

Monday, January 29, 2007

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Dear Sir

**Spinifex Well Project – New Data and Information**

Please find attached an announcement with regard to Spinifex Well project.

**Yours faithfully**



**Kenneth M Allen**  
**Company Secretary**

Further enquires can be directed to

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## ASX RELEASE

### Spinifex Well Project

#### New Data and Information

During November 2006, Fairstar Resources Limited purchased the multi – client airborne geophysical data, covering the entire Spinifex Well project area, from FUGRO Limited. COWAN GEODATA Services (CDS) of Dalkeith, Perth, were contracted to undertake quality control assurance of this digital aeromagnetic and radiometric data followed by automated data enhancement and geologic and structural analysis and interpretation with a view to identifying potential litho-structural for ground follow up prospecting and geologic work. The processing work employed a range of filtering and analytical techniques to enhance anomalies of interest and provide preliminary depth estimates.

The reprocessing of, in particular, the airborne magnetic data to produce a ‘terraced total magnetic intensity map’ of the area, shown as Figure 1, revealed a wealth of geologic detail hitherto unappreciated. The bulk of the reported gold occurrences lie within clearly defined, sinistral, high strain, shear zones apparent on the both the eastern and western flanks of the lenticular “Bundarra batholith”; shown on Figure 3. These have been termed the “West” and “East” Spinifex Shears respectively”. Both sheared margins to the Bundarra batholith are litho – structural zones which deserve ground follow up exploration to determine and characterize any potentially mineralized and hydrothermally altered zones which may be the footprint of a shear zone hosted gold deposit developed at the contact zone between the Bundarra quartz diorite intrusive complex and an older northerly striking gabbro – dolerite greenstone complex which has been incorporated and in part hybridised by mixing with the granodiorite complex at its intrusive margins. These comments are underscored by the success of former workers in this area in defining the gold prospects briefly discussed below.

These contact zones have been intruded by a suite of late microgranite, quartz porphyry, pegmatite and aplite dykes which are in some cases demonstrably or in others spatially associated with the quartz – sulphide – gold mineralization described below. This spectrum of intrusives is indicative of late magmatic differentiation from calc alkaline to peralkaline, which would support the observed development of a late hydrothermal gold bearing system.

The Bundarra batholith is characterized by its massive and unshered character. However, the intense post intrusion deformation, apparent in the high strain shears developed on its flanks, have developed a pronounced rectilinear fracture shattering within the batholith, apparent on Figure 1. The entire Spinifex tectonic block appears twisted towards the north on going northeast, along the shears, with a strong sinistral component. The strong east – west linear features shown on Figures 1 to 3 are Proterozoic age basic dykes which are irrelevant in respect of gold mineralization

Within the “West” and “East Spinifex Shears” the following gold prospects were identified by others during the period 1988 to 1993. These were, from north to south:

**Jim’s Zone:** this was defined as a NW striking shear hosted zone of quartz – sulphide – gold veining within sheared and altered quartz diorite comprising a ground anomalous geochemical footprint measuring a strike length of 1km and width of 250m. Surface quartz vein float samples returned values of up to 42.5 g/t gold;

**Hoppity’s Zone:** also defined as a NW shear hosted system of quartz – sulphide – gold veins and veinlets over an apparent geologic strike of 2.5 km. Surface quartz vein float samples returned numerous strongly anomalous gold assays up to 28.6 g/t gold. This prospect is associated with a large and widespread gossanous quartz vein systems associated with widespread rock alteration;

**Henderson's North and Henderson's South prospects:** This zone has so far been defined by a few significant float samples with gold assay values between 2.35 and 16.10 g/t Au. Further exploration work will be required to define a target on this prospect; and

**The Golden Dingo Main Zone:** This area has been subject to well conducted surface exploration work including detailed airborne magnetics, detailed 1:10,000 scale aerial photography, ground surveying, geologic mapping, rock chip sampling and soil sampling. The mineralized zone strikes WNW over a distance of some 5km in a zone giving a geologic footprint of 400m width as defined by surface soil geochemistry and float rock sampling. A considerable number of strongly anomalous float samples of vein quartz were taken with values of up to 101 g/t gold.

It is suspected that the vein system developed may approximate to a brittle fracture ladder vein stockwork rather than a sheeted array more typical of brittle – ductile systems. A further zone known as the Golden Dingo South prospect is of comparable dimensions and geologic signature.

