

# ASX Announcement

02 March 2022

## AEM Survey Identifies Conductors at Opaline Well

### HIGHLIGHTS

- ✦ **AEM survey identifies four highly prospective conductors at Opaline Well, with Anomaly 101 regarded as the highest priority for follow-up exploration work.**
- ✦ **Systematic exploration work to refine drill targets will focus on Anomaly 101 and consist of ground truthing in the next field campaign.**
- ✦ **Westar's highest priority is progressing Gidgee North, where the Company is scheduled to commence a maiden drill campaign late Q1 CY2022.**

Westar Resources Limited (ASX: WSR) (**Westar**, the **Company**) is pleased to announce the results of the airborne Xcite™ electromagnetic survey (AEM) and interpretations completed for the Opaline Well project in the Pilbara of Western Australia.

The AEM program was the next systematic step in identifying priority drill targets after a successful field reconnaissance and rock-chip sampling program conducted earlier in CY2021. The AEM survey, using NRG's Excite™ airborne electromagnetic system covered the entire project tenure (Figure 1), an area of approximately 70km<sup>2</sup> and 372-line km on 200m line spacing (Figure 2). The survey was intended to rapidly identify discrete conductors representing potential massive sulphide drill targets. Follow up ground truthing is currently being planned.

#### **Westar Managing Director Karl Jupp commented:**

*"The AEM geophysics and modelling have proven to be a rapid and effective exploration tool, identifying several prospects for further evaluation. Anomaly 101 is the standout target and will be the focus for ground-truthing in our next field campaign at Opaline Well."*



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#### **Projects**

Sandstone (100% Owned)  
Mt Magnet (100% Owned)  
Nullagine (100% Owned)  
Southern Cross (RMS JV)

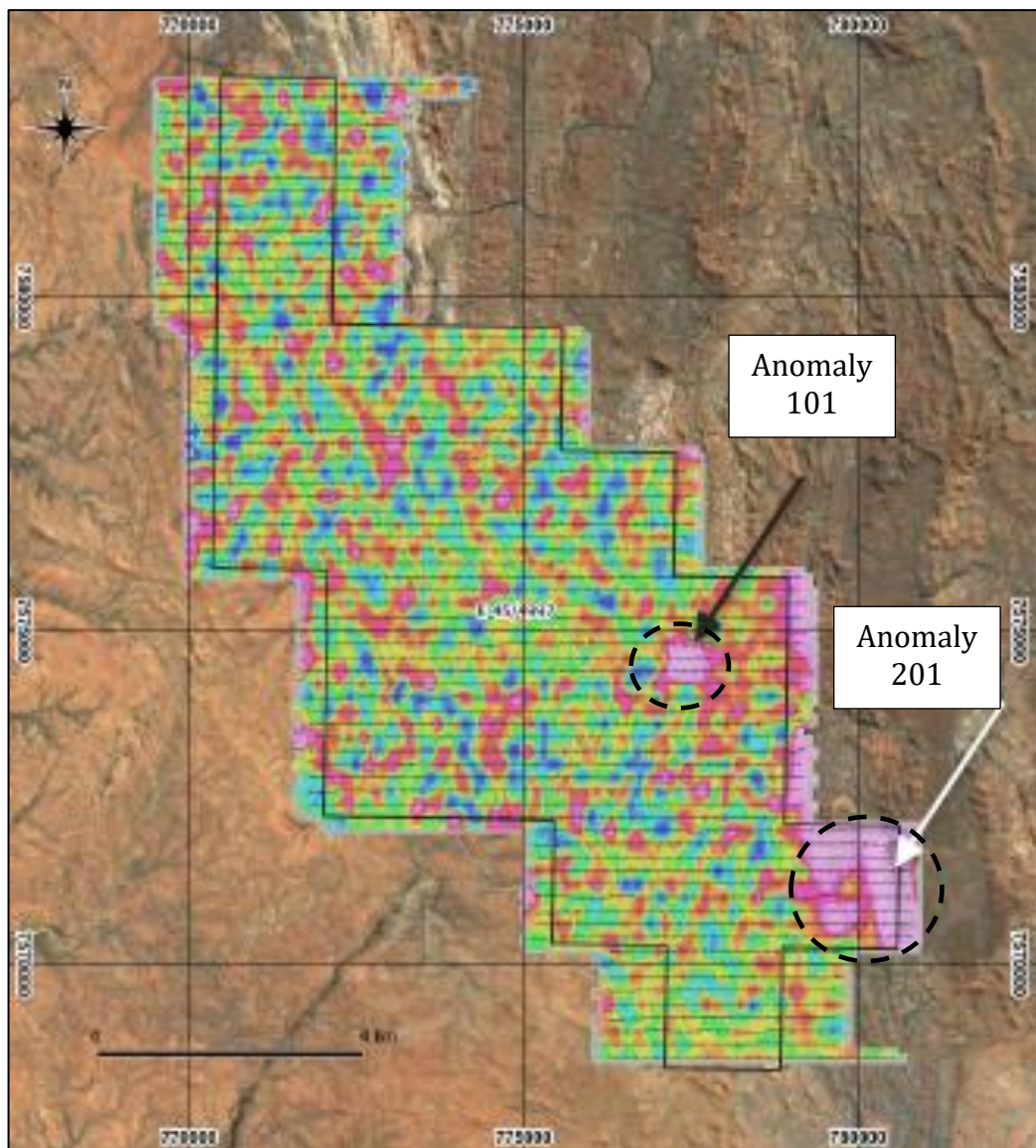
ASX Code WSR

## Airborne Electro-Magnetic Survey (AEM) Results

Westar undertook a high resolution Xcite™ electromagnetic and magnetic survey in October 2021. The processed data was provided to specialist consultants, Newexco Pty Ltd (Newexco) for interpretation and modelling.

The main area of interest is anomaly 101, Figure 1, which is a high-amplitude, mid to late time EM anomaly and appears as discrete, steeply dipping, relatively conductive body at depth. A series of early-time anomalies (201, 202 and 203) appear spatially related.

Anomalies 200, 101, 102 and 103 are likely attributable to stratigraphic conductors within the Cleaverville Formation, such as thin BIF units along a faulted contact.

