

## ASX ANNOUNCEMENT

# VENTNOR COMMENCES GROUND EM SURVEY AT **BIRANUP PROJECT**

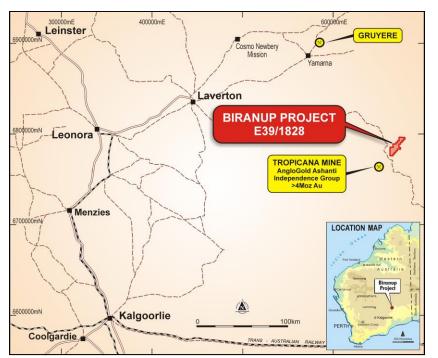
Ventnor Resources Ltd (Ventnor) (ASX:VRX) will commence geophysical surveys this week at its Silver Dragon and Fire Dragon prospects in the Biranup Project area, 370 kilometres north-east of Kalgoorlie in Western Australia, as it seeks to develop drill-ready targets.

Biranup was formerly known as the Black Dragon Gold Project. When granted in March 2015 the 42 graticular block EL39/1828 was referred to as the Black Dragon Gold Project, however subsequent work by Ventnor has identified multiple exploration targets on the 140 sq km area.

These exploration targets are prospective for various minerals as well as gold and to avoid confusion and easier identification the tenement has been renamed the Biranup Project area.

Ventnor's Biranup Project is proximal to the Tropicana gold mine owned by AngloGold Ashanti and Independence Group. Tropicana commenced production in 2013 and contains a resource in excess of 4Moz and is 22 kilometres to the south-west of EL 39/1828.

The two target surveys to be completed at Biranup will utilise Moving Loop Electromagnetic (MLEM) geophysical technology to investigate the prospective areas.



## ASX: VRX

### **Capital Structure**

Shares on Issue 206 million (post rights issue)

Unlisted Options 12.88 million

Market Cap @ 2¢ a share *\$4.1 million (fully diluted)* 

Cash \$2.5M (post rights issue)

#### **Corporate Directory**

Paul Boyatzis Non-Executive Chairman

**Bruce Maluish** Managing Director

Peter Pawlowitsch Non-Executive Director

**John Gearv Company Secretary** 

## **Company Projects**

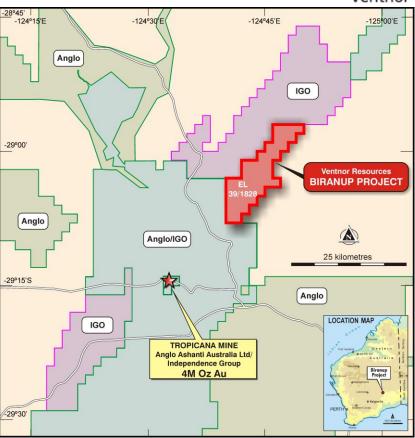
Ventnor has a continuing royalty on future production by Sandfire from the Thaduna/Green Dragon Copper Project in the Doolgunna district, WA.

Biranup Project adjacent to the Tropicana Gold Mine.

Warrawanda Nickel Project south of Newman, WA.

The Company is actively assessing other gold and base metal projects in Australia.





# **Detailed Information**

EL39/1828 was previously explored in the 1990s by WMC and more recently by the AngloGold Ashanti and Independence Group joint venture, which generated a large dataset of geological information over a  $7\frac{1}{2}$  year period.

Tenement	E39/1828 (42 Blocks)
Activity	Quantity
Surface Rock Chip sampling	165 Samples
Soil sampling	2,566 Samples
Auger geochemistry	3,459 Samples
AC drilling	1,044 holes (43,773m)
RC Drilling	66 holes (9,627m)
Diamond Drilling	4 holes (821m)
Gravity Survey	275 stations
Airborne Magnetic & Radiometric Survey	521 line kms
Airborne Electromagnetic Survey	284 line kms
Induced Polarisation Gradient Survey	22 line kms

## Historic exploration conducted on EL39/1828



AngloGold explored the ground for Tropicana-style gold mineralisation, being a 30° southeast dipping, tabular orebody characterised by biotite-sericite-pyrite alteration of the host gneisses. The primary exploration technique used was vertical aircore drilling on a 200m x 200m drill pattern, and sometimes 400m or wider lines, drilled to blade refusal, with routine gold assays down-hole and bottom-of-hole multi-element assays. Limited RC and diamond drilling was conducted in areas of stronger gold anomalism. The result of this exploration effort is that Ventnor has inherited a large database of geochemical multi-element assays and geophysical surveys that are invaluable in targeting not only gold mineralisation, but other precious and base metals.

