



31st July 2013

Company Announcement Office

Australian Securities Exchange

QUARTERLY EXPLORATION AND ACTIVITIES REPORT

(For the period 1st April 2013 to 30th June 2013)

Excellent Quarter of Drilling produces high grade Gold and Silver - Sorpresa Project at Fifield NSW demonstrates substantial growth

Highlights for the Quarter

- The Sorpresa mineralization has expanded substantially in the diamond drilling 400m South East of the main strike and 800m South of Roadside area and remains open (Appendices 1 & 2)
- Step out percussion drilling at Roadside area shows continuity in gold and silver mineralization (which remains open) including high grades (Appendices 5A and 5B for sections)
- Diamond drilling also confirms continuity in the receptive host geology at Sorpresa and contains bonanza grade gold in post quarter reporting (Appendices 4 & 5)
- To the South West of Trench 31, RAB drilling has doubled the relevant geology (black silica) associated with the Sorpresa system (Appendix 6)
- The prospective area for Sorpresa style mineralization is estimated now in excess of 8km² and the Company maintains the view that the area has multimillion ounce gold potential

Percussion Drilling Assay Highlights (Top 12) at Sorpresa Project for June Quarter

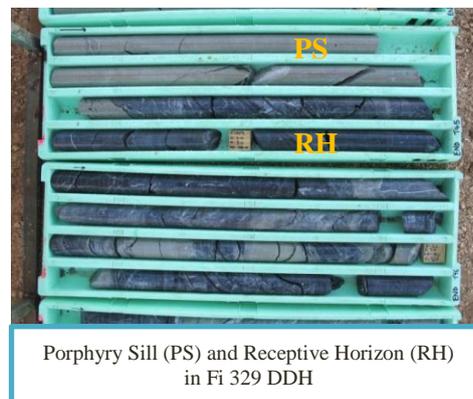
Hole	Intersection details ¹ (high grade component shown)	Including section
Fi 321	4m @ 1.42g/t Au from 86m 20m @ 230g/t Ag from 70m AND 8m @ 31g/t Ag from 112m	2m @ 934g/t Ag AND 2m @ 353g/t Ag
Fi 313	16m @ 2.67g/t Au from 68m 16m @ 113g/t Ag from 68m AND 4m @ 52g/t Ag from 50m	6m @ 6.2g/t Au 2m @ 372g/t Ag
Fi 320	16m @ 175g/t Ag from 68m AND 4m @ 115g/t Ag from 96m	2m @ 525g/t Ag AND 2m @ 245g/t Ag
Fi 311	6m @ 3.09g/t Au from 54m 8m @ 215g/t Ag from 54m	
Fi 312	2m @ 1.86g/t Au from 44m AND 10m @ 1.3g/t Au from 50m 14m @ 106g/t Ag from 48m	2m @ 3.39g/t Au 4m @ 196g/t Ag
Fi 310	8m @ 2.33g/t Au from 62m 6m @ 94g/t Ag from 44m AND 16m @ 72g/t Ag from 62m	2m @ 6.67g/t Au 2m @ 176g/t Ag AND 2m @ 124g/t Ag
Fi 319	2m @ 1.01g/t Au from 72m 14m @ 87g/t Ag from 68m AND 22m @ 28g/t Ag from 98m	6m @ 148g/t Ag
Fi 318	4m @ 1.08g/t Au from 74m 28m @ 53g/t Ag from 66m	4m @ 166g/t Ag
Fi 315	2m @ 1.11g/t Au from 72m 28m @ 55g/t Ag from 50m	4m @ 159g/t Ag
Fi 316	17m @ 62g/t Ag from 60m	2m @ 163g/t Ag
Fi 317	6m @ 107g/t Ag from 64m AND 4m @ 59g/t Ag from 74m 4m @ 45g/t Ag from 86m	2m @ 212g/t Ag
Fi 308	10m @ 1.46g/t Au from 70m	2m @ 6.14g/t Au

¹ Au was determined by fire assay method AA26 with AAS finish, and Ag used ME-ICP61 at ALS Laboratories – [Full Results Link](#)

During the June quarter, Rimfire Pacific Mining NL (ASX:RIM) (“Rimfire” or “The Company”) also undertook its first ever diamond drilling program (5 holes for 1,402m, in 3 locations).

Important assay results were received in the immediate post June quarter period and add significantly to the prospective nature of the Sorpresa project area and are therefore included in this report for completeness.

The diamond drilling assays have confirmed the presence of bonanza high grade gold (Au) with silver (Ag) mineralization within an extensive and continuous receptive “black silica” horizon at the Sorpresa Project.



Immediate Post Quarter Diamond Drilling Assay Highlights at Sorpresa Project

Hole	Intersection details ² (high grade component shown)	Including section
Fi 329 DDH	1m @ 114g/t Au from 159m 1m @ 33g/t Ag from 159m	
Fi 328 DDH	7m @ 4.24g/t Au from 87m 20m @ 97.6g/t Ag from 80m	1m @ 22.7g/t Au 1m @ 631g/t Ag
Fi 327 DDH	1m @ 24.9g/t Au from 143m 10m @ 35.9g/t Ag from 121m, AND 3m @ 78.2g/t Ag from 135m	

(The appendices 1 to 4 give important context to this report including hole locations, sections, shapes and assays)

The Executive Chairman, John Kaminsky, commented:

“The June quarter has produced great advances in the Sorpresa project area.

Each drill program has confirmed and expanded significantly the quality, scale and potential of the emerging gold and silver system. The latest high grade results and geological observations are totally consistent with all our previous work, and occur within a much larger known area.

Important principles from the various drilling programs are now well established. The IP geophysics is connected to the mineralized horizon geology thus providing an important exploration tool for the wider area to rapidly define additional high grade targets.