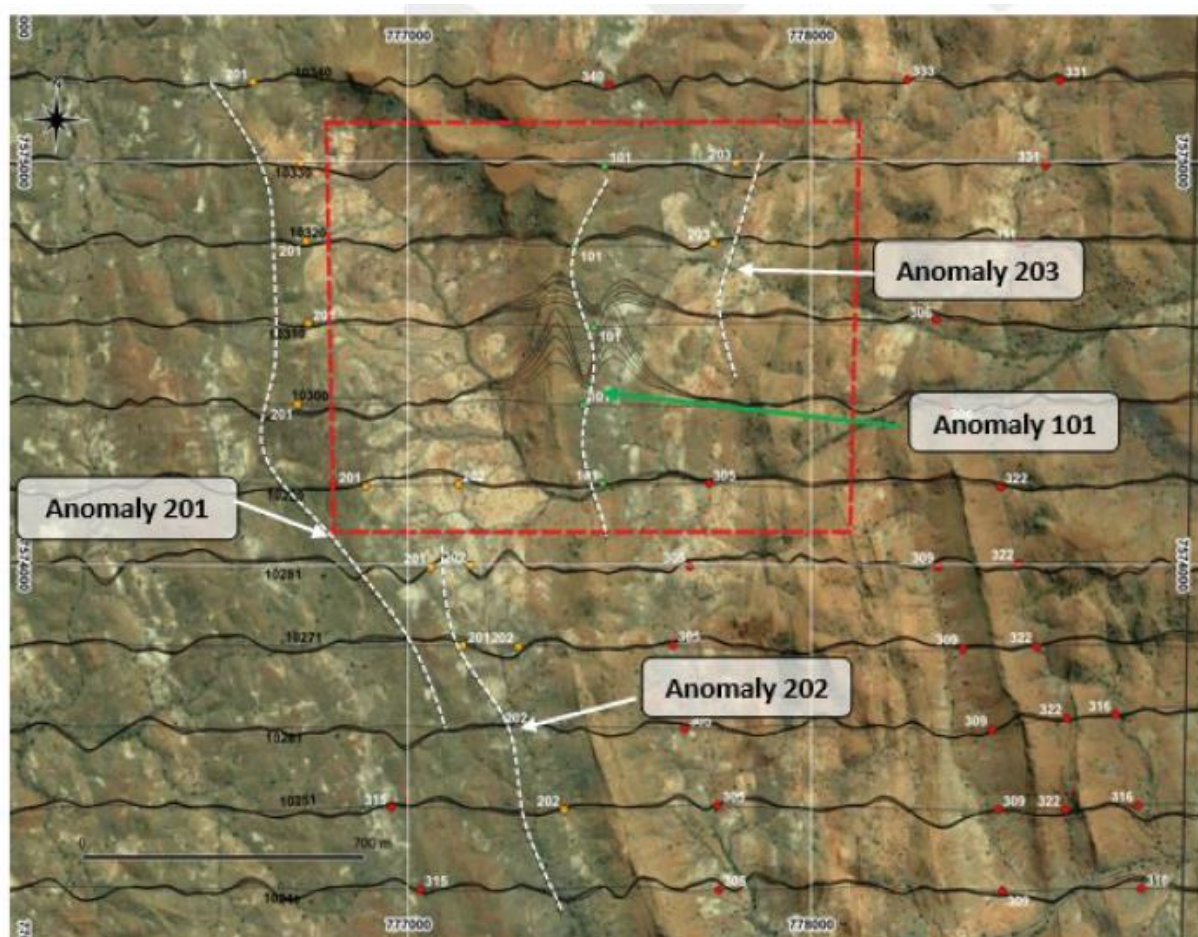


**Figure 1** – The Opaline Well Project and late time (Ch 40) identified AEM anomalies

## Priority Prospect – Anomalies 101, 201, 202 and 203

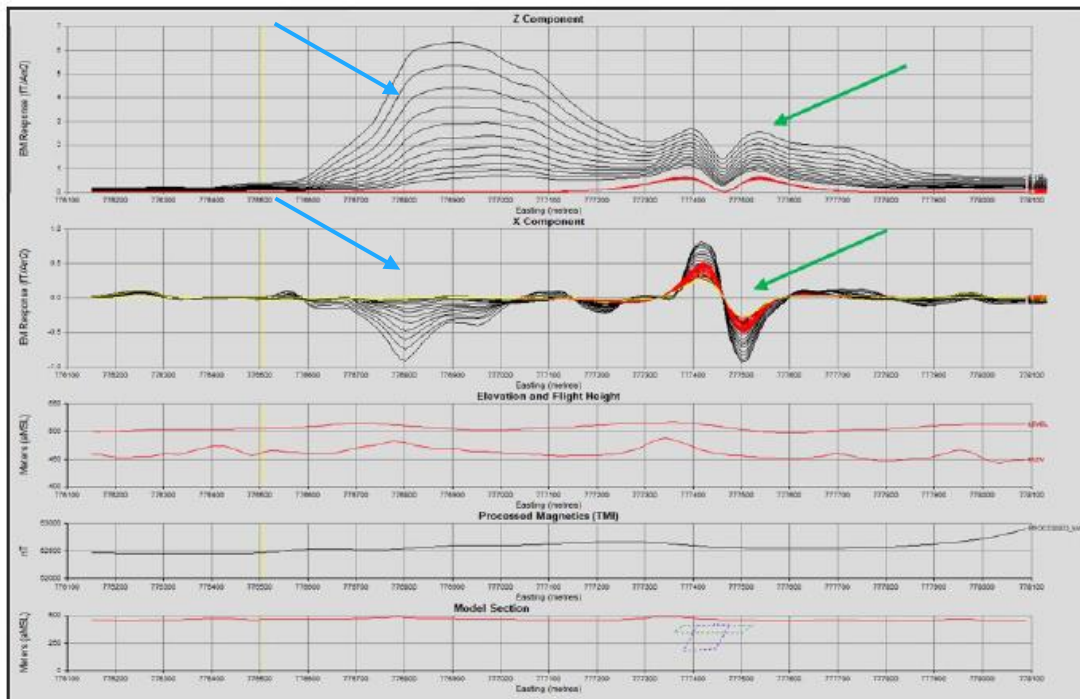
The most interesting and highest priority anomaly identified in the AEM survey is anomaly 101 (Figure 2), being of relatively high-amplitude and spanning several flight lines. Anomaly 101 is a mid to late time EM anomaly and appears as a classical, stand-alone, prominent, mid to late time, twin peak EM anomaly, characteristic of a steeply dipping, relatively conductive body at depth (Figure 3).