Immediately after the tenement was granted, Ventnor commenced field checking and data analysis work, and within six months had completed a maiden RC drilling program on the Black Dragon outcrop which produced high grade assay results including 9 metres at 7.08g/t Au in BDRC1001 and 6 metres at 3.02g/t Au in BDRC1026 (ASX announcement 16<sup>th</sup> November 2015 – "Black Dragon Exploration Update"). Whilst this drilling program hasn't yet resulted in an economic resource, it did confirm the presence of gold mineralisation at higher grades than previous drilling, supporting the Company's view regarding the remaining prospectivity of the tenement.

Since the last drilling campaign, Ventnor has acquired high quality IP survey data and is reevaluating the drill data in conjunction with the IP data to plan a further drill program.

In 2016, Ventnor has continued to advance the Biranup Project area through acquisition of detailed 50m line-spaced aeromagnetic data, as well as satellite-acquired Emissivity and quartz mapping. These datasets have been reviewed in-house and by Company consultants to generate multiple exploration targets for testing.

A large airborne SPECTREM survey was flown previously and a review was carried out to assess survey data quality and identify regolith features and any anomalous EM responses that could indicate bedrock conductors associated with conductive semi-massive to massive sulphide mineralisation for follow-up work. As a result of this work, Ventnor has determined to proceed with on-ground MLEM surveys at Silver Dragon and Fire Dragon.

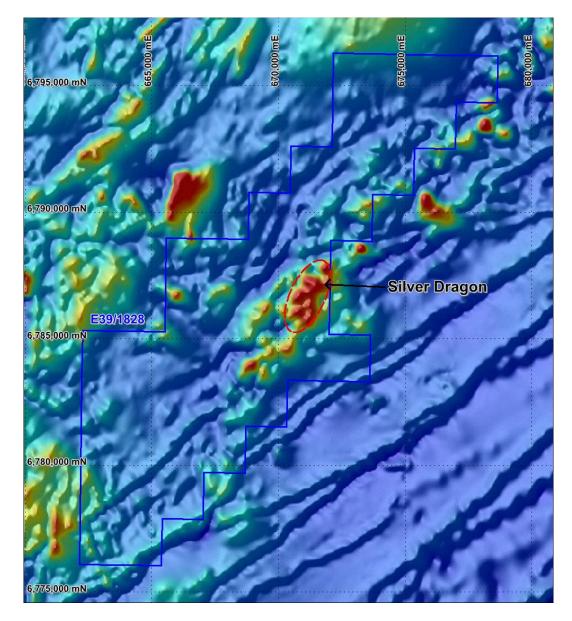
## **SPECTREM** system specifications

SPECTREM is a fixed-wing time domain STEP response AEM system with capabilities to detect semi-massive to massive sulphides at considerable depth, in either conductive or resistive environments. SPECTREM records a full on-time measurement of the EM field using a 100% duty cycle square current waveform, which is processed to provide a STEP response signal at the receiver (Legault, 2015). A three component air-cored receiver coil is towed 128m behind the aircraft at a nominal flying height of 90m above the ground.



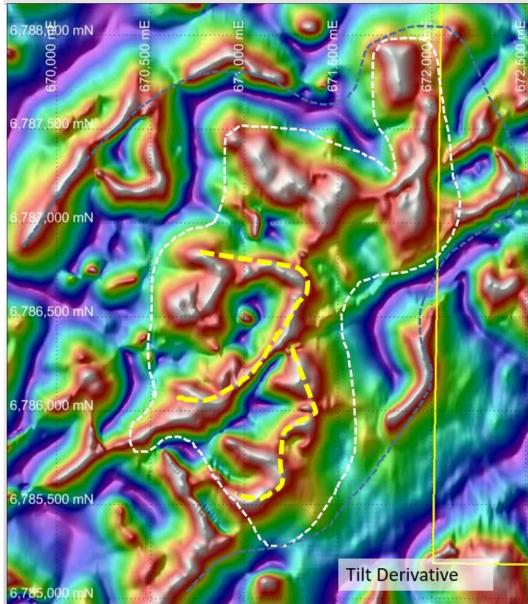
# **Project Areas**

**Silver Dragon** is a conceptual Copper-Nickel target whose location has been generated from the magnetic data and geochemical assays. The image below shows the location of Silver Dragon on the 100m line-spaced magnetic image outlining a complex magnetic body.



The Silver Dragon area has also been covered by 50m line-spaced magnetic survey which has allowed for more detailed processing to examine the internal structure of the magnetic body, see below.