We now have the emergence of porphyry geology at Fifield, occurring within an important structural corridor in NSW, that already hosts large mines based on porphyry systems, so this looks to be important. The mineralization continuity is excellent at Roadside and the prospective area south west of Sorpresa has doubled.

Intersecting bonanza grade of **1m @ 114g/t Au**, (results received in the immediate post quarter period) in our first ever diamond drilling was an unexpected bonus. This was well supported by other results in the quarter and 2012 results at Sorpresa, thus showing the excellent development progress of Sorpresa.

Looking forward we have many high quality target areas for what now looks to be much lower risk drilling, particularly east and south east in and around the Roadside area at Sorpresa.

Darren Glover is a recent and significant senior management addition to the Fifield team. He will be working to build the Sorpresa project with Colin over the next 12 months. Shareholders should be extremely pleased by the results of the last quarter, which set an exciting stage for further important developments at Fifield.”



² Au was determined by fire assay method AA26 with AAS finish, and Ag used ME-ICP61 at ALS Laboratories – [Available Results Diamond Drilling](#)

Colin Plumridge, Senior Exploration Geologist, remarked:

“We have again achieved exciting gold and silver intersections in the June quarter drilling. These are consistent and impressive results. Sorpresa has again produced excellent outcomes, including high grade assays, geological continuity and a major expansion of the area.

The diamond drilling program in particular has provided an enormous leap forward in our understanding of the system geology and confirmed the large scale of the mineralization operating at Sorpresa. The five cored holes showed remarkable similarity in both the overall geology and the mineralization style, confirming the extensive scale of the Sorpresa mineralized system.



Appendices 1 to 4 show we now have approx. 1.4km of mineralization strike, containing some excellent results that remain open in many directions. We have obvious high priority areas for follow up RC drilling.

The Sorpresa gold and silver mineralization is characterized by a low dip rolling structure, which represents a very favourable geometry for delineation and mining considerations, which is an important commercial consideration as we move forward.

The RAB drill program has doubled one of the key Sorpresa style geology units to the south west. This entire area (shown in Appendix 6) looks impressive and has been hidden under shallow alluvium cover, which is prospective for the Sorpresa style gold and silver mineralization.

It has been an incredibly busy quarter, with a mixture of drill programs that have ensured that the Company has proceeded to the next significant level of understanding at Sorpresa and its surrounds.

Darren Glover and I will be working closely together on the exploration programs and the drillout of Sorpresa in the next 12 months. His management expertise and strong technical knowledge in porphyry style gold systems in NSW will add tremendous value to the Company.

We are eagerly looking forward to an exciting period over the next 12 months.”

Brief Summary of the Drilling Programs conducted in the June Quarter

Three concurrent drill programs were conducted in the June quarter. A brief summary is provided, with more details available in the Appendix 7, which provides hyperlinks to other reports.

RAB (rotary air blast) Drilling Program at Sorpresa

RAB drilling was undertaken to the south west of the known gold mineralized position at Trench 31 location, within the Sorpresa project area. This drilling was to shallow depths (6~12m), with 25m to 50m spacings on multiple traverse lines, for more than 125 holes using the Company’s in-house percussion drill rig.

The objective of the RAB drill program was to penetrate the alluvium cover in this location and test the underlying bedrock potential for gold. This is the first extensive prospecting for gold under the alluvium cover sequence. It should be noted from the RAB program that:

- Important “black silica” (silicified carbonaceous sediment) similar to the known Sorpresa geology was seen
- Much of the highly prospective Sorpresa Project, yet to be explored (8km²), is hidden under shallow alluvium
- This RAB drilling lays the foundation for additional deeper RC drilling at a later stage

Diamond Drilling Program at Sorpresa

The diamond drilling conducted at Sorpresa has underpinned and extended the knowledge of the Sorpresa mineralization system substantially. Assay results for Fi 325 DDH will be available in August.

Key outcomes for the diamond drilling were as follows:

- The gold and silver receptive horizon has expanded substantially, remains open along strike and down dip
- The connection of the Sorpresa mineralization host geology to the IP response is firmly established offering an important geophysical technique to enable direct drill targeting
- The Sorpresa mineralization appears continuous, has excellent geometry and remains within open cut mining depths or has potential grade suited to underground mining (Appendices 3 & 4)
- The observed geology is dynamic with consistency observed across each hole drilled, including identification of the intensely altered porphyry trap rocks
- Significant bonanza grade and potential economic widths to mineralization in diamond core was seen thus providing validation of high grade mineralization in the system encountered in previous percussion drilling (2012).

The next phase of drilling will follow obvious prospective areas east and south east of the main Sorpresa strike that are currently low risk extensions of known gold and silver mineralization will be targeted with RAB and percussion drilling.

Percussion RC Drilling Program at Sorpresa

RC drilling was undertaken across the Sorpresa Project, with a key emphasis on the Roadside, Trench 31 and Boundary Gate Areas. 4,050m of RC drilling was completed and priority assays undertaken. The results demonstrate that the Roadside Area in particular has strong continuous mineralization of considerable scale, desirable geometric shape, and still open in many directions.

A high success rate was seen in the drilling where 33 of 35 holes assayed at Sorpresa were gold mineralized (>0.1 g/t or more, for min. 2m interval), including nearly a third of these holes having a minimum of **10 gram-metres** of gold.

The Roadside area contained strong silver mineralization, with 12 of 16 holes assaying a minimum of **900 gram-metres** silver, plus gold credits.

At the Roadside area, a long section (B – B/) in the North - South direction gives a **400m of continuous strike length** (Appendices 1 & 5A). Hole Fi 321 was the **2nd best result for silver drilled at Sorpresa to date, with 20m @ 230g/t silver (Ag) from 70m, incl. 2m @ 934g/t silver (Ag)**, AND an additional 16m grading above 24g/t silver (Ag)

Hole Fi 313 gave **16m @ 2.67g/t gold (Au) from 68m, incl. 6m @ 6.2 g/t Au and 16m @ 113g/t silver(Ag) from 68m, incl. 2m @ 372g/t silver (Ag)**. This hole is also at South Roadside and appears to be part of a re-emerging gold corridor trending South East.