Anomaly 101 is the late-time part of the broader 101, 201, 202 and 203 anomalies, which overlap and overlie the late time 101 anomaly. Additional ASTER, SENTINAL 2 and radiometric data indicate anomalies 201, 202 and 203 are conceivably a weathering product from the deeper, underlying more conductive body associated with Anomaly 101, however, the possibility remains these may potentially be related to surficial cover and ground truthing is required.

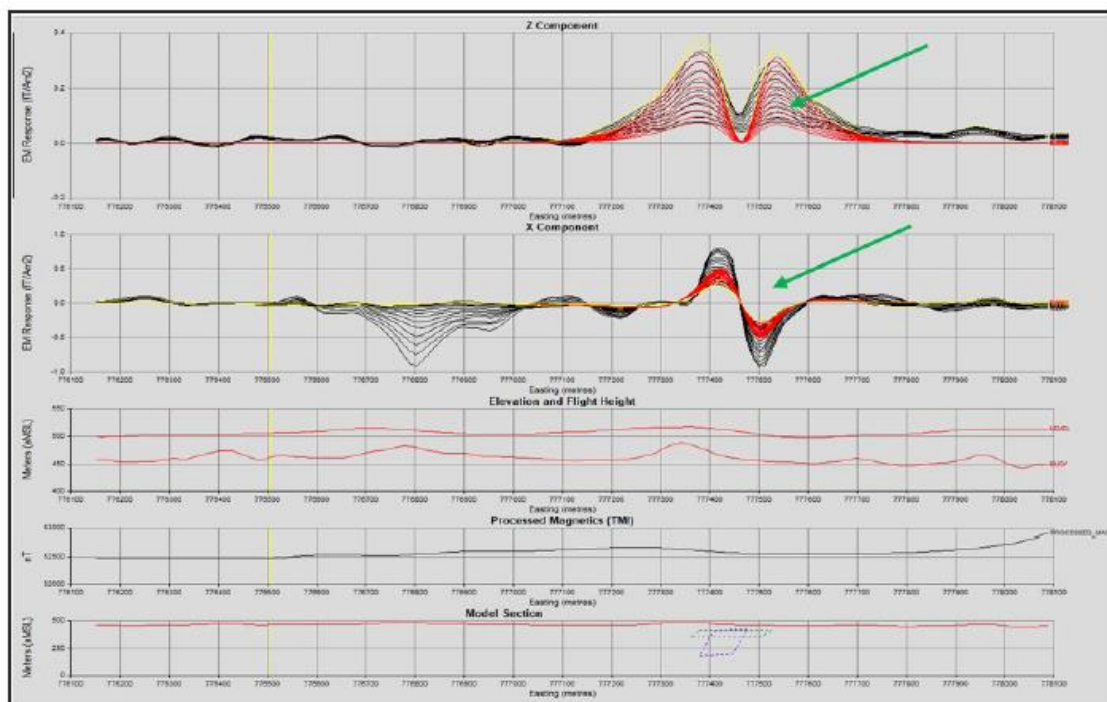


**Figure 2** – Anomaly 101, and potentially related anomalies 201, 202 and 203

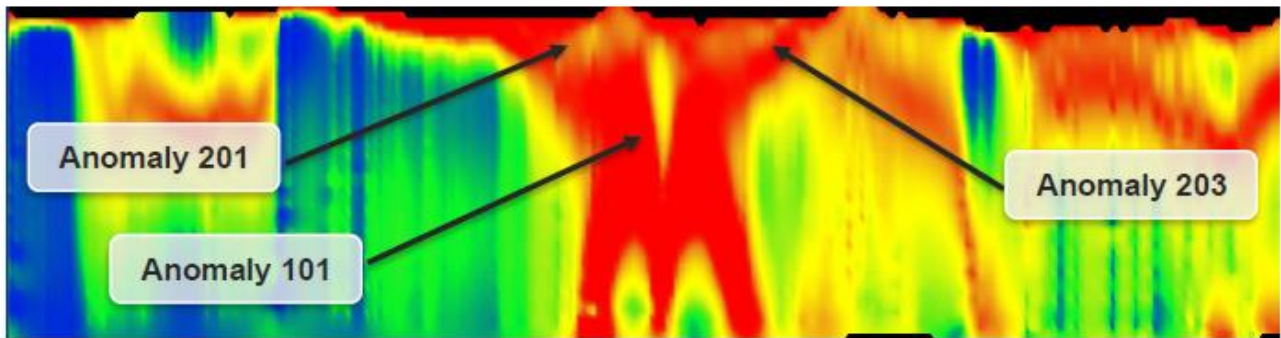
Anomaly 101 has been modelled as two steeply dipping plates which produce excellent late-time fit. The offset between the plates are likely an artefact of the modelling and it is probable the causative body is a more complex, single plate feature, thinning and deepening to the north. The EM anomaly extends for approximately 800m in strike length, with depth to centre top of the plate approximately 40m below surface in the south and 75m in the north, dipping steeply to the east.



