

21 December 2016

ASX Code: AGS

## HELI EM SURVEY UPDATE

*WILCHERRY PROJECT JOINT VENTURE, SOUTH AUSTRALIA*

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- **Highly encouraging results to date with many late-time conductors identified, potentially indicative of massive sulphide mineralisation**
  - **Large conductors have been identified at the Zealous and Telephone Dam prospects:**
    - **The conductor at Zealous is approximately 1.7 kilometres long and is located 450 metres to the northwest of previous drilling at the prospect and presents a high priority target for future exploration**
    - **The conductor at Telephone Dam is approximately 3.0 kilometres long. While some drilling has been completed at this prospect, its effectiveness at testing the conductor is uncertain at this stage**
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Alliance Resources Ltd (Alliance) is pleased to provide an update on the regional helicopter-borne electromagnetic (HEM) survey that commenced at the Wilcherry Project in South Australia in early December. The Wilcherry Project is a joint venture between Alliance (51%) and Tyranna Resources Ltd (ASX Code: TYX) (49%).

The high-resolution HEM survey is being completed using the Xcite™ system to test for conductors associated with massive sulphide base metal deposits including tin, copper-gold, and silver-lead-zinc deposits. The survey has been planned to test a large area of Palaeo-proterozoic Hutchinson Group meta-sediments where they are underlain by Hiltaba Granite (indicated by significant gravity lows). The survey is being flown on 800 metre spaced east-west oriented lines and infilled to 400 metre line spacing in areas of significant conductivity.

Production from the HEM survey has been slower than expected due to a smaller aircraft being available for the survey and high wind conditions. At present 1,085 line kilometres (86%) of the original planned survey area is complete and an additional 76 line kilometres of infill surveying have been flown.

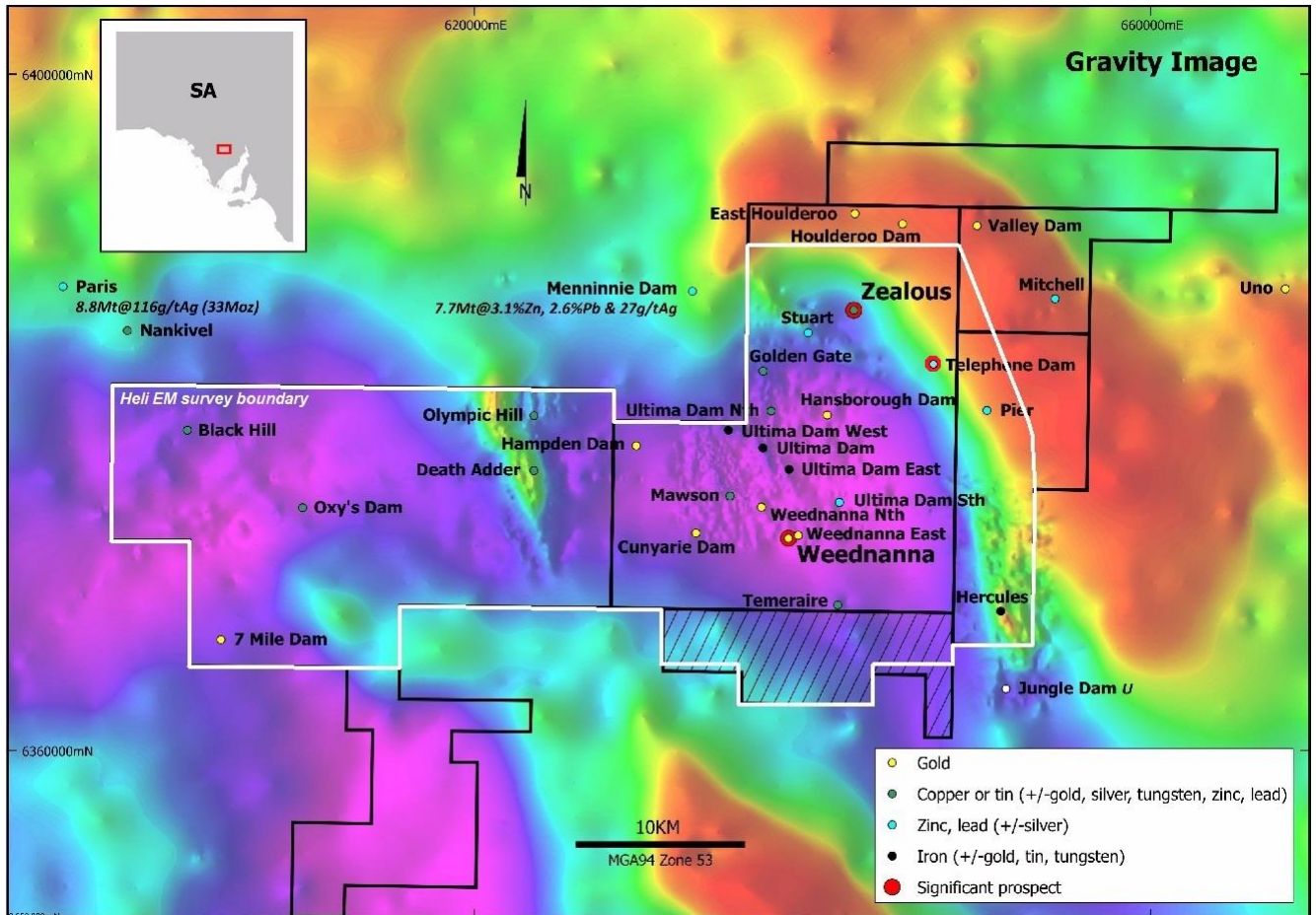
The survey has been paused over the Christmas-New Year period, due to prior commitments of the aircraft, and is planned to recommence in February 2017.