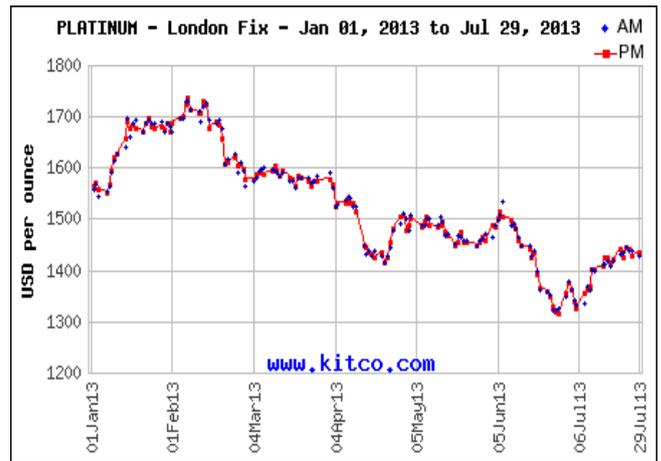
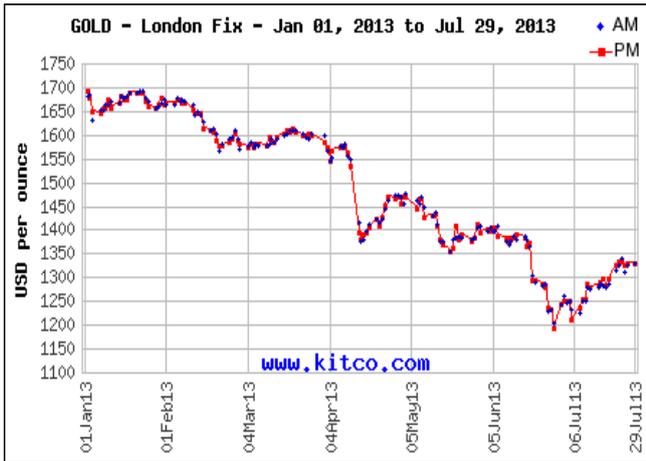
A cross section (K–L) of the assay results at Roadside shows mineralization at the southern end is continuous for a length of 250m down dip and open. (Appendices 1 & 5B)

The entire area between Boundary Gate and Roadside, heading east, is seen as highly prospective at Sorpresa. The diamond drill holes have also demonstrated that the same geology incorporating the “black silica receptive horizon” continues to the south.

Combining the long section (B-B/) at Roadside with the Diamond drilling long section (A-B-C-) gives a large, expanding scale to the mineralization (Appendices 2,3 &4).

COMMODITY PRICING FOR THE JUNE 2013 QUARTER

The prices of Gold, Platinum and Silver all had notable price corrections in the quarter, however, these had rebounded somewhat in July (www.kitco.com).

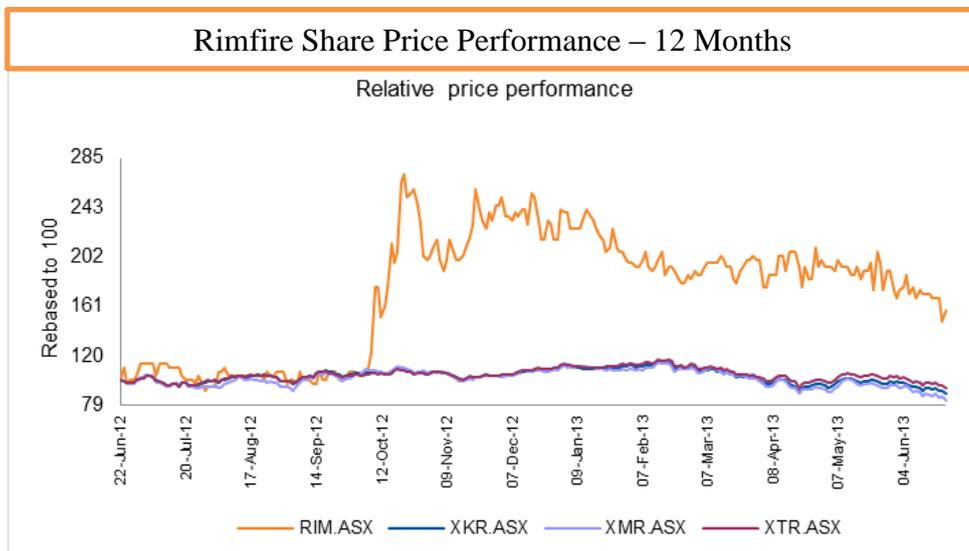


As at 29th July 2013, the prices for metals in New York based on closing Ask in USD were as follows:

Gold	\$1,328/oz
Platinum	\$1,438/oz
Silver	\$20/oz

CORPORATE ACTIVITIES

Company share price performance for the period



XAO is ALL ORDINARIES; XKR is S&P/ASX 300 RESOURCES; XMR is S&P/ASX MIDCAP RESOURCES

The Company had an outstanding market performance relative to its peers, with the Company share price achieving well above the market indices and exceeding performance of most mineral and metal resource companies.

Tenement Position

The tenement position saw non-renewal of minor tenements EL7233 and EL7234 (total 10 blocks). There is no impact on the Company's main project areas at Sorpresa at the end of the period.

Cash, Facilities and Investments

As at 30th June 2013 the Company had approximately \$909,000 in cash. The Company extended drilling programs beyond original intention, due to the positive field observations in the drilling and forecasts for possible restricted access in the following quarter due to weather. Three concurrent drill programs were conducted, which was unusual.

It is anticipated that the Company will conduct activities using primarily its own internal percussion rig and equipment, thus enabling ongoing work, but greatly reducing contractor payments.