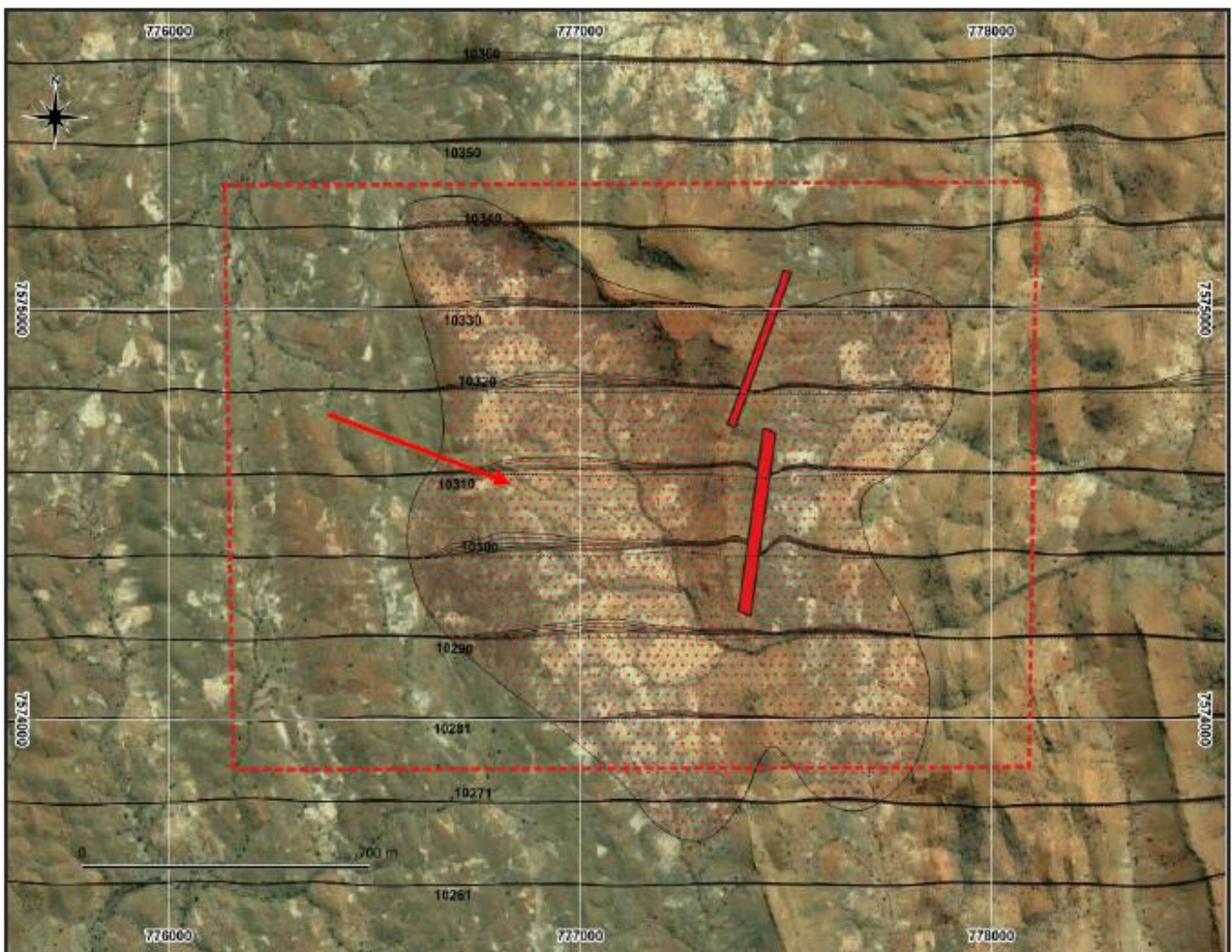
**Figure 3** – Anomalies 101 (green arrows) and 201 (blue arrows), Line 10310, with early late time profiles (Ch 10-20) observed (black) and modelled (red).



**Figure 4** – Anomaly 101 (green arrows), Line 10310, with late time profiles (Ch 30-40) observed (black) and modelled (red). Note the absence of anomaly 201 in the late time channels.



**Figure 5** – Anomaly 101 (centre) with surrounding anomalies 201 and 203, Line 10300, conductivity section.

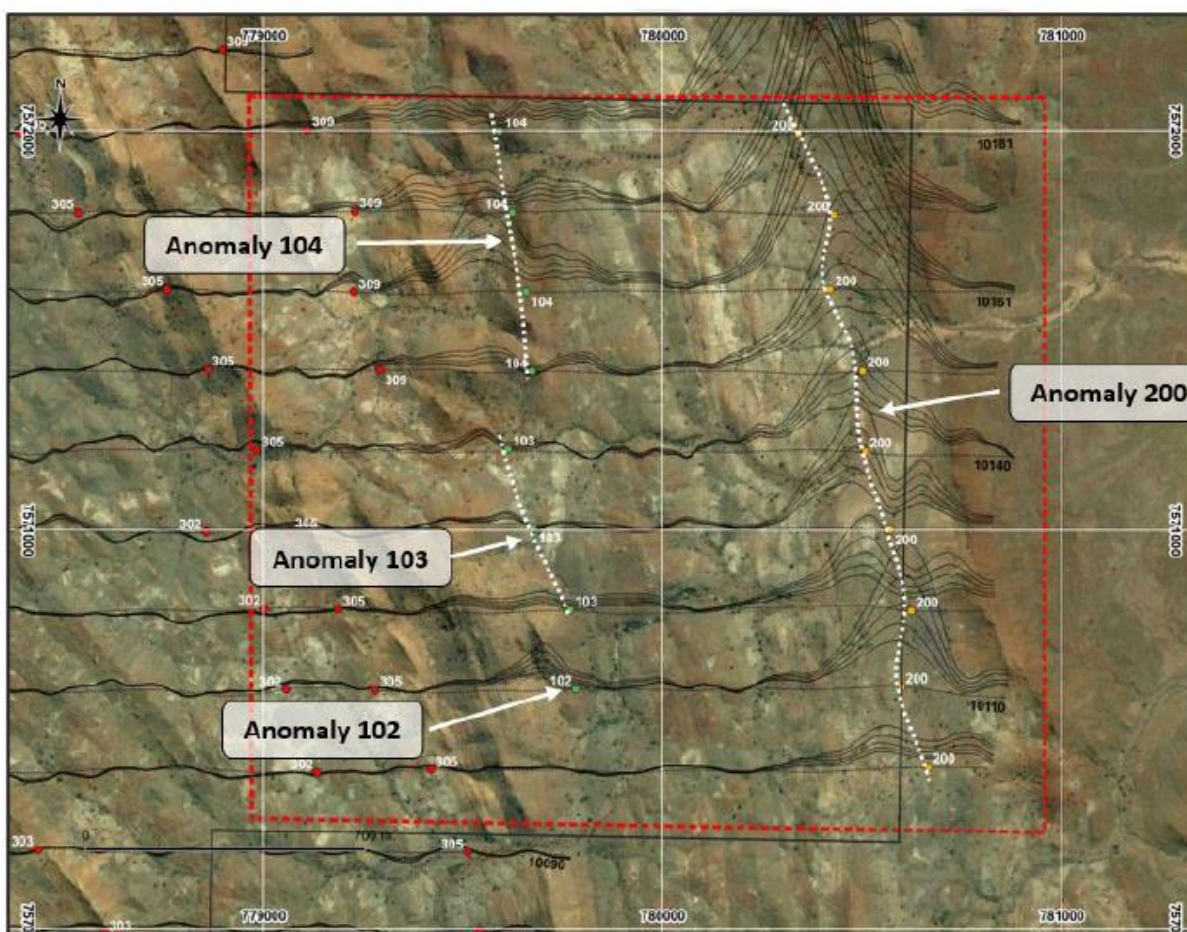


**Figure 6** – Zoomed map of anomalies 101, 201, 202 and 203 on satellite image background. Modelled plates of anomaly 101 and stippled area (red arrow) outlining the broader area of surface anomalies 201, 202 and 203.