Results received to date have been highly encouraging with many late-time conductors identified, potentially indicative of massive sulphide mineralisation.

Most of these conductors still require infill flying, however surveying is complete at the **Zealous tin prospect** and the **Telephone Dam silver-lead-zinc prospect** where strong late-time conductors have been identified.

The conductor at Zealous is arcuate and approximately 1.7 kilometres long (Figure 2). The anomaly is located 450 metres to the northwest of previous drilling at the prospect and presents a high priority target for future exploration.

The conductor at Telephone Dam strikes north-south and is approximately 3.0 kilometres long (Figure 3). While some drilling has been completed at this prospect, its effectiveness at testing the conductor is uncertain at this stage.



**Figure 1. Wilcherry Project: Location of HEM survey area on a gravity image with prospects. Gravity lows are indicated by purple colour (indicating prospective Hiltaba Granite)**

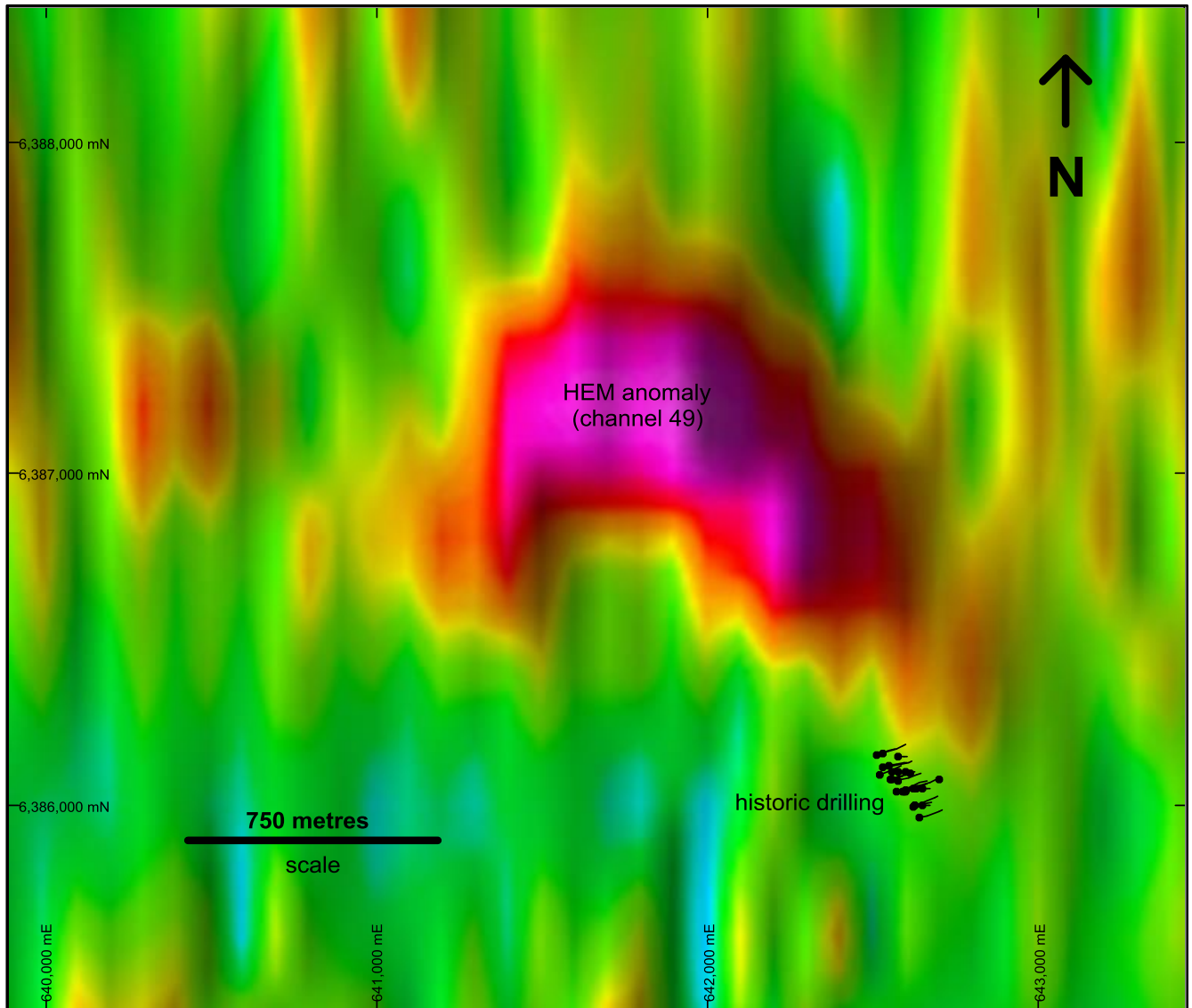
Alliance intends to complete ground electromagnetic surveys at the Zealous and Telephone Dam prospects in early 2017 to better define the location of conductors for drill testing.

**Steve Johnston**  
Managing Director

Alliance Resources Ltd has projects in South Australia, Western Australia and New South Wales for gold and base metals. For further information about Alliance Resources Ltd, please visit [www.allianceresources.com.au](http://www.allianceresources.com.au)

### Competent Person's Statement

The information in this report that relates to the Exploration Results is based on information compiled by Mr Stephen Johnston who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Johnston is a full time employee of Alliance Resources Ltd and 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 Johnston consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