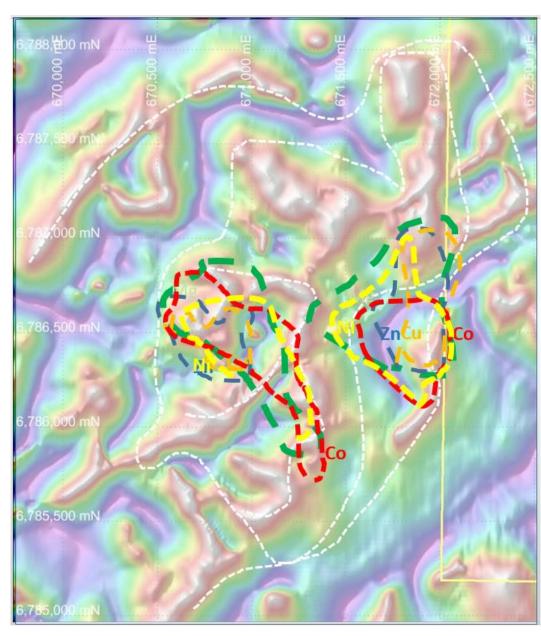




The tilt derivative image, above, suggests the magnetic body at Silver Dragon may show ovoid zoning features which are also prospective.



When overlayed with the geochemistry, the following mineral anomalism can be seen to be co-incident with the magnetic features.



The magnetic body is associated with anomalism from the multi-element assays from auger sampling:

- Fe Depleted
- Zn Enriched
- Cu Enriched
- Co Enriched
- Ni Enriched

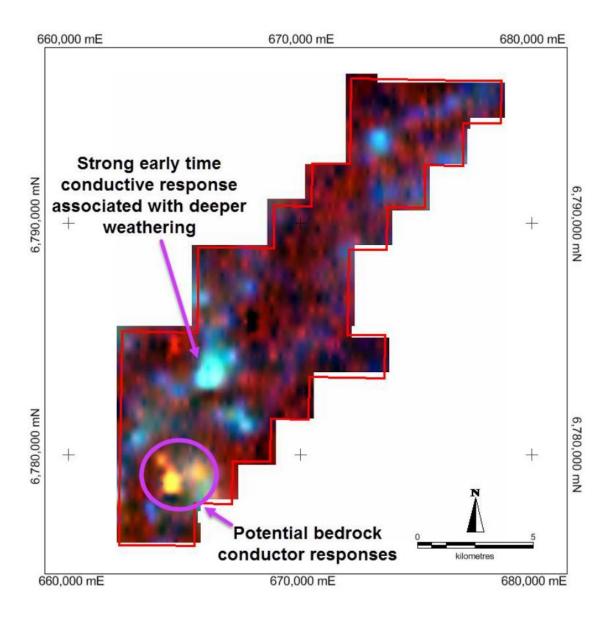
A ground based electromagnetic survey is the next appropriate stage of exploration to detect the presence of a conductor, such as massive, or disseminated sulphides.



The review of the SPECTREM survey data highlighted a number of EM responses which warrant follow-up work. A priority exploration target has been highlighted at Fire Dragon which has been included for an additional on-ground MLEM Survey to be conducted concurrently with the Silver Dragon survey.

Anomalous SPECTREM EM responses were observed in the middle-late time EM decay channels and are interpreted as discrete bedrock conductor anomalies that could be associated with semi-massive to massive sulphide mineralisation or conductive stratigraphy, such as pods of graphite from metamorphosed black shale.

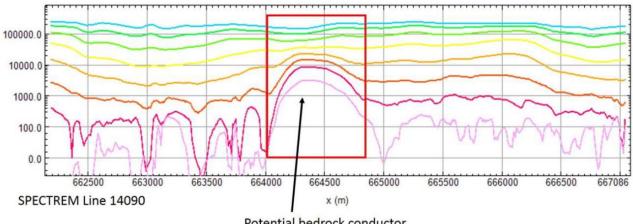
The figure below shows the later time channel ternary RGB image (0.5VD filtered time decay channels R = 9, G = 7 and B = 5) highlighting the bedrock conductor responses observed at the Fire Dragon prospect in purple. Tenement outline shown in red. Coordinates are GDA 94, MGA 51.





100000.0 10000.0 1000.0 100.0 0.0 area.

The Z component SPECTREM response profile from survey line 14090, (which transects the Fire Dragon anomaly) is shown below. This is interpreted as a middle-late time bedrock conductor anomaly. It is the strongest bedrock conductor anomaly observed, and is also associated with a discrete weak magnetic anomaly which would be unusual if associated with conductive shale or graphite in this geological setting.