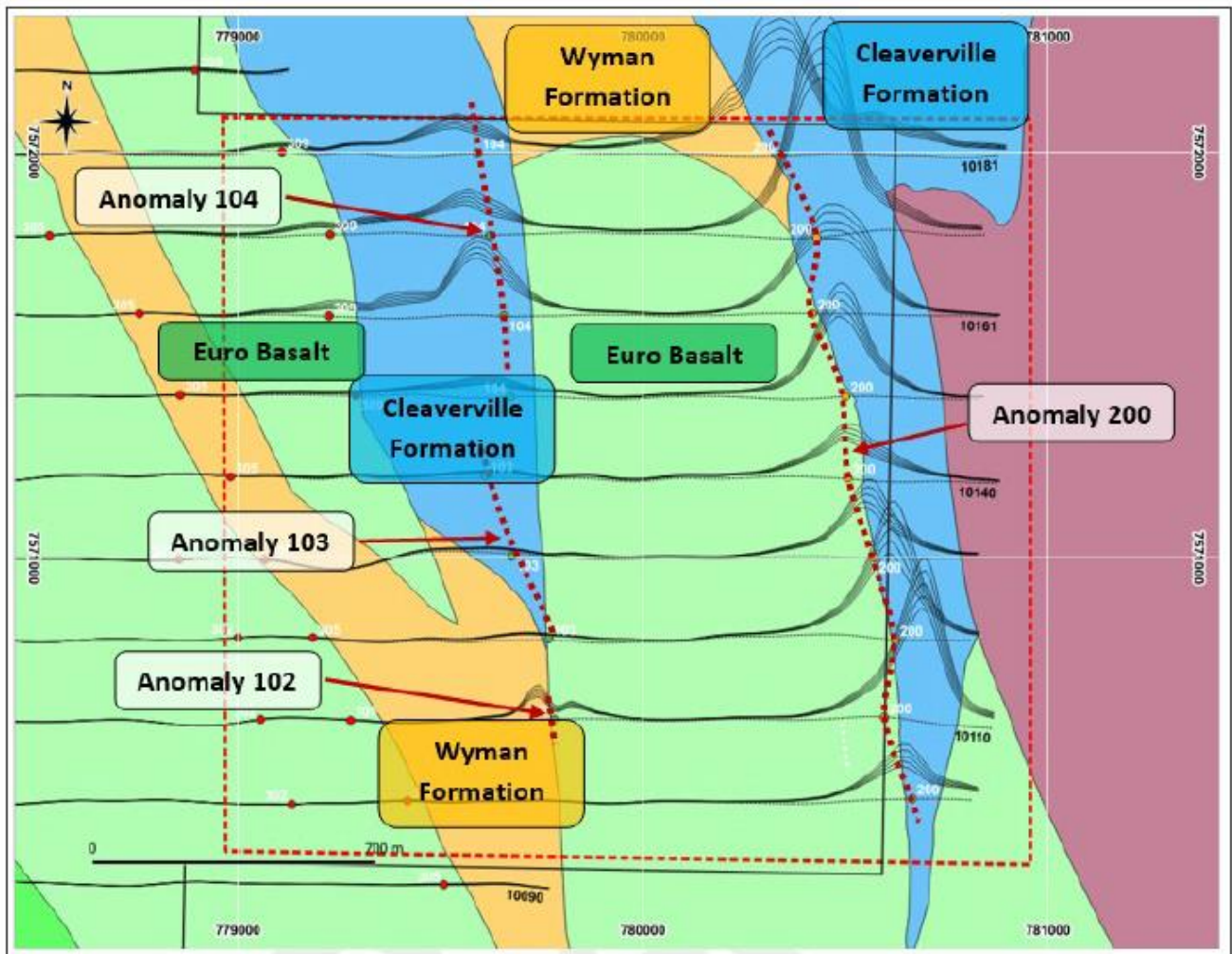
## Anomaly 200, 102, 103 and 104

Anomaly 200 is the highest amplitude EM anomaly in the survey area, spanning nine flight lines (approximately 2km) and extends off the edge of the survey on both the north and south edges. The anomaly appears as a broad, irregular asymmetric single peak anomaly with a very large early time anomaly, grading to a low, late time anomaly and has been modelled as a series of shallow westerly dipping plates. It is possible the early time, surficial conductor may be a weathering product from the deeper conductive body, most likely a stratigraphic unit such as BIF.

Anomalies 102, 103 and 104 trend north-south along the western contact of the Euro Basalt (a mixture of basalt, komatiitic basalt, sills and volcanoclastic rocks) and the Cleaverville Formation (BIF, chert, sediments and volcanoclastic rocks) and appear related. Slivers of the Wyman Formation (felsic volcanic and volcanoclastics and local sedimentary rocks) are also present in the area. These anomalies are much smaller in amplitude than Anomaly 200 and it is possible the same type of causative body is responsible for these anomalies as Anomaly 200, most likely thin BIF units along a faulted contact between the Euro Basalt and Cleaverville Formation.



