# NEW GOLD GEOCHEMICAL ANOMALY IDENTIFIED ON DOROTHY HILLS TREND SOUTH OF GRUYERE DEPOSIT



### **Highlights**

- Interface Rotary Air Blast (RAB) drilling identified a three kilometre long and over one kilometre wide interface gold geochemical anomaly (at >10 ppb Au) at the new Toto Prospect on the Dorothy Hills Trend between Gruyere and YAM14.
- Three discrete parallel trends at >15 ppb Au coincident with linear magnetic anomalies are of similar size and gold grade to the original Gruyere discovery anomaly.
- The northern end of the Toto anomaly is located approximately two kilometres south of the Gruyere Deposit.

Gold Road Resources Limited (**Gold Road** or **the Company**) (ASX: GOR) is pleased to announce it has identified a three kilometre long (and up to 1.2 kilometres wide) geochemical gold anomaly (>10 ppb Au) between the Gruyere Deposit and YAM14 Prospect at the Dorothy Hills Trend. This new anomaly is coincident with the **Toto Prospect** area (Figures 1 and 2).

The recently completed Interface RAB drill programme totalled 1,563 metres in 522 holes, varying between one to six metres in depth (average three metres), and covering an area of approximately six kilometres north-south by three kilometres east-west. The drill spacing was on 200 metre, 400m metre, and 600 metre east-west section lines with holes spaced 50 metres apart along the drill lines.

The results of the programme outline a coherent >10 ppb Au anomaly measuring approximately three kilometres north-south by 1.2 kilometres east-west along the trend of the Dorothy Hills Shear Zone, which hosts the Gruyere Deposit only two kilometres to the north. Internal to the greater anomalous zone are three parallel north-south zones at >15 ppb Au that are of equivalent dimensions and gold intensity to the initial Gruyere discovery anomaly identified using the same Interface RAB techniques in August 2013.

Gold Road is now planning to complete follow-up Aircore drilling over the peak areas of the anomaly which will test for gold mineralisation and other pathfinder elements in the Archean bedrock below the currently identified footprint.

Gold Road's Executive Chairman, Ian Murray commented; "We are very encouraged that this anomalism, identified in the recent Interface RAB programme at Toto Prospect, appears to be larger than both the original anomalies over Gruyere and YAM14 (Figure 1).

This new anomaly continues to enhance our view that the Dorothy Hills Trend, within our 100% held tenements, is host to a very large gold system, and that more significant discoveries could be made over the Trend.

This anomalism is further evidence of the strength of the regional targeting program that led to the Dorothy Hills Trend, and five others, being identified as high-priority Gold Camp Scale Targets within our Yamarna tenements."

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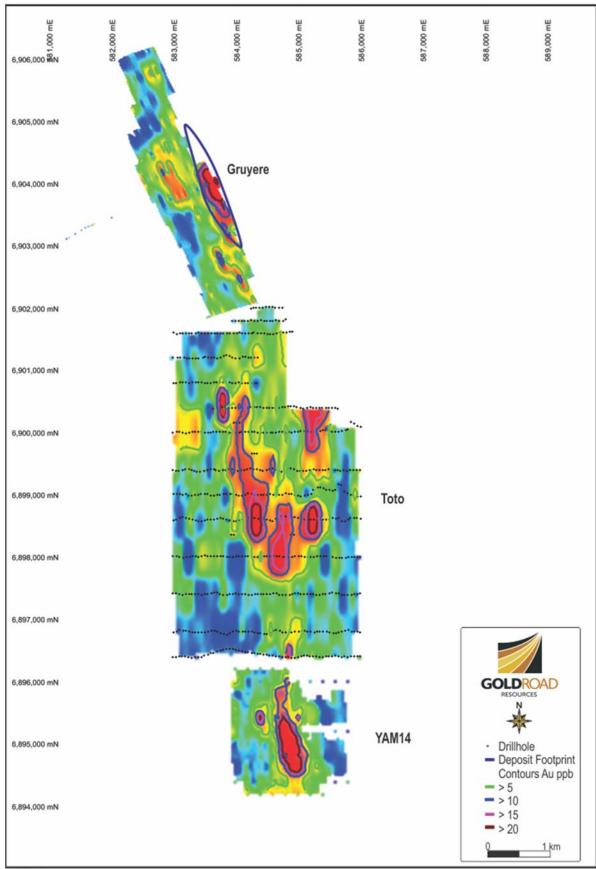


Figure 1: Gold contours at 5ppb, 10ppb, 15ppb, and 20ppb over gold contour image. Derived from Gold Road's Interface RAB and Auger drilling over Dorothy Hills Trend, South Dorothy Hills Gold Camp.