Issued Capital

The issued capital remained unchanged and at the close of business on 30th June 2013 there were 610,529,976 ordinary shares.

Personnel Addition

The Company has increased its Fifield site technical, commercial and managerial capability with the addition of Mr Darren Glover, as Exploration and Development Manager, responsible for the overall project and site management at Fifield NSW. This allows more focused attention on the Sorpresa project area as the Company moves towards resource definitions.

Darren has a very strong exploration and project management history, most recently with Gold Fields Australasia. He has extensive (12 year) Cu-Au Porphyry exploration experience in the East Lachlan Fold Belt, NSW Australia. This background is ideally suited to the work requirements at Fifield.

Mr Colin Plumridge, as Senior Exploration Geologist – District Discoveries, will be able to apply his tremendous field experience to further exploration and discovery work in the Fifield district, surrounding Sorpresa, whilst still maintaining important input into the known Sorpresa system.

The collaborative efforts of both Darren and Colin will enable a more rapid assessment of the Fifield district and development of Sorpresa with an objective to proving up a resource.

Metal Prices

As at 30th July 2013, the approx. trading prices ([Kitco.com](http://www.kitco.com)) for metals in New York based on opening Ask in USD were as follows:

Gold	\$1,328/oz
Platinum	\$1,443/oz
Silver	\$20/oz



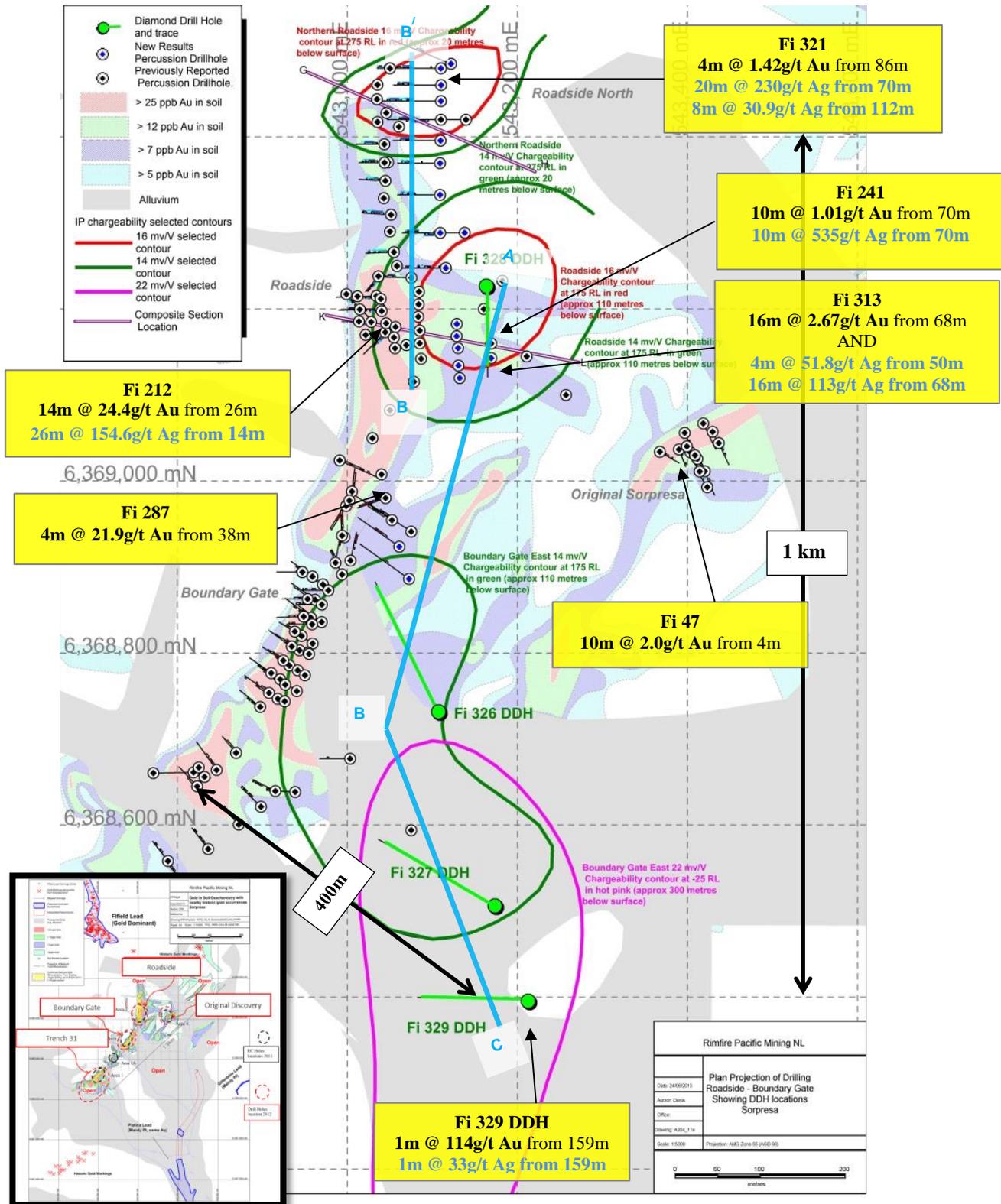
JOHN KAMINSKY
Executive Chairman

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, 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 mineralization 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 his information in the form and context in which it appears.

APPENDIX 1

Plan View Percussion and Diamond Drill Holes – Roadside Location within the Sorpresa Project

Selected historic and current assays are shown for orientation. Refer tables (current and previous) for complete results.