**Figure 2. Zealous Prospect: Location of channel 49 late-time HEM anomaly relative to historic drilling**

## About the Zealous Prospect

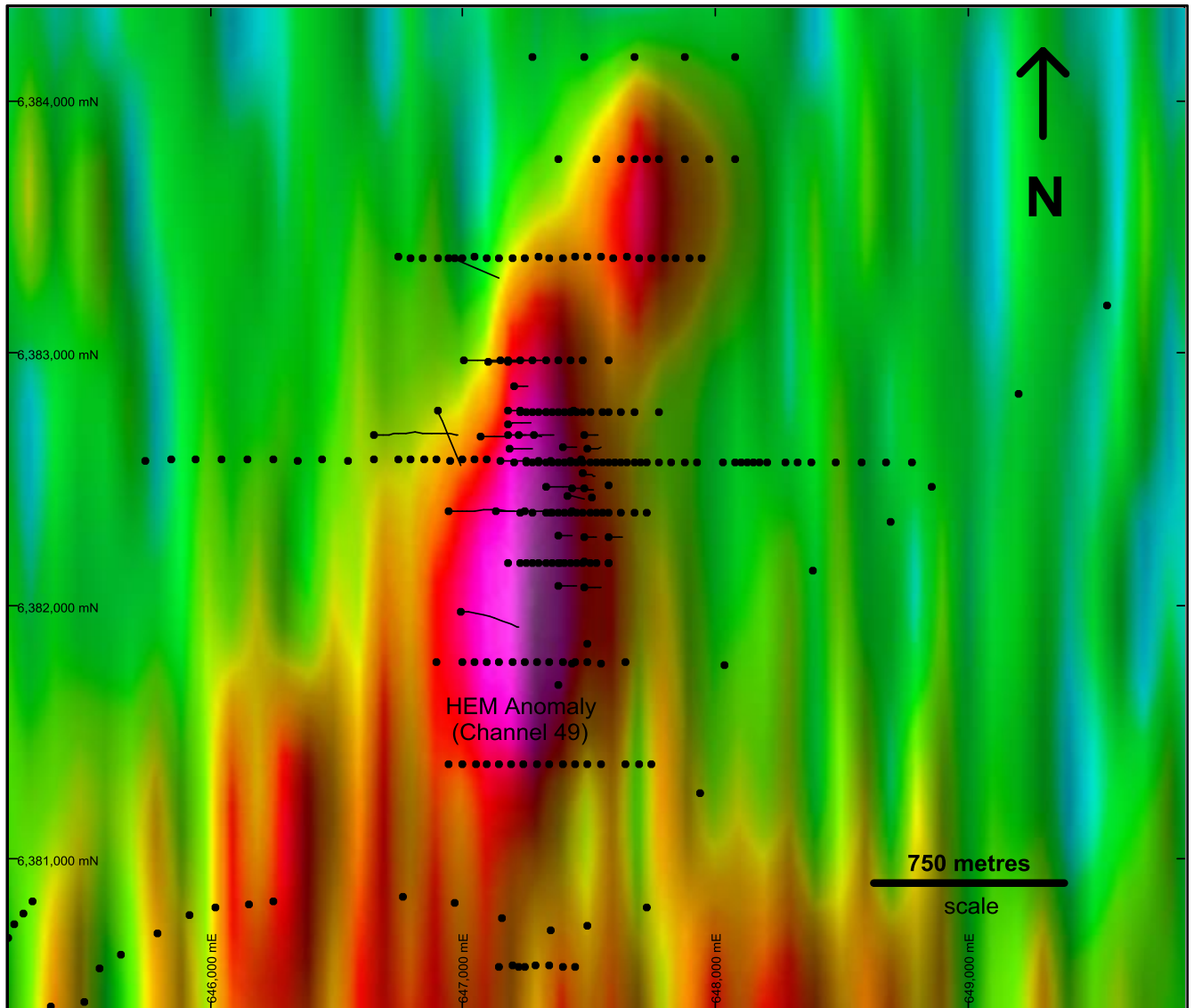
The Zealous Prospect was discovered in 2012 when drilling by Ironclad Mining for iron ore returned a significant tin intersection of 7m @ 3.3 % Sn from 52m in hole 12ZLRC007.

Subsequent drilling programs in 2013 and 2014 returned further significant tin results including:

- 5m @ 2.3 % Sn from 128m in 13ZLRC001,
- 3m @ 0.8 % Sn from 103m in 13ZLRC005,
- 12.3m @ 1.1 % Sn from 99m in 13ZLDH001, and
- 10m @ 0.8 % Sn from 130m in 14ZLRC004.

