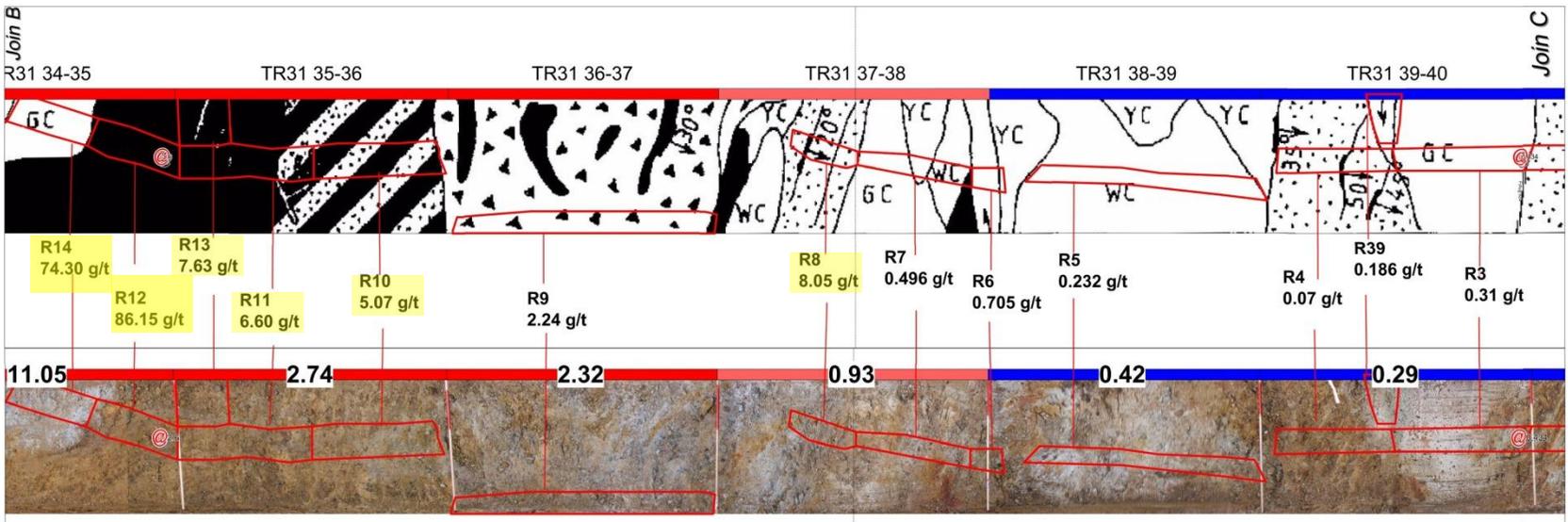


Mapped Geology

Assay of Geology

Photo Geology

Wall Assay
Section Grades
Oct 2010



Mapped Geology

Assay of Geology

Photo Geology

Wall Assay
Section Grades
Oct 2010

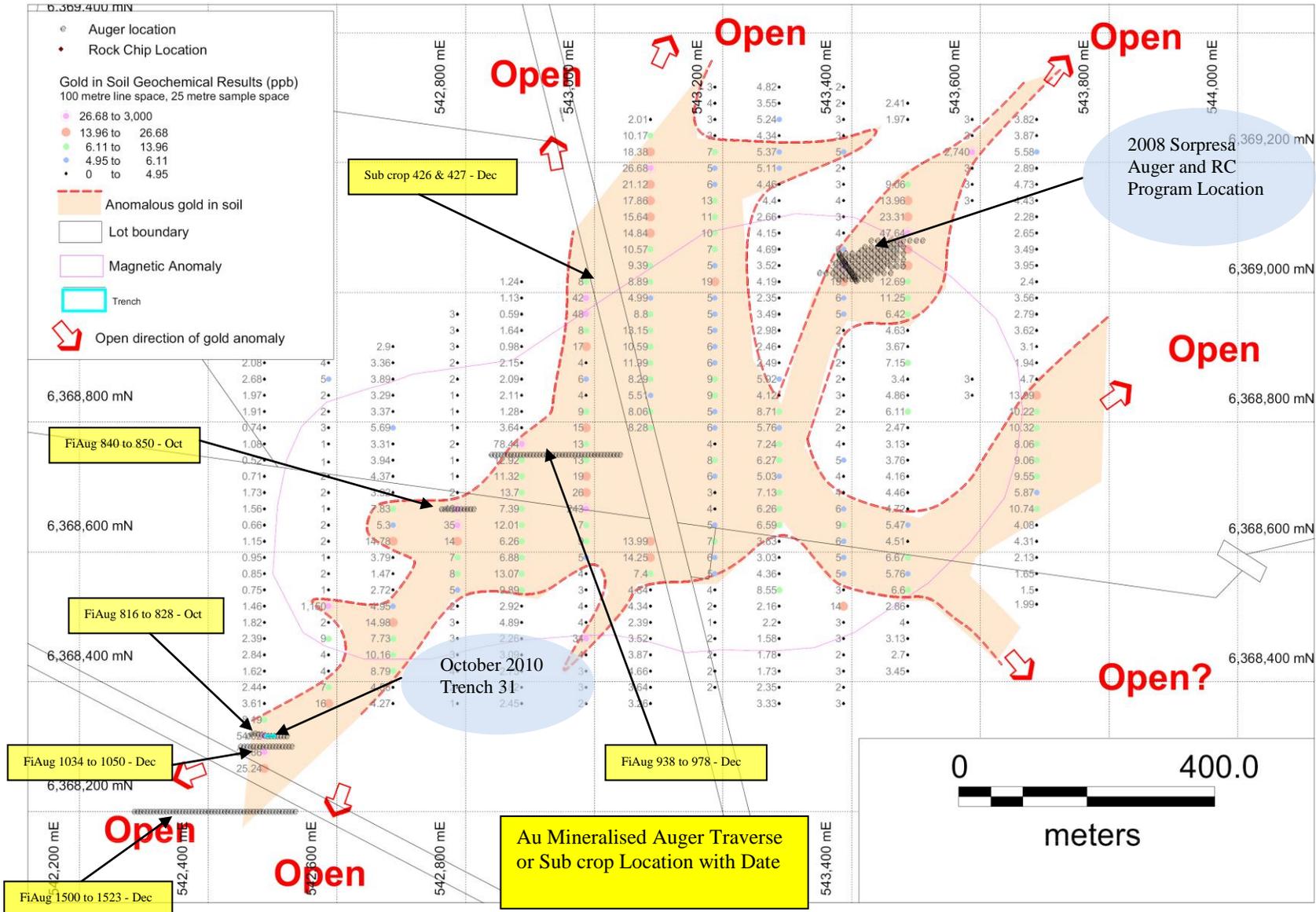
Appendix 1 (part 3)

Table of Assay Results for Trench 31 Geology Samples

Geological Samples Trench 31 DESCRIPTION	Au-AA22 Au g/t	Au-AA26 Au g/t	Au-AA26 Au repeat g/t	Au-AA26 Au Average g/t
FiTr31 - R1	0.218			
FiTr31 - R2	0.063			
FiTr31 - R3	0.31			
FiTr31 - R4	0.07			
FiTr31 - R5	0.232			
FiTr31 - R6	0.705			
FiTr31 - R7	0.496			
FiTr31 - R8	>1.00	8.05	8.04	8.05
FiTr31 - R9	>1.00	2.44	2.03	2.24
FiTr31 - R10	>1.00	5.23	4.90	5.07
FiTr31 - R11	>1.00	7.01	6.18	6.60
FiTr31 - R12	>1.00	82.60	89.70	86.15