### **Former Exploration Drilling**

Following discovery and surface exploration work, two small RAB (Rotary Air Blast) percussion drilling programs were conducted to shallow depths at the Golden Dingo Main Zone and at Jims Zone. All other gold prospects mentioned above have never been tested by drilling. The first RAB program comprised 30 x 20m deep 60° angled holes drilled in February 1988. A further program of 800 x 5m deep vertical RAB holes were drilled at the Golden Dingo Main Zone and another 610 x 5m deep vertical RAB holes were drilled at Jim's Zone in 1990. In addition, a further 6 shallow inclined RAB holes were drilled to investigate possible subsurface extensions of interpreted gossanous sub crops at the Golden Dingo main zone. During 1992 a programme of some 3,500m of shallow RAB drilling was undertaken at the Golden Dingo Main Zone on drill fences spaced between 400m and 800m apart. It is Fairstar's technical opinion that these holes were either drilled to very shallow depths with an inappropriate drilling technique and/or the fences of holes drilled were too widely spaced to successfully test the prospects.

### **Further Targets Defined from the New Interpretation of Geophysical Data**

As COWAN GEODATA Services have correctly pointed out in their report to Fairstar, dated December 2006, there are numerous other features of geologic interest which also appear to post date the intrusion of the Bundarra batholith. These are defined as follows:

#### **Target: Possible Breccia Pipe**

This target was described as a three dimensional negative magnetic anomaly superimposed on a series of NW linear magnetic lows. CDS suggested that this anomaly could possibly be a breccia pipe or an intrusive complex with evidence of alteration, and that the entire zone may be prospective. The magnetic signature of the target zone is composite and both curvilinear and more three dimensional anomalies. The strongly negative anomaly has similarities to Mt Leyshon in Queensland and Blue Rose, north of the Anambra granite in South Australia, and is considered to be a high priority target.

### **Targets 1 to 4: Fracture System Targets**

Four clearly anomalous fracture system targets have been selected by CDS. These are either in areas of prominent reversely magnetized anomalies or define areas of magnetic lows and are associated with clear geologic offsets, which could provide potential conduits to solutions emanating from late granitoid intrusives of the Late Archaean. CDS has selected, in particular, the intersections of fractures 2 and 3 as site for immediate follow up ground prospecting.

### **Late Stage Plug Targets**

The aeromagnetic data has highlighted a number of discrete ovoid anomalies interpreted by CDS as probable late synorogenic intrusive phases or plugs. These ovoid features have both positive and negative polarity suggesting different generations of intrusives. Plug targets 1 and 2 have negative polarity and are relatively large. All the plug type targets will be inspected in the field during Q3 2007.

### **Proposed Work Program for Q3 and Q4 - 2007**

Fairstar intends to fly the Spinifex Well licences with airborne high resolution digital photography to be flown by DIGITAL MAPPING Australia Limited, prior to undertaking advanced prospect evaluation of all the above exploration target zones. This airborne survey will be flown in Q3, 2007. Advanced prospect work will comprise 1:500 or 1:1,000 scale geologic mapping, check sampling and reconnaissance RC percussion drilling.

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*The information in this report that relates to Exploration Results is based on information compiled by Mr. Nigel Maund, who is a Member of the Australian Institution of Mining and Metallurgy, UK Institution of Mining Metallurgy and Materials and Society of Economic Geologists. Mr. Maund is an Executive Director of Fairstar Resources Limited and has sufficient experience relevant to the style and mineralization and deposit type under consideration, and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves". Nigel Maund consents to the inclusion of this report of the matters based on his information in the form and context in which it appears.*