**Figure 6** – Zoomed map showing anomalies 102, 103, 104 and 200 on satellite image background.



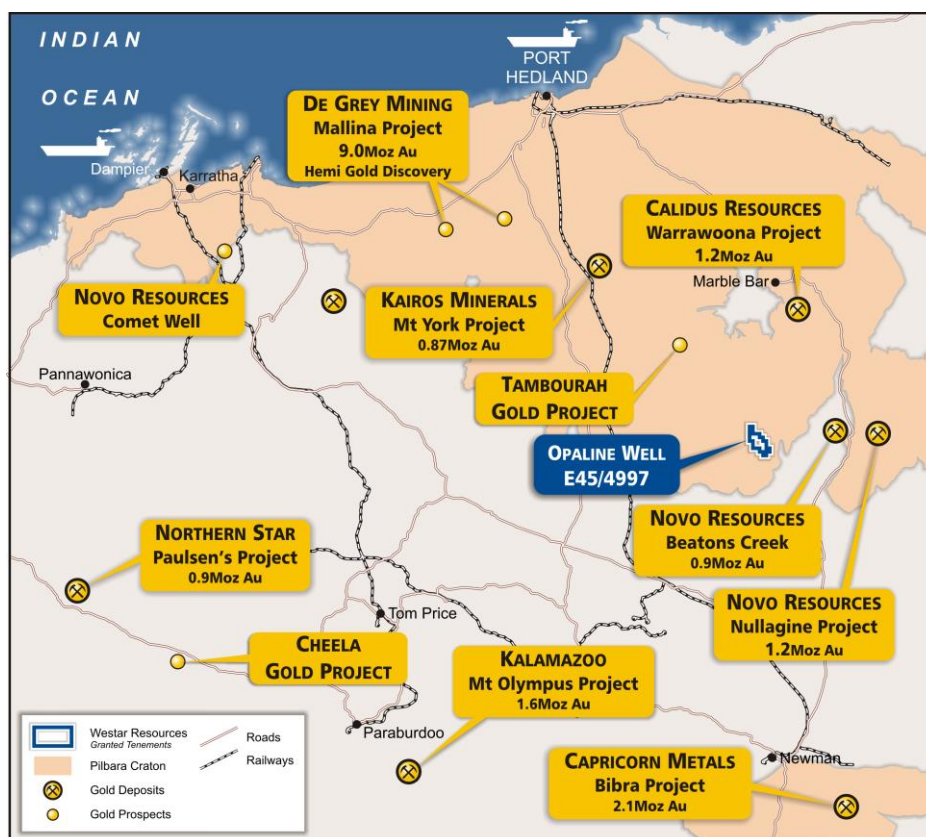
**Figure 6** – Anomalies 102, 103, 104 and 200 on interpreted geology background.

## Next Steps

Westar will integrate the plate models and results of the Newexco findings with other geophysical datasets to plan for field reconnaissance during the upcoming field season. Future work programs will include ground-truthing of the identified anomalies, field mapping, rock-chip sampling and establishing access and logistical constraints for potential future ground-based geophysics (such as Moving Loop Electro-Magnetic, MLEM survey) and, if ultimately justified, drilling.

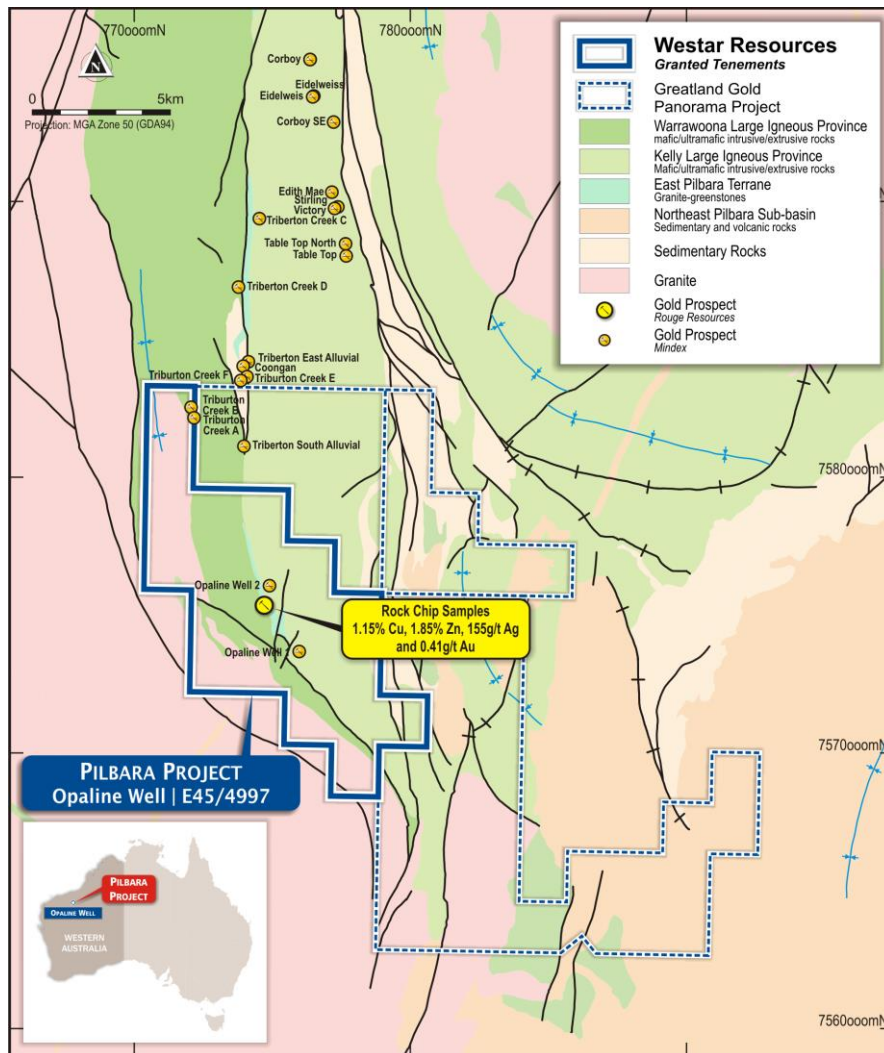
## BACKGROUND

The Opaline Well Project is located approximately 190km southeast of Port Hedland and 35km west of Nullagine in the highly prospective Pilbara Mineral Field (Figure 3). The project consists of one granted exploration license of approximately 67 km<sup>2</sup> (E45/4997) and lies adjacent to Geatland Gold's "Panorama Project" (Figure 4), of which Geatland Gold states "*... known gold mineralisation and potentially the largest coherent cobalt-in streams anomaly in Western Australia.*"<sup>1</sup>



**Figure 7 - Opaline Well Project Location Map and significant gold operations in the Pilbara region of WA**

<sup>1</sup> <https://greatlandgold.com/projects/panorama/>



**Figure 8 – Westar’s Opaline Well Project adjoining Geatland Gold’s Panorama Project.**

The Opaline Well Project straddles the Coongan greenstone belt, western margins of the Kelly greenstone belt and gneissic intrusive granitoids of the Callina and Tambina Supersuities. Most of the Coongan and Kelly greenstone belts form part of the Pilbara Supergroup and consist of volcanic and sedimentary sequences, including the dominantly basaltic Warrawoona Group and Kelly Group which is dominated locally by the Euro Basalt. Ultramafic rocks intrude the southern area of the Kelly greenstone belt in the southeast of the Project.