FiTr31 - R13	>1.00	8.37	6.89	7.63
FiTr31 - R14	>1.00	71.60	77.00	74.30
FiTr31 - R15	>1.00	5.39	5.53	5.46
FiTr31 - R16	>1.00	2.57	2.69	2.63
FiTr31 - R17	>1.00	3.69	3.90	3.80
FiTr31 - R18	>1.00	3.30	3.15	3.23
FiTr31 - R19	>1.00	1.89	1.73	1.81
FiTr31 - R20	0.68			
FiTr31 - R21	>1.00	6.22	6.33	6.28
FiTr31 - R22	0.734			
FiTr31 - R23	>1.00	3.75	2.92	3.34
FiTr31 - R24	>1.00	7.79	7.65	7.72
FiTr31 - R25	>1.00	1.46	1.47	1.47
FiTr31 - R26	>1.00	3.84	3.28	3.56
FiTr31 - R27	0.65			
FiTr31 - R28	0.631			
FiTr31 - R29	0.248			
FiTr31 - R30	0.048			
FiTr31 - R31	0.396			
FiTr31 - R32	0.434			
FiTr31 - R33	0.479			
FiTr31 - R34	0.351			
FiTr31 - R35	0.462			
FiTr31 - R36	0.093			
FiTr31 - R37	0.32			
FiTr31 - R38	0.072			
FiTr31 - R39	0.186			