6880000 mN

**"VERY HIGH STRAIN"**  
Spinifex West  
Shear Zone

**BUNDARRA BATHOLITH**  
Displaying rectilinear  
shatter fracture pattern

**"HIGH STRAIN"**  
Spinifex East  
Shear Zone

6870000 mN

Fairstar  
Application  
E37/894

**POSSIBLE  
BRECCIA  
PIPE TARGET  
(green)**

6860000 mN

Central  
Zone

Jims  
Zone

Hoppity's  
Zone

6850000 mN

Golden Dingo  
& Main  
Zones

Henderson's  
Nth & Sth  
Zones

6840000 mN

Fritz's  
Zone

Amanda's  
Zone

**REVERSE  
POLARIZED  
MAGNETIC  
ANOMALIES  
(blue)**

6830000 mN

Hematite  
Nth & Sth  
Zones



**Gold Exploration  
Zones**



**FairStar**  
RESOURCES LTD.

**Spinifex Well Project**

Figure 1

Regional Setting - Terraced Total Magnetic Intensity

6820000 mN

330000 mE

340000 mE

350000 mE

360000 mE

6880000 mN

6870000 mN

6860000 mN

6850000 mN

6840000 mN

6830000 mN



6820000 mN



**Spinifex Well Project**  
Figure 2

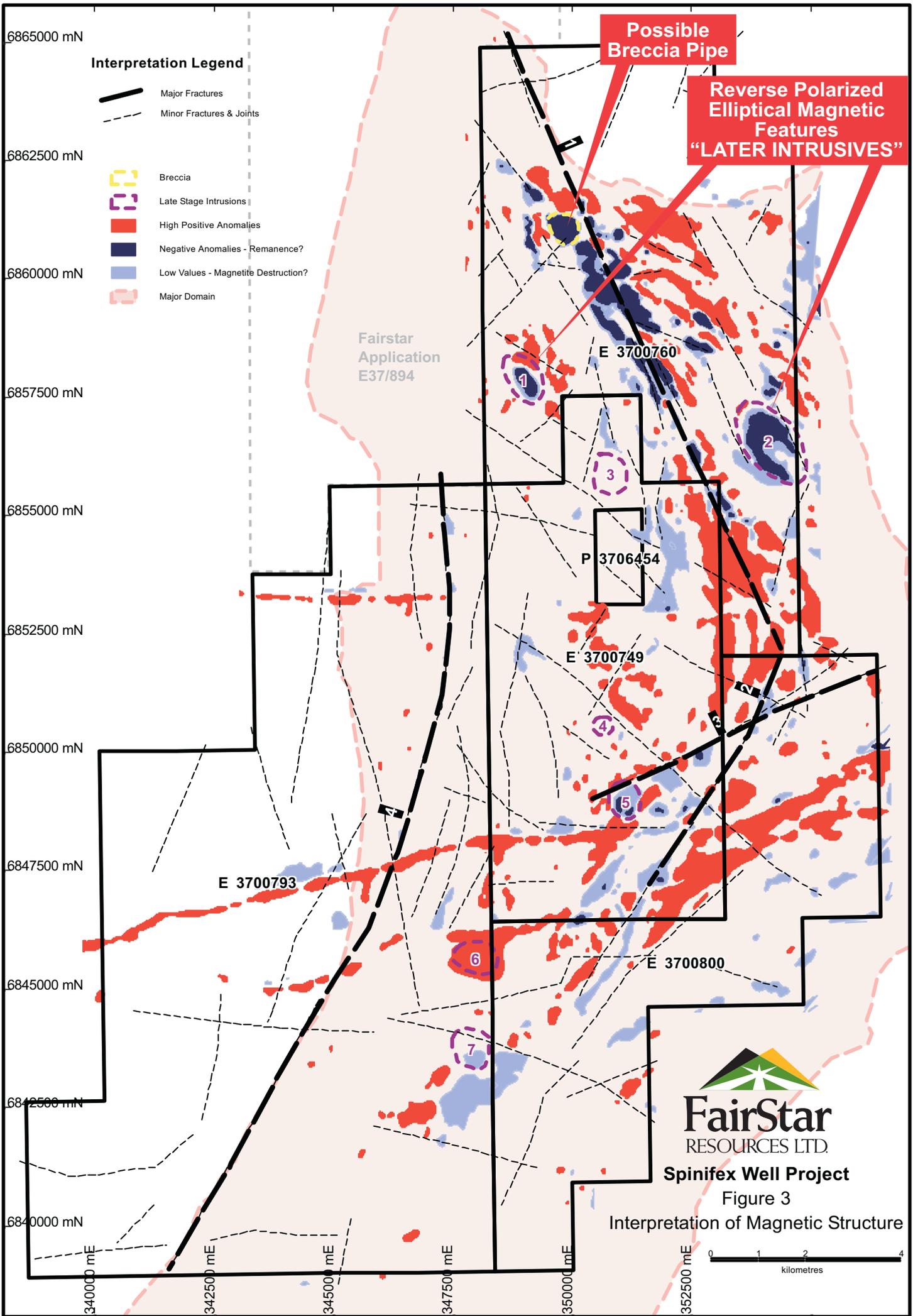
Uninterpreted - Terraced Total Magnetic Intensity

330000 mE

340000 mE

350000 mE

360000 mE



  
**FairStar**  
 RESOURCES LTD.  
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 Figure 3  
 Interpretation of Magnetic Structure