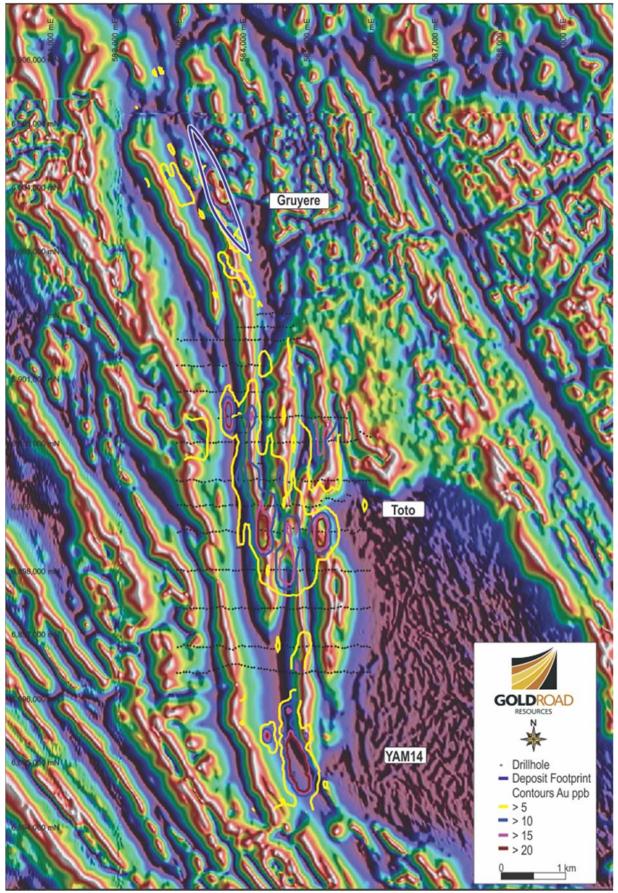


Figure 2: Gold contours at 5ppb, 10ppb, 15ppb, and 20ppb over RTP Tilt magnetic image. Derived from Gold Road's Interface RAB and Auger drilling over Dorothy Hills Trend, South Dorothy Hills Gold Camp.

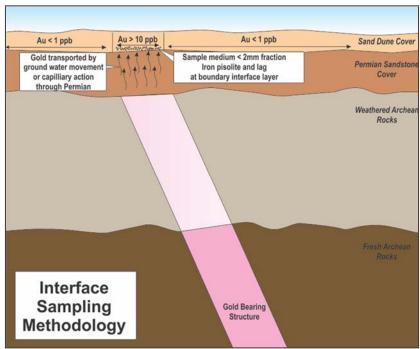


### Interface RAB Drilling and the Toto Anomaly

Interface RAB drilling penetrates through the predominantly sand dune cover ubiquitous to the Yamarna Belt. A single sample is collected from the upper contact surface of the cemented and iron rich Permian sandstone which is variably situated below the unconsolidated sand dune cover, and which overlies the Archean rocks which host the gold mineralisation (Figure 3).

The interface samples were sieved to <2mm fraction to produce a 100-gram sample. The samples were delivered by Gold Road to Intertek Laboratories in Kalgoorlie for preparation, and assayed in Perth utilising a 10 gram Aqua Regia digestion and AAS for gold analysis with a 1 ppb detection limit. The drill-hole locations were surveyed using a handheld GPS.

Gold Road considers this method to be more effective than other traditional surface soil surveys. Similar shallow Interface RAB and Auger programmes were effective in identifying the discovery anomalies over the Gruyere Deposit, YAM14 and the Breelya-Minnie Hill Prospects in 2013. Follow-up drilling has led to significant discoveries in all of these target areas.