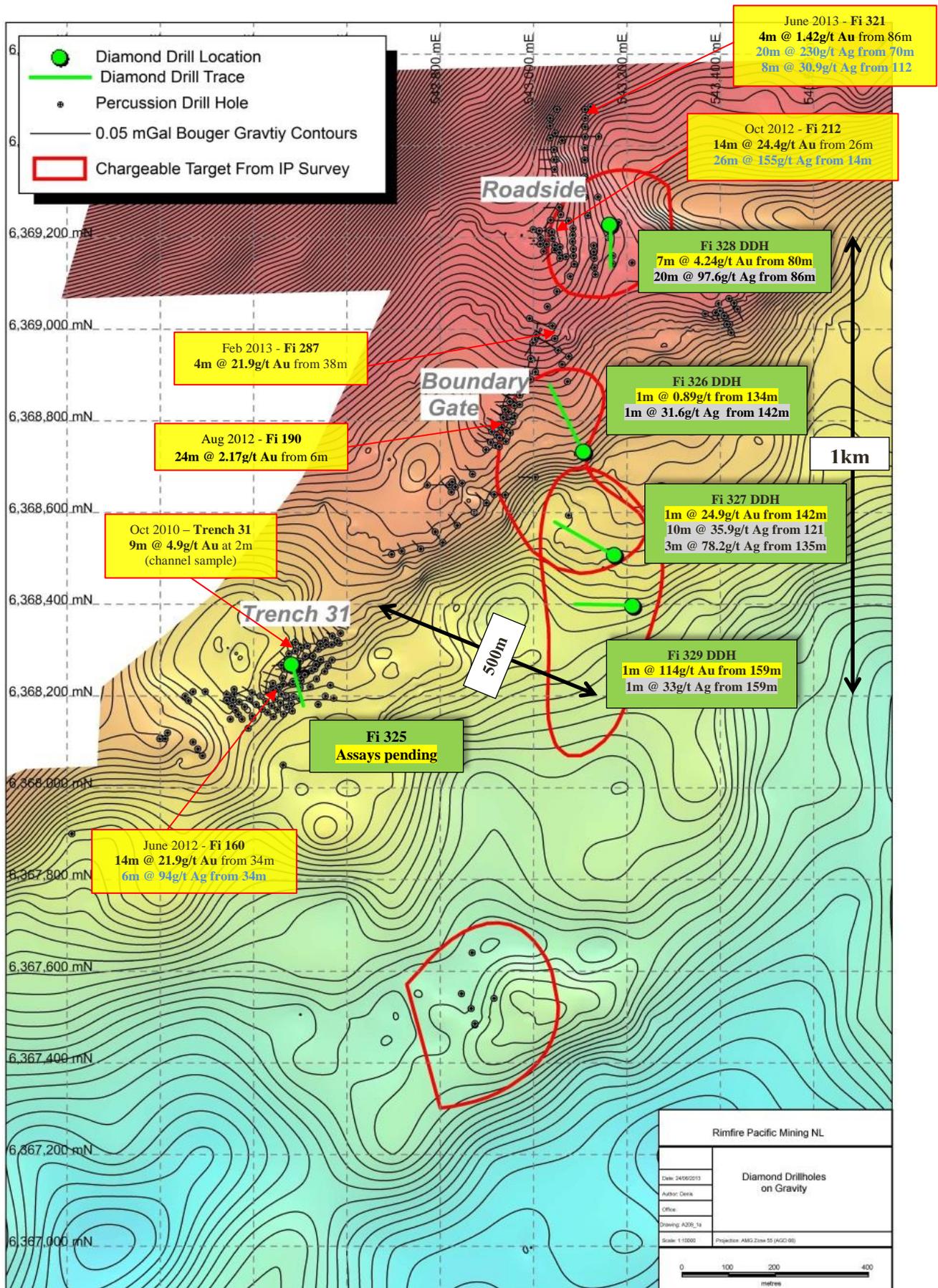


Very successful step out percussion drilling was conducted in the June Quarter. In addition, the Diamond Drilling Holes significantly expanded the known Sorpresa mineralization and also produced high grade intersections.