Potential bedrock conductor

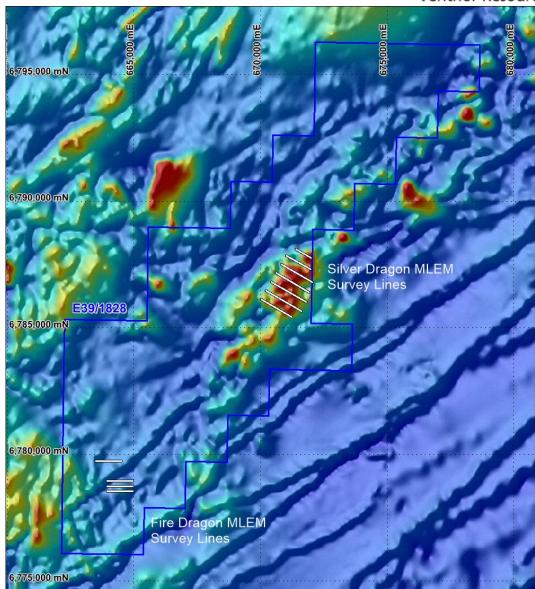
In support of the geophysical interpretation, there is geochemical anomalism associated with the Fire Dragon SPECTREM anomaly. Aircore bottom-of-hole assays for silver and cobalt are anomalous. The peak value, which is on the southern edge of the EM anomaly, is a bottom-of-hole sample that returned 28.68g/t silver and 0.32% cobalt.

# MLEM Program

Ventnor is planning to undertake an MLEM survey over each of these areas; the images below show the planned survey over the airborne magnetic and SPECTREM images.

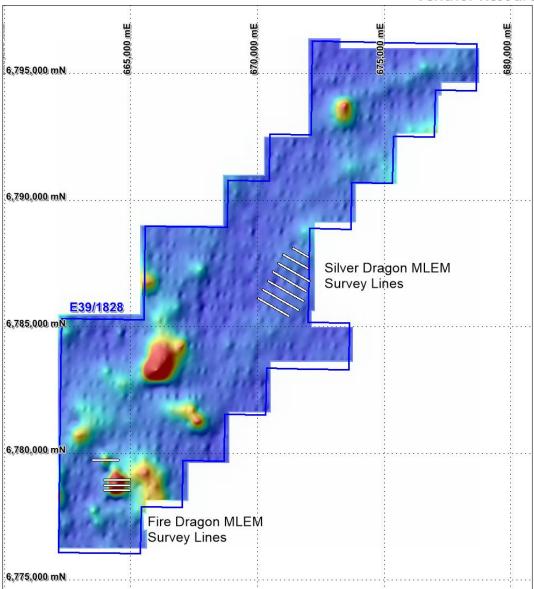
MLEM involves moving a generator, transmitter and large wire-loop that are used to generate an electromagnetic field within the subsurface to energise any conductive bodies that may occur nearby. A sensor is located in the middle of the loop and records the decay of the induced electromagnetic field to detect anomalous responses that can be associated with semi-massive to massive sulphide mineralisation. The transmitting loop and sensor are moved together, typically along survey lines, to explore for conductive bodies within a project





Proposed MLEM survey over magnetic image.





## Proposed MLEM survey over SPECTREM electromagnetic image.

It is expected that results from the surveys will be available in early November, and following interpretations, may generate targets that the Company will consider drilling to advance the project.

Further information: Bruce Maluish Managing Director Ventnor Resources 0418 940 417



# **Competent Person's Statement**

The information in this release that relates to Exploration Results is based on, and fairly represents, information compiled by Mr David Reid who is a Member of the Australian Institute of Geoscientists (MAIG). Mr Reid is a contractor to Ventnor Resources Limited. Mr Reid has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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 Reid consents to the inclusion in this report of the matters based on information provided by him and in the form and context in which it appears.



#### **ABOUT VENTNOR**

Ventnor Resources is a gold and base metals-focused explorer that reached agreement with its JV partner Sandfire Resources NL for Sandfire to acquire 100% ownership of the historic Thaduna/Green Dragon Copper Project, 170 km north of Meekatharra in Western Australia. Ventnor retains a royalty interest.

The Thaduna/Green Dragon Project is located 40km east of DeGrussa and represents the largest copper resource in the Doolgunna-Bryah Basin Region outside of Sandfire's DeGrussa-Doolgunna Project.

Ventnor has been granted a tenement (Biranup Project) adjacent to the Tropicana Gold Mine in WA that is prospective for gold and base metals, with prospects identified following an extensive review of historical data. The Company has conducted a preliminary exploration program comprising mapping, rock chip sampling and has completed an initial drill program on the Black Dragon Gold Prospect.

Also in Western Australia, 40 km south of Newman, is Ventnor's Warrawanda Nickel Project.

#### **Proven Management**

The Ventnor directors have extensive experience in gold exploration and production and in the management of publicly listed mining and exploration companies.

#### **PROJECT LOCATIONS**