**Figure 3:** Schematic cross section of typical Yamarna Belt geological profile showing the interface layer sampled in Interface RAB drilling programmes, and relationship of identified gold anomalism associated with Archean hosted gold mineralisation below. Interface RAB drilling penetrates the Sand Dune Cover and collects a sample at the interface contact with upper contact of the Permian Sandstone.

#### **Future Work**

Gold Road is planning a follow-up programme of Aircore drilling to test the identified Toto Prospect anomaly. This programme will comprise Aircore holes drilled to refusal at the top of the fresh rock horizon in the underlying Archean rocks. Holes will be sampled through the Archean weathered profile and assayed for gold, and a single sample taken at end-of hole will be assayed for gold and an additional multi-element assay suite. Further coherent gold anomalism identified in the Aircore programme would then be tested with follow-up RC drilling. The Aircore programme will be completed on the same east-west drill lines as for the RAB programme with holes spaced 50 metres apart on lines.

The Aircore programme is planned to commence in the September 2014 Quarter, along with additional RAB/Aircore drilling programmes at Pacific Dunes-Corkwood and Wanderrie-Sun River Gold Camps. Similar regional drilling is currently in progress on the Riviera-Smokebush camp on the South Yamarna Joint Venture tenements to the south.



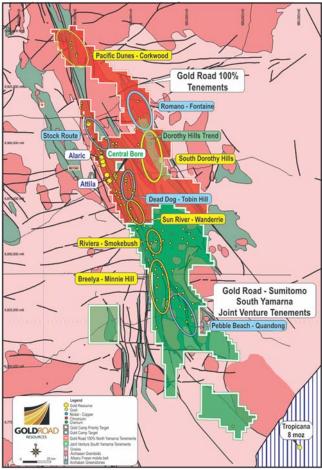


Figure 4: Gold Road 100% tenements and Gold Road-Sumitomo South Yamarna Joint Venture tenements showing location of Dorothy Hills Trend as well as other Gold Camps and Redox Targets

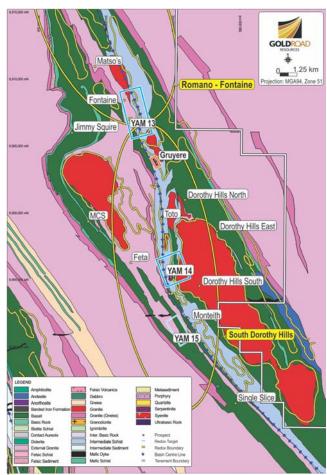


Figure 5: The Dorothy Hills trend showing Gruyere, Toto and YAM14

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#### **About Gold Road Resources**

Gold Road Resources Limited (ASX: GOR) is exploring and developing its wholly-owned **Yamarna Belt**, a newly discovered gold region covering ~4,900 square kilometres on the Yilgarn Craton, 150 kilometres east of Laverton in Western Australia.

Gold Road announced in May 2013 an exploration joint venture with Sumitomo Metal Mining Oceania Pty Ltd (a subsidiary of Sumitomo Metal Mining Co. Limited) for Sumitomo Metal Mining to earn up to 50% interest in Gold Road's South Yamarna tenements, an area covering ~2,800 square kilometres.

The Yamarna Belt, adjacent to the 500 kilometre long Yamarna shear zone, is historically underexplored and highly prospective for gold mineralisation. Geologically similar to the prolific Kalgoorlie Gold Belt, the Yamarna Belt has a resource of 1.3 million ounces of gold, hosts a number of significant new discoveries and lies north of the 7.9 million ounce Tropicana deposit.

Gold Road is prioritising exploration on five of its nine **Gold Camp Targets** on the Yamarna Belt. Identified in 2012 through interpretation of various geological and geophysical data sets, each target has a 15-25 kilometre strike length and contains numerous prospects. Initial exploration of these targets has been very encouraging.