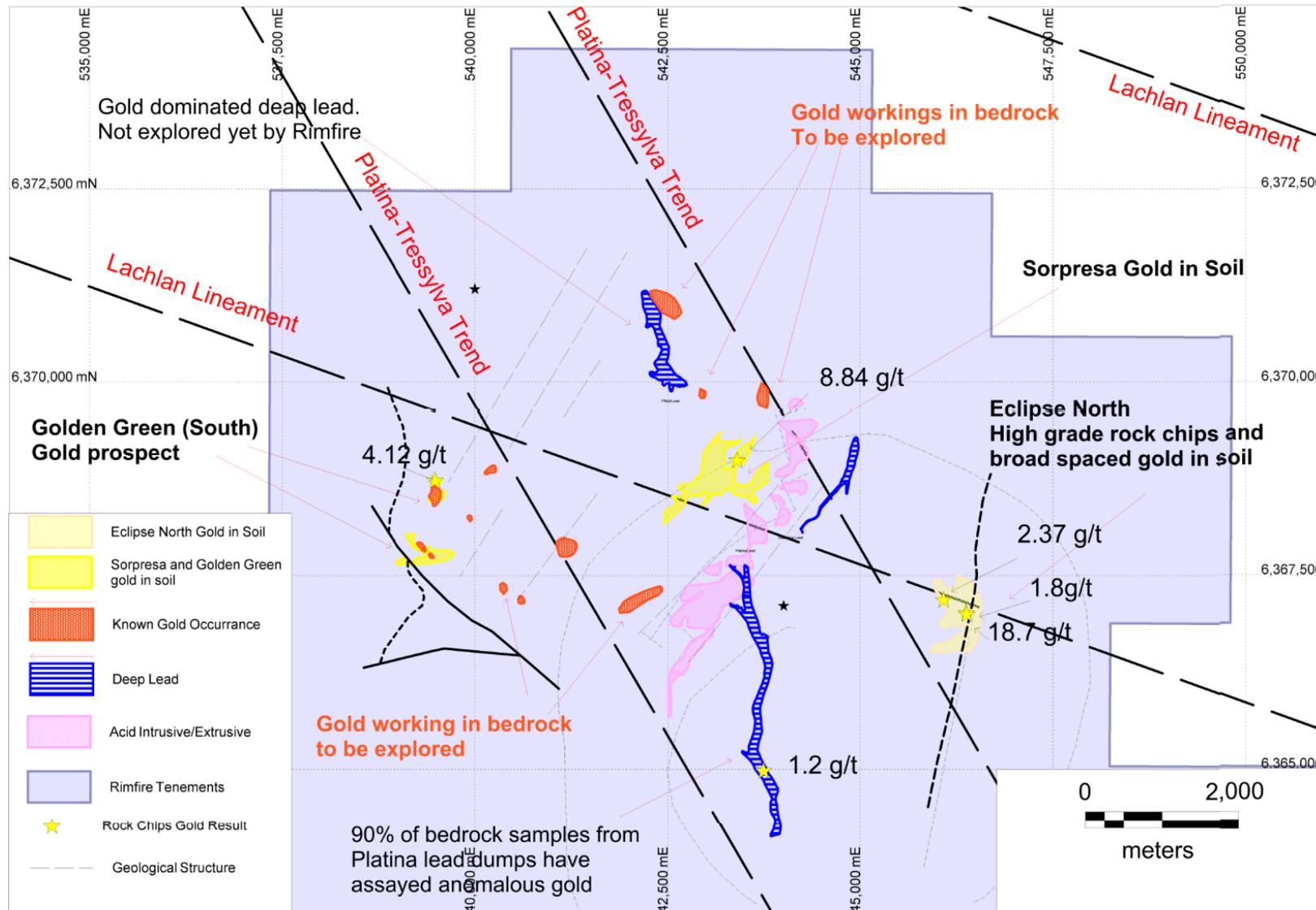
APPENDIX 2 The Sorpresa Area Anomalous Gold Zone