Refer to Tyranna Resources Ltd ASX announcement dated 2 August 2016 for further details.

Alliance is targeting a replacement style tin deposit similar to Renison in Tasmania. This style of deposit contains cassiterite (tin oxide) with massive pyrrhotite (iron sulphide) and is strongly conductive.



**Figure 3. Telephone Dam Prospect: Location of channel 49 late-time HEM anomaly relative to historic drilling**

## About the Telephone Dam Prospect

The Telephone Dam area has been explored since the 1970's. The area has been subject to several phases of RAB, aircore, RC, and diamond drilling that have returned significant results including:

- 8m @ 4.8 % Pb, 0.3 % Zn and 92 ppm Ag from 12m in 08TDRC001,
- 92m @ 2.2% Pb/Zn from 60m in 09TDRC008, and
- 12m @ 6.5% Pb/Zn and 93 ppm Ag from 158m in 11TDRC009

Refer to Trafford Resources Ltd Scheme Booklet lodged with ASX on 31 March 2015, under Technical Project Review and Independent Valuation section, for further details.

Mineralisation is hosted within a moderate west-dipping predominantly carbonate/calc-silicate unit with lesser graphitic metasediments. All mineralisation intersected to date occurs in this zone and is characterised by massive sulphides (dominantly pyrrhotite).



## JORC Code, 2012 Edition – Table 1 Report: Wilcherry Project Heli EM Survey

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

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

<b>Criteria</b>	<b>Commentary</b>
<i>Sampling techniques</i>	A regional high-resolution helicopter borne time domain electromagnetic & magnetic survey is being completed at the Wilcherry Project using the Xcite™ system. 800m spaced lines are being flown at a survey altitude of 30 to 40m (Tx-Rx array) and 60 to 70m (helicopter). 400 metre spaced infill lines are completed in areas of significant conductivity. Surveying is completed using an 18.4m diameter transmitter with 4 turns, 220A current, 250,000NIA dipole movement, and 25Hz base frequency, and receiver – diameter 0.613m (effective) (X), 1.0m (Z) with 200 (X), 100 (Z) turns recording dB/dT and integrated B-field digitally at 624kbps.
<i>Drilling techniques</i>	Not applicable as no drilling was undertaken.
<i>Drill sample recovery</i>	Not applicable as no drilling was undertaken.
<i>Logging</i>	Not applicable as no drilling was undertaken.
<i>Sub-sampling techniques and sample preparation</i>	Not applicable as no drilling was undertaken.
<i>Quality of assay data and laboratory tests</i>	The geophysical equipment used: <ul style="list-style-type: none"> <li>• Xcite™ system with coincident Tx-Rx sensor configuration</li> <li>• Transmitter: 18.4m diameter transmitter with 4 turns, 220A current, 250,000NIA dipole movement, and 25Hz base frequency</li> <li>• Receiver: 0.613m (effective) (X), 1.0m (Z) diameter with 200 (X), 100 (Z) turns recording dB/dT and integrated B-field digitally at 624kbps</li> <li>• Acquisition System: NRG RDAS II</li> </ul>
<i>Verification of sampling and assaying</i>	Results detailed in this report have been processed by Southern Geoscience Consultants and reviewed by Alliance geologists. Primary geophysical data was captured electronically in the field and transmitted to Southern Geoscience Consultants on a daily basis.
<i>Location of data points</i>	All data has been collected in GDA94 MGA Zone 53 grid system. Data points were located using a Novatel DL-V3L1L2 Real Time GPS (recording rate: 20Hz) and SF-01 laser altimeter.
<i>Data spacing and distribution</i>	800m spaced lines are being flown at a survey altitude of 30 to 40m (Tx-Rx array) and 60 to 70m (helicopter). 400 metre spaced infill lines are completed in areas of significant conductivity.
<i>Orientation of data in relation to geological structure</i>	The orientation of the geophysical survey was designed to be unbiased with respect to known geology and structures. East-west oriented lines were consistently flown.
<i>Sample security</i>	Not applicable as no drilling was undertaken.
<i>Audits or reviews</i>	No audits or reviews of the sampling technique or data have been completed.