The first Gold Camp Target was the South Dorothy Hills Trend which yielded the recent 100% owned Gruyere and YAM14 gold discoveries. The discoveries, approximately nine kilometres apart and on the same structural trend, approximately 25 kilometres north-east of its more advanced project Central Bore, exhibit two different mineralisation styles not seen before in the Yamarna Belt, and confirm the potential for the Dorothy Hills Trend to host further significant gold deposits.

#### NOTES:

The information in this report which relates to Exploration Results or Mineral Resources is based on information compiled by Mr Justin Osborne, Exploration Manager for Gold Road Resources Limited. Mr Osborne is an employee of Gold Road Resources Limited, as well as a shareholder and share option holder, and is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Osborne has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Osborne consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

## **Appendix 1**

## JORC Code, 2012 Edition - Table 1 report - Toto Interface RAB drilling

#### **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	The sampling has been carried out using Rotary Air Blast (RAB) drilling. A total of 522 holes were drilled in this reported programme. Holes were drilled vertically to refusal. Hole depths varied from one metre to a maximum six metres and averaged three metres in depth to the interface layer between sand dune cover and underlying Permian Sandstone.
	Include reference to measures taken to ensure sample representation and the appropriate calibration of any measurement tools or systems used.  Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	The one metre interval at the contact was sieved for < 2mm fraction and a 100 gram sample submitted to Intertek Laboratories in Kalgoorlie for preparation, and assayed in Perth utilising a 10 gram Aqua regia digestion and Graphite Furnace AAS for gold analysis with a 1 ppb (parts per billion) detection limit. The drill locations were surveyed using a handheld GPS.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	A RAB drilling rig, owned and operated by Raglan Drilling, was used to collect the samples. The RAB bit has a diameter of 4 inch (100 mm).
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.  Measures taken to maximise sample recovery and ensure representative nature of the	The single sample collected during the Interface RAB drilling is from the contact between sand and underlying sandstone. This is essentially a modified soil sample collected using drilling methods. Sample recoveries are not recorded or relevant to the style of sampling.
	samples.  Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.  Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.  The total length and percentage of the relevant intersections logged	The interface sample is logged for presence of oxide, pisolitic, calcrete or other weathering products. No lithology other than sand or sandstone is present.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	No core was collected.  One-metre drill samples were laid out onto the ground in rows, and a single sample is collected from the interface sample at contact between sand and sandstone. The sample is collected and then sieved to produce a -2mm product for assay.

Criteria	JORC Code explanation	Commentary
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were prepared at the Intertek Laboratory in Kalgoorlie. Samples were dried, and the whole sample pulverised to 85% passing 75um, and a sub-sample of approx. 100g retained. A nominal 10g was used for gold analysis. The procedure is industry standard for this type of sample.
	Quality control procedures adopted for all sub-sampling stages to maximise representation of samples.	No field QAQC samples are collected.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	This is a modified soil sample and only a small amount of material is required to measure the quantitative level of gold anomalism at a single point.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered appropriate to give an indication of low level gold anomalism to be used to identify coherent regional scale low level god anomalies.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Samples were analysed at Intertek Laboratory in Perth. The analytical method used for gold was a 10g Aqua Regia digestion with AAS finish for gold only, which is considered to be appropriate for the material and mineralisation. The method gives a near total digestion of the regolith intercepted in RAB drilling.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	No field QACQ samples were collected during this programme.
Verification of sampling and	The verification of significant intersections by either independent or alternative company personnel.	Significant results were compiled by the Technical Director and checked by the Exploration Manager.
assaying	The use of twinned holes.	Twin holes are not relevant.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All field logging is carried out on Toughbooks using LogChief. Logging data is submitted electronically to the Database Geologist in the Perth office. Assay files are received electronically from the Laboratory. All data is stored in a Datashed/SQL database system, and maintained by the Database Geologist.
	Discuss any adjustment to assay data.	No assay data was adjusted. The lab's primary Au field is used for plotting and reporting purposes. No averaging is employed.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	RAB locations were determined by hand-held GPS, with an accuracy of 5m in Northing and Easting.
	Specification of the grid system used.	Grid projection is GDA94, Zone 51.
	Quality and adequacy of topographic control.	RL's are allocated to the drill hole collars using detailed DTM's generated during aeromagnetic surveys in 2011. The accuracy of the DTM is estimated to be better than 1-2m. The absolute elevation is not relevant to the survey which is essentially a 2D Plan survey looking for anomalism in a single horizontal plane.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	RAB drilling was carried out on a nominal 200m, 400m or 600m line spacing north-south with holes 50m apart east-west on the drill lines. One sample was collected for every hole drilled.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Results from the RAB drilling are used only to define a modified soil anomaly in a single plane at the Sand interface representing the potential signature above primary Archean gold mineralisation.
	Whether sample compositing has been applied.	No compositing is applied or relevant.
Orientation of data in relation to	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The orientation of the drill lines (90 degrees azimuth) is approximately perpendicular to the regional strike of the targeted mineralisation. Holes are drilled vertical.