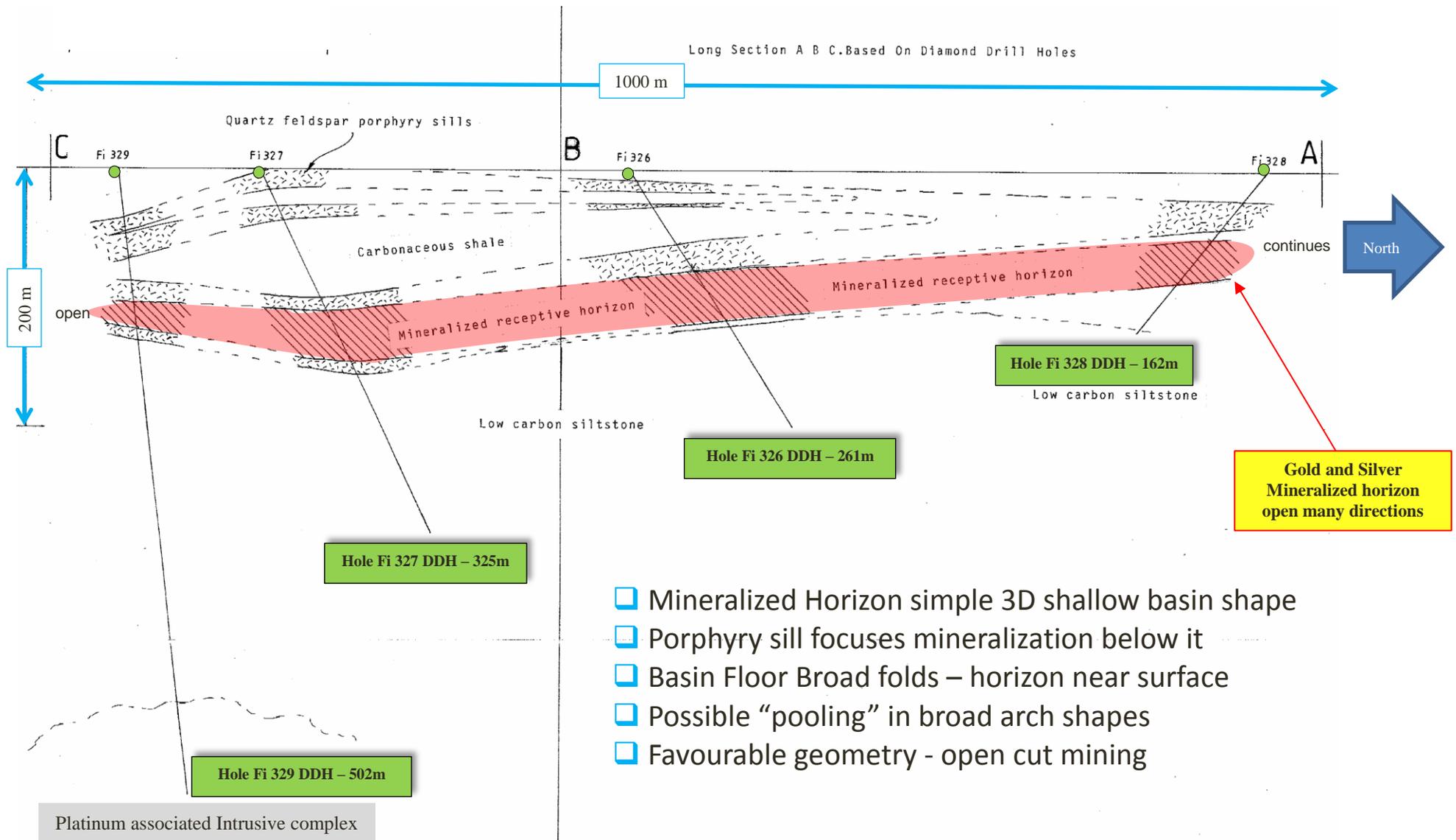
APPENDIX 2

Plan View Diamond Drill Holes - Sorpresa Project (with Gravity and IP backdrop)

Selected reference assays are shown for orientation. Refer tables (current and previous) for complete results.



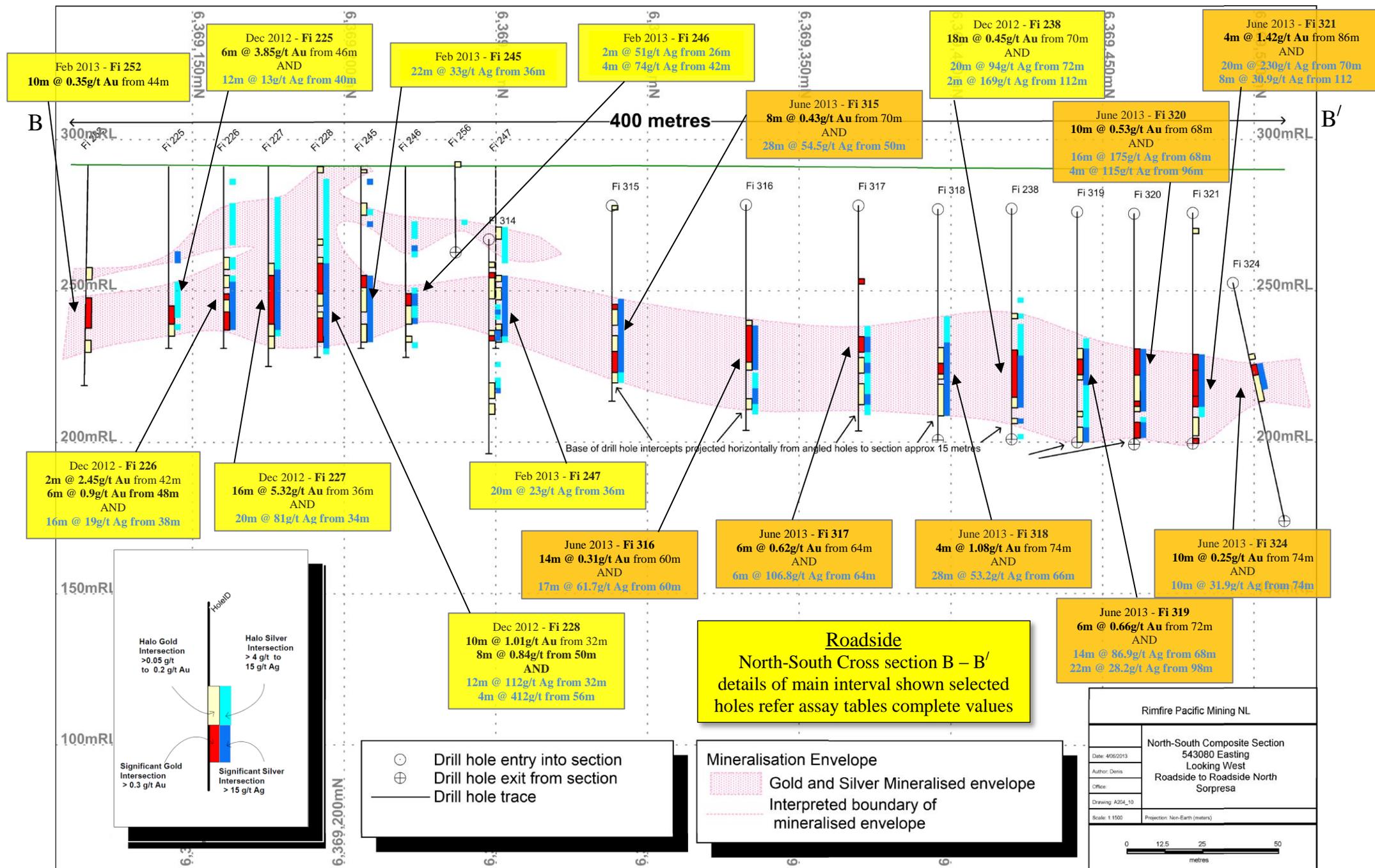
Appendix 3 Diamond Drilling 1km “Long Section north – south”



The geology plotted as a long section and cutaway (Appendices 2 and 3) for the diamond drilling gives the interpretation that the receptive horizon “rolls on”, is shallow dipping and likely continuous. Results in holes Fi 327 DDH and Fi 329 DDH in particular, expand Sorpresa hundreds of metres further to the east and south of previous gold and silver intersections.