(Soil Geochemistry Lines with Trench 31 Location and RC Program (2008) shown as context)



APPENDIX 3

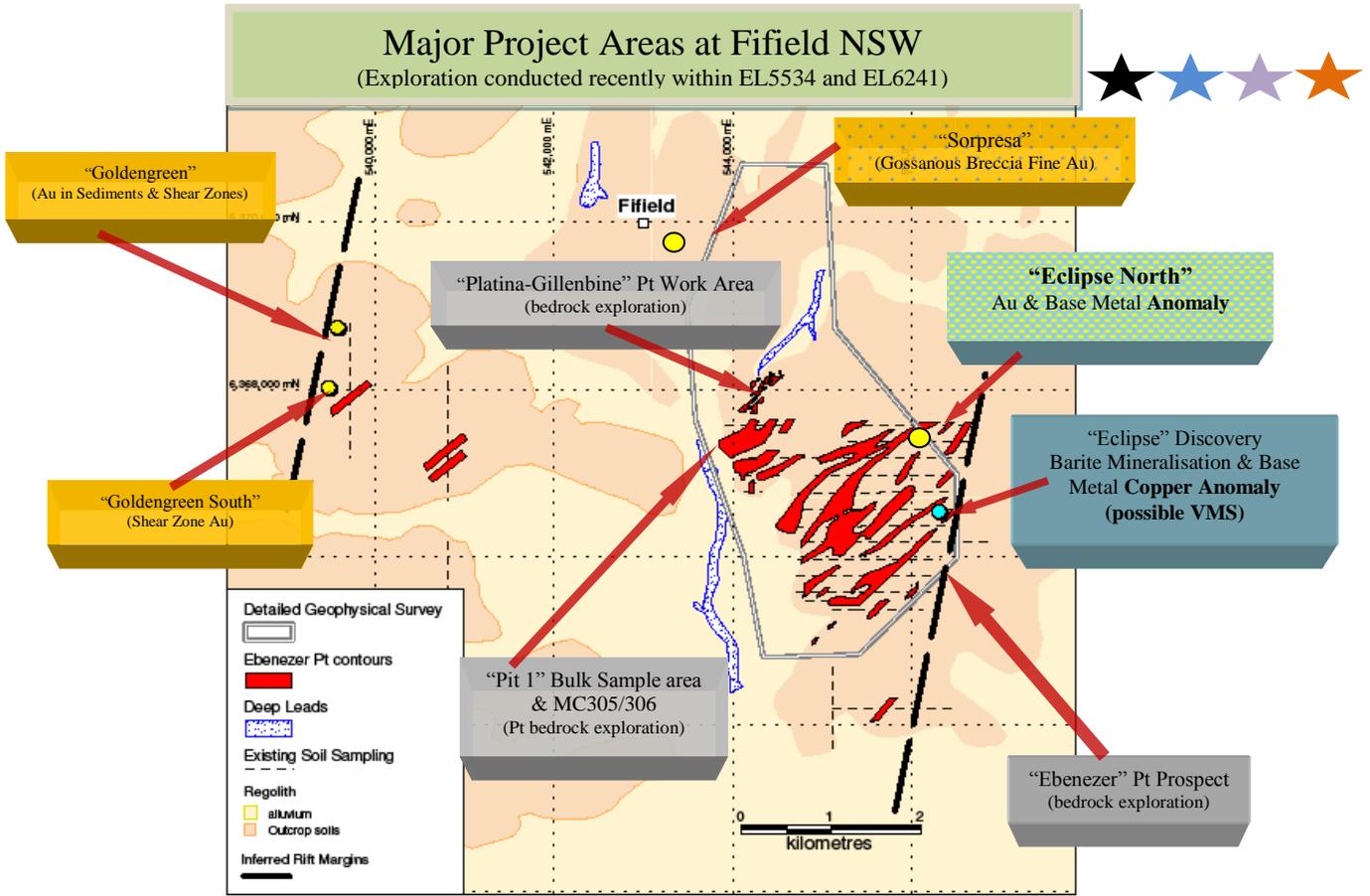
The Sorpresa Area Anomalous Gold Zone – within the wider Fifield Gold Observations



Gold Features

Appendix 4

Project Areas Fifield NSW and Metal Zoning Interpretations



★ Bulk sampling
 ★ Auger drilling
 ★ Trenching
 ★ Mapping
 ★ Assays