Criteria	JORC Code explanation	Commentary
geological structure	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No sampling bias is considered to be introduced.
Sample security	The measures taken to ensure sample security.	Samples are collected into numbered Paper Soil Sample bags and sealed. Sample bags are then stored in Cardboard Boxes with 20 per box, with sample number strings noted on the top and ends of the boxes. The boxes are sealed and transported by company transport to the Intertek Laboratory in Kalgoorlie. Pulps were despatched by Intertek to their laboratory in Perth for assaying.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Sampling and assaying techniques are industry-standard. No specific audits or reviews have been undertaken at this stage in the programme.

Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.  The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The RAB drilling occurred within tenement E38/1932, which is fully owned by Gold Road Resources. The area of the tenement where activity took place is located on the Yamarna Pastoral Lease, which is owned and managed by Gold Road.  Tenement E38/1932 is located inside the Yilka Native Title Claim WC2008/005, registered on 6 August 2009. The 2004 "Yamarna Project Agreement" between Gold Road and the Cosmo Newberry Aboriginal Corporation govern the exploration activities respectively inside the Pastoral Lease. Aspects of these agreements are currently under review.  The tenement is in good standing with the WA DMP.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Earlier regional style exploration was competed in part of the area by Asarco in early 2000's. The previous data was not used in the generation of the data the subject of this release.
Geology	Deposit type, geological setting and style of mineralisation.	No particular deposit type is targeted in this programme. The target is first pass regional scale low level gold anomalism potentially related to Archean orogenic gold mineralisation.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:  easting and northing of the drill hole collar  elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar  dip and azimuth of the hole  down hole length and interception depth  hole length.  If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the	Hole locations are identified in Figure 1. All holes are drilled vertically. Assay values used in the interpretation of geochemical anomalism is reported as the single gold value in each individual hole taken form the single Sand-Sandstone interface sample.  The use of low level geochemical information to identify anomalous trends and "footprints" rather than reporting of individual values is considered appropriate and best practice in locating and mapping geological and geochemical anomalous trends that potentially identify target areas for follow up drilling. The detailed coordinates for each hole collar, and hole depth information is not considered material to this report, and as such individual hole location details are not reported.
Data aggregation methods	Competent Person should clearly explain why this is the case.  In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.  Where aggregate intercepts incorporate short lengths of high grade results and longer	Absolute grades at very low levels are utilised for identification of gold anomalies above general back ground levels. Grade contours at specific values are identified as anomalous against local back ground levels. For gold a value of >5ppb and >10ppb are considered anomalous.
	lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.  The assumptions used for any reporting of metal equivalent values should be clearly stated.	No aggregate intercepts are reported.  No metal equivalent values are used.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.  If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	Mineralisation geometry is not considered in this programme. Gold anomalism is determined in a single horizontal plane and contoured to produce anomalous footprints.

Criteria	JORC Code explanation	Commentary
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figures 1 and 2 in the body of text.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Absolute values are not considered material in using low level geochemical assays to identify low level regional anomalies.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Drill hole location data are plotted on Figure 1 and 2.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	Follow-up Aircore drilling is planned to test the weathered Archean profile to fresh rock refusal beneath the entire 5ppb anomaly.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	This programme will be completed and assays reported in Q3 2014.