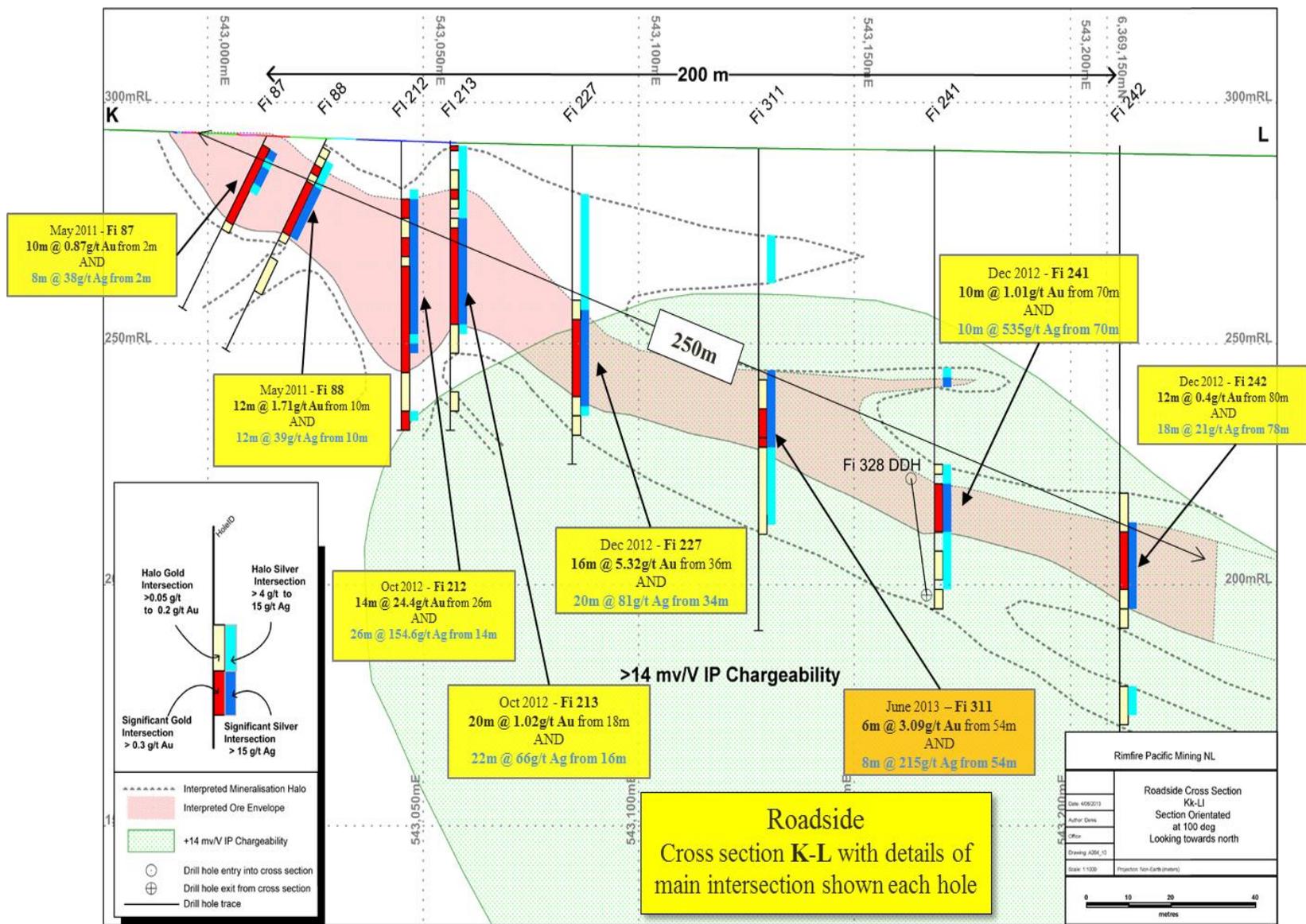
Appendix 5A

North – South section B – B' of Drilling at the Roadside Area Looking to the West showing the best interval only on holes