The Project area contains several recorded historical workings, including Triberton Creek A and B (MINDEX S0025168 & S0030003), where historic rock chip samples revealed grades up to 200g/t gold, and Opaline Well 1 and 2 (MINDEX S0027158 & S0027159), where rock chip samples have returned grades up to 0.25 – 1.15% Cu, 0.14 – 1.85% Zn, 79 - 155g/t Ag and 0.19 - 0.41 g/t Au. Nearby historical mining centres in the area include Eidelweiss and Corboys. The Victory Mine had a limited production of 1,929 oz of gold mined and at Coongan Star, Consolidated Gold Mines produced 5,478 oz of gold. Elevated levels of Cobalt throughout the tenement have also been detected through historical stream sediment sampling.

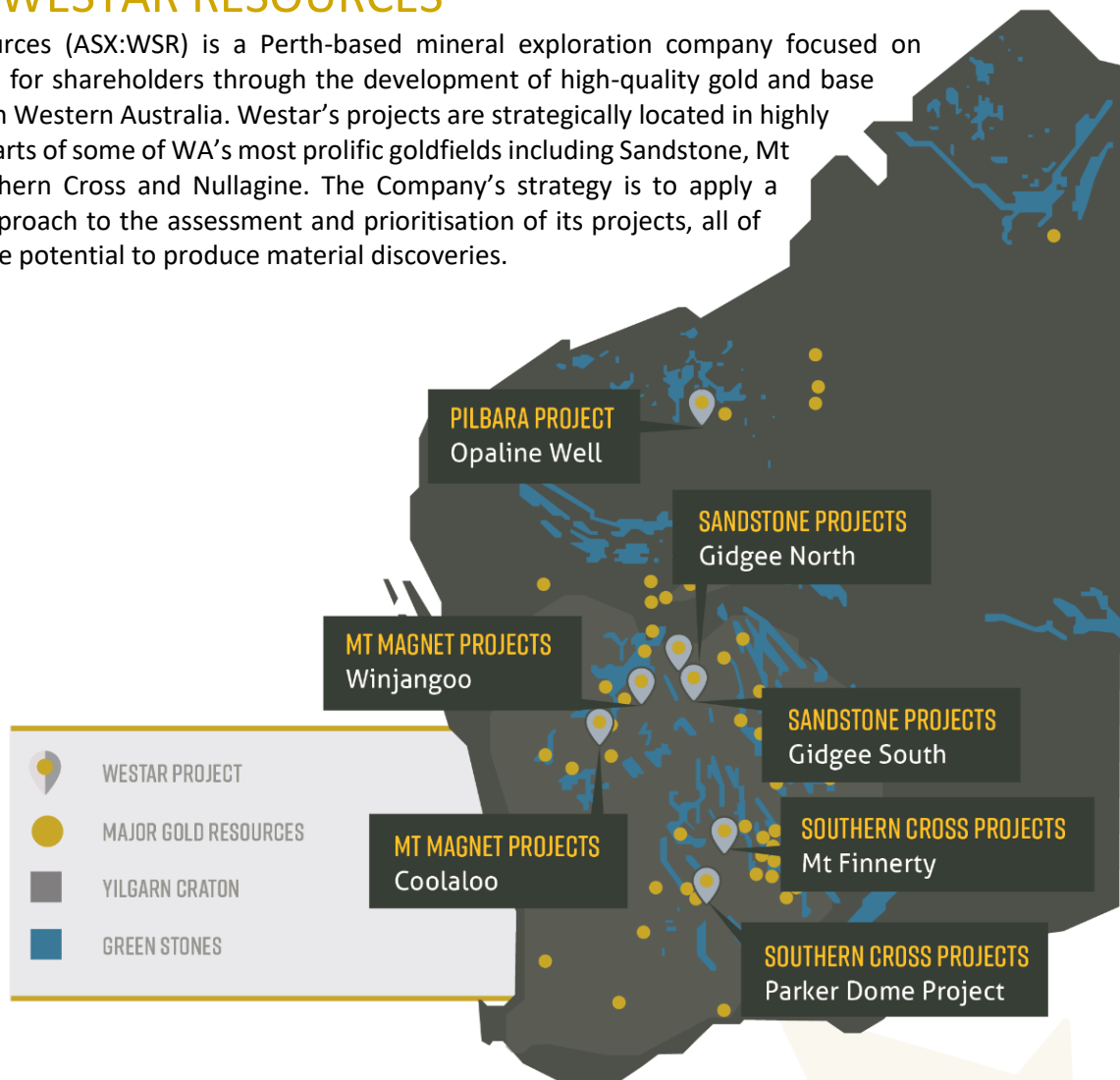
For the purpose of Listing Rule 15.5, this announcement has been authorised by the board of Westar Resources Ltd.

## ENQUIRIES

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## ABOUT WESTAR RESOURCES

Westar Resources (ASX:WSR) is a Perth-based mineral exploration company focused on creating value for shareholders through the development of high-quality gold and base metal assets in Western Australia. Westar's projects are strategically located in highly prospective parts of some of WA's most prolific goldfields including Sandstone, Mt Magnet, Southern Cross and Nullagine. The Company's strategy is to apply a systematic approach to the assessment and prioritisation of its projects, all of which have the potential to produce material discoveries.



## COMPETENT PERSON STATEMENT

The information in this announcement that relates to exploration results is based on and fairly represents information compiled by Karl Jupp, a competent person who is a member of the AusIMM. Karl Jupp is employed by Westar Resources Limited. Karl Jupp has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves. Karl Jupp consents to the inclusion in this announcement of the matters based on his work in the form and context in which it appears.