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	<p>The geophysical survey described in this report was undertaken on Wilcherry Project tenements EL4870, EL5164, EL5299, EL5470, EL5590, EL5875 and ELA2016/00144.</p> <p>The tenements are current and in good standing.</p> <p>The Wilcherry Project is being explored in joint venture by Alliance Resources Limited (51%) and Tyranna Resources Limited (49%). Both parties are contributing to the joint venture.</p>
<i>Exploration done by other parties</i>	<p>The Wilcherry Project area has previously been explored by numerous companies since the 1970's including Pan Continental Mining, Asarco, Marumba Minerals, the Shell Company of Australia, WMC, Aberfoyle Resources, Acacia Resources, Western Metals Resources, AngloGold Australasia, Aquila Resources, Trafford Resources, and Ironclad Mining.</p>
<i>Geology</i>	<p>The Wilcherry Project is situated in the southeastern part of the Gawler Craton, which is an ancient crystalline shield comprising Archean to Mesoproterozoic age metasediments, volcanics and granites. The region has undergone multiple events of tectonic deformation, granite intrusion and metamorphism. Regional geological and tectonic synthesis shows the tenement area to be in the Cleve Domain of the Gawler Craton based on its structural, metamorphic and stratigraphic characteristics.</p> <p>The Project area is dominated by metasediments of the Palaeoproterozoic Hutchison Group sediments which unconformably overly early Palaeoproterozoic Miltalie Gneiss and Achaean granulites and gneisses of the Sleaford Complex. The Hutchison Group consists of metamorphosed clastic marine sediments, iron formations, carbonates and mafic volcanics. Deformation and metamorphism occurred during the Kimban Orogeny (1850-1700 Ma) and was accompanied by the syntectonic intrusion of the Moody Suite granites. The result is a northwest trending igneous - metamorphic complex of metasedimentary rocks, amphibolite, schist, gneiss and granite.</p> <p>Palaeoproterozoic units are overlain by the younger Gawler Range Volcanics and are intruded by the contemporaneous Hiltaba Suite Granites. The Hiltaba Suite/Gawler Range magmatic event (1595-1575 Ma) represents a major Mesoproterozoic tectonic/tectonothermal event which affected much of the Gawler Craton; it is this event which is believed to have been responsible for widespread gold, uranium and base metal mineralisation.</p> <p>Widespread surficial cover obscures much of the bedrock whilst weathering has produced a regolith of kaolinised saprolite to an average depth of between 40 - 100m.</p>
<i>Drill hole Information</i>	<p>The survey area is illustrated in Figure 1. Results are presented in Figures 2 and 3 for the Zealous and Telephone Dam prospects respectively. Data acquisition and processing is incomplete for the remainder of the survey area and will be reported once complete.</p>
<i>Data aggregation methods</i>	<p>Not applicable as no drilling or geochemical sampling was undertaken.</p>
<i>Relationship between mineralisation widths and intercept lengths</i>	<p>Not applicable as no drilling or geochemical sampling was undertaken.</p>
<i>Diagrams</i>	<p>See Figures 1 to 3 of this report.</p>
<i>Balanced reporting</i>	<p>Results are presented for the Zealous and Telephone Dam prospects. Data acquisition and processing is incomplete for the remainder of the survey area and will be reported once complete.</p>
<i>Other substantive exploration data</i>	<p>Refer to the body of this announcement.</p>
<i>Further work</i>	<p>The heli EM survey is planned to be completed in February 2017. A ground EM survey is planned to be completed at the Zealous and Telephone Dam prospects in early 2017 to better define conductors for drill testing.</p>