Appendix 5B

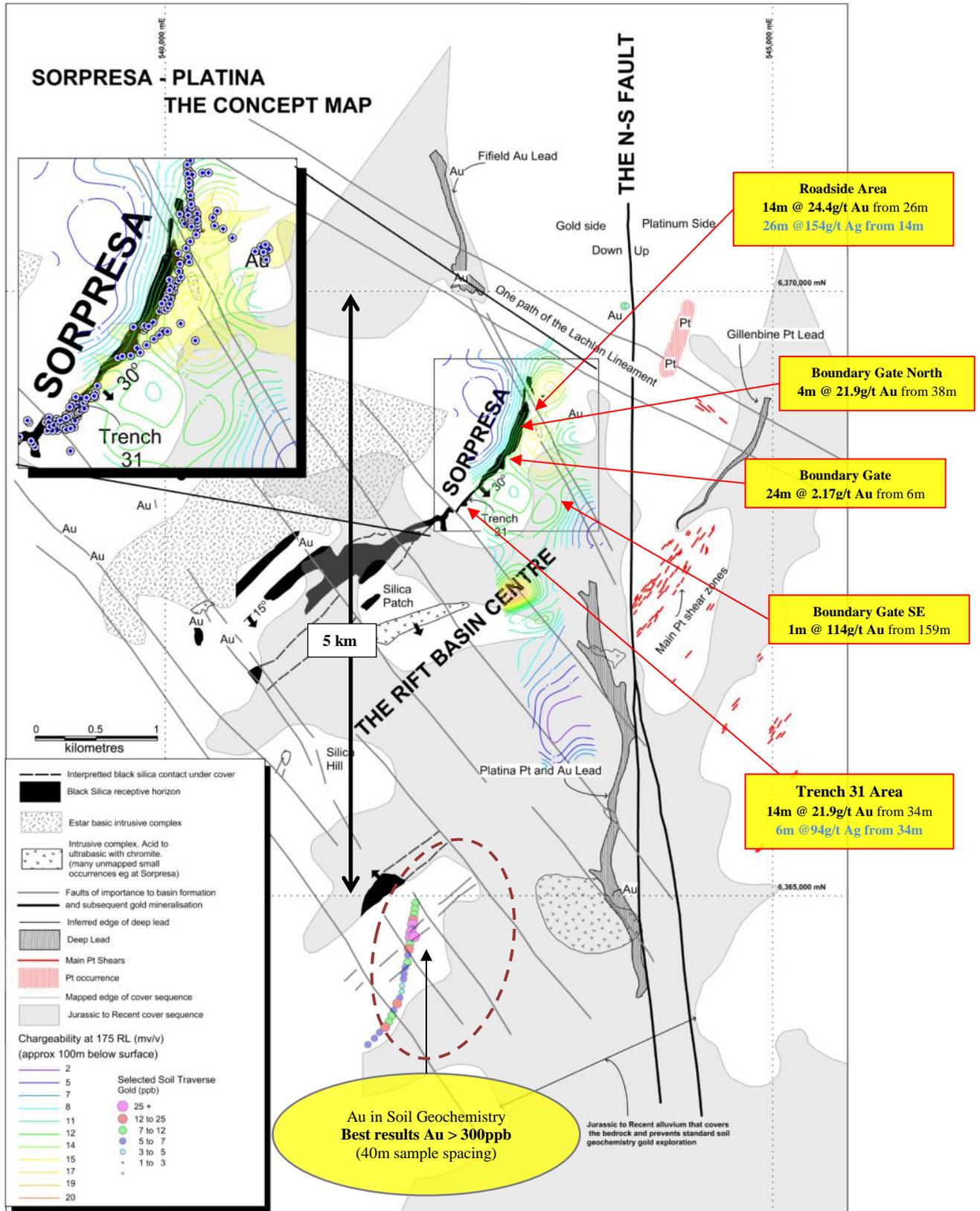
East – West Cross section K - L of Drilling at the Roadside Area Looking to the North showing the best interval on each hole



Appendix 6

The Geological Concept Model – Syncline Rift Basin in Plan View

(Note that the IP survey response at approx. 100m depth is overlaid, selected assays for orientation shown)



Appendix 7 - Sorpresa Project Information Thread

The Company provides a **hyperlink thread** of the Sorpresa Gold Mineralization area of recent ASX and video materials as follows. The thread provides important views previously expressed, that will assist the reader with understanding the Company's technical consideration and outlook for the work it is undertaking:

1. ASX July 17th 2013 [Diamond Drilling Reveals Bonanza Grade of 1m @ 114g/t Au](#)
2. ASX June 13th 2013 [Further Positive RC Drilling Results at Sorpresa Project](#)
3. ASX May 23rd 2013 [Diamond and RC Drilling Completed, RAB Drilling Extended](#)
4. ASX April 26th 2013 [Mineralized Zones Intersected in Diamond Drilling](#)
5. ASX April 12th 2013 [RAB Drilling program Commences at Sorpresa](#)
6. ASX April 5th 2013 [Diamond Drilling and RC Drilling Commences at Sorpresa Gold Project](#)
7. ASX March 27th 2013 [Additional Assays at Sorpresa Gold Project](#)
8. ASX March 13th 2013 [Sorpresa Gravity Geophysical Survey Commences](#)
9. ASX February 19th 2013 [Continuous 350m Section Established at Roadside Area & New Gold Zone Intersected](#)
10. ASX January 31st 2013 [Quarterly Exploration Activities December 2012](#)
11. ASX December 18th 2012 [Sorpresa Project Produces More Encouraging Results](#)
12. ASX November 22nd 2012 [Presentation for 2012 AGM](#)
13. ASX November 5th 2012 [Best Silver Grades to Date Seen at Sorpresa Project Area](#)
14. ASX October 10th 2012 [Highest Gold and Silver Grades seen to date at Sorpresa Project](#)
15. ASX September 17th 2012 [First Gold Sections Created at Sorpresa Project – New Assay Results](#)
16. ASX August 31st 2012 [New Gold in Soil Zones Located 4km South of Sorpresa](#)
17. ASX July 31st 2012 [Quarterly Exploration Activities June 2012](#)
18. ASX July 26th 2012 [Successful Intersections at Sorpresa Gold Project](#)
19. ASX June 13th 2012 [High Grade Gold Intersection Sorpresa Project – Fifield NSW](#)
20. ASX May 28th 2012 [Sorpresa Gold Project has Increased Potential at Depth](#)
- A video link is provided to a [3D model of the IP Anomaly at Sorpresa \(click here\)](#).
21. ASX April 30th 2012 [Quarterly Exploration Activities March 2012](#)
22. ASX January 31st 2012 ([Quarterly Exploration Activities December 2011](#))
23. A video link is provided [January 2012 Sorpresa Gold Project – Trench 31 Area Review Video](#)
24. ASX 28th November 2011 [AGM Exploration Presentation – Including Key Summary Assay results of Sorpresa](#)
25. Rimfire Website Summary [Brief history of Sorpresa Mineralization discovery and style \(to September 2011\)](#)
26. ASX [Assays Confirm Significant Gold and Silver at Sorpresa Project 6th July 2011](#)