## Opaline Well AEM data

### JORC Code, 2012 Edition – Table 1 report

#### Section 1 Sampling Techniques and Data

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

Criteria	Commentary
<i>Sampling techniques</i>	<p>New Resolution Geophysics (NRG) were engaged by Westar Resources LTD to carry out an Xcite™ Time Domain Electromagnetic (TDEM) and Magnetic Survey (EM) programme at the Opaline Well project (near Nullagine, WA) between the 14<sup>th</sup> to 17<sup>th</sup> of October 2021.</p> <p>Data was acquired using NRG's Xcite™ Airborne (helicopter) Electromagnetic (AEM) system.</p> <p>75 lines spaced 200m north to south were surveyed, totalling 372km.</p> <p>EM locations were simultaneously collected by Xcite™ in-built GPS Novatel DL-V3L1L2</p> <p>The Xcite™ system specifications are as follows;</p> <ul style="list-style-type: none"> <li>•Aircraft Type: AS350B Series helicopter</li> <li>•Sensor Configuration: Coincident Transmitter-Receiver[Tx-Rx]</li> <li>•AltitudeofTx-Rxarray:30 to 40m</li> <li>•Tx loop diameter:18.4m</li> <li>•Tx number of turns:4</li> <li>•Tx current:280A</li> <li>•Tx Dipole Moment:300,000 NIA</li> <li>•Tx Base frequency:25Hz</li> <li>•Receiver[Rx] Coils: X&amp;Z; concentric to Tx</li> <li>•Rx diameter: 0.613m[X],1.0m[Z]</li> <li>•Rx number of turns: 200[X], 100[Z]</li> <li>•Altitudeofhelicopter:60-70m</li> <li>•Acquisition System:NRGRDASII</li> </ul>
<i>Drilling techniques</i>	Not Applicable, no new drilling is being reported in this announcement.
<i>Drill sample recovery</i>	Not Applicable, no new drilling is being reported in this announcement.
<i>Logging</i>	Not Applicable, no new drilling is being reported in this announcement.
<i>Sub-sampling techniques and sample preparation</i>	Not Applicable, no new drilling is being reported in this announcement.
<i>Quality of assay data and laboratory tests</i>	<p>The NRG Xcite™ system is calibrated prior to commencement of survey – high altitude check.</p> <p>Daily field quality control is undertaken including; a check for line path deviation, altitude deviation, magnetic noise, diurnal and GPS satellites.</p> <p>The flight path map is plotted and checked against survey specifications/locations.</p>
<i>Verification of sampling and assaying</i>	<p>Data is recorded using an NRG proprietary data acquisition system.</p> <p>Final quality control completed by NRG geophysicists includes: a check for residual line noise in derivatives, magnetic spikes and data integrity.</p>
<i>Location of data points</i>	<p>Location coordinates are referenced to WGS84 UTM Zone 50S.</p> <p>Location information was recorded using a Novatel DL-V3L1L2 GPS Receiver.</p> <p>Height information was recorded using a SF11/C (Loop) and SF00 (Heli) - Laser Altimeter.</p>
<i>Data spacing and distribution</i>	75 lines spaced 200m north to south were surveyed, totalling 372km.
<i>Orientation of data in relation to geological structure</i>	Survey lines were orientated on a north to south grid, crossing locally key geological lithologies and structures that are orientated NW/SE.

<i>Sample security</i>	The processed data was provided to Newexco for interpretation in Dec-21. The data was provided in a Geosoft database file.
<i>Audits or reviews</i>	Data reviewed and interpreted by third party geophysical consultant Newexco Exploration Pty Ltd.

## Opaline Well AEM data

### JORC Code, 2012 Edition – Table 1 report

### Section 2 Reporting of Exploration Results

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

<b>Criteria</b>	<b>Commentary</b>
<i>Mineral tenement and land tenure status</i>	<p>Surveys were conducted on tenement E45/4997 which is 100% owned by Rouge Resources, a wholly owned subsidiary of Westar Resources. The tenement is located approximately 45km west of Nullagine and accessed via the Marble Bar Rd and station tracks. There are no encumbrances on tenement E45/4997.</p> <p>The tenement is current and in good standing with the Department of Mines, Industry Regulation and Safety (DMIRS) of Western Australia</p>
<i>Exploration done by other parties</i>	Historic exploration on E45/4997 has been limited to regional stream sediment sampling. There are a small number of very historic shafts within E45/4997.
<i>Geology</i>	The Opaline Well Project straddles the Coongan greenstone belt, western margins of the Kelly greenstone belt and gneissic intrusive granitoids of the Callina and Tambina Supersuites. Most of the Coongan and Kelly greenstone belts form part of the Pilbara Supergroup and consist of volcanic and sedimentary sequences, including the dominantly basaltic Warrawoona Group and Kelly Group which is dominated locally by the Euro Basalt. Ultramafic rocks intrude the southern area of the Kelly greenstone belt in the southeast of the Project. Shear hosted gold and VMS style base metal mineralisation are the exploration targets. At this early stage a genetic model for mineralization has yet to be fully developed.
<i>Drill hole Information</i>	Not applicable, no new drill hole information is reported
<i>Data aggregation methods</i>	Not applicable, no drill assay or similar interval results are reported.
<i>Relationship between mineralisation widths and intercept widths</i>	Not applicable, no drill assay or similar interval results are reported.
<i>Diagrams</i>	Suitable maps and diagrams have been included in the body of the announcement.
<i>Balanced reporting</i>	Key results and conclusions have been included in the body of the announcement.
<i>Other substantive exploration data</i>	In Late 2020 Westar flew a detailed airborne magnetic and radiometric survey over Opaline Well. The program deliverables were a suite of magnetic and radiometric images which were used to refine the geological targeting on E45/4997. During 2021 Westar engaged Geological Consultants PGN to provide an interpretation of the geology of E45/4997. In June 2021, 63 rock chip samples were taken at Opaline Well. Samples were random rock chip samples collected from prospective outcrops and historic mine dumps within the project area, as part of the first pass project assessment.
<i>Further work</i>	Follow-up exploration programmes will be designed after integration and analysis of all data sets.