ASX Announcement
13th February 2024

# Multiple New Lithium, Gold and Base Metal Targets at Opaline Well

## Highlights

- ***Hyperspectral mapping identifies multiple significant features indicative of lithium, gold and base metal mineralisation***
- ***Linear features within granitoids may indicate lithium-bearing pegmatites; untested by Westar or previous explorers***
- ***Numerous coherent hydrothermal alteration anomalies with mineral signature similar to gold/base metal mining centres and workings in the East Pilbara remain largely untested***
- ***Pegmatites to undergo sampling for lithium, and along with other intrusions, also sampled for Australian critical/strategic minerals including tin, tantalum, tungsten and molybdenum***
- ***Geochemical sampling and mapping programs planned for the 2024 field season***

Westar Resources Limited (ASX:**WSR**) (**Westar** or the **Company**) is pleased to announce that excellent pegmatite hosted lithium targets have been interpreted from a hyperspectral study covering the Opaline Well Project, appearing in places as a swarm of linear features occurring within granitoids. In addition, several gold and base metal targets have been generated using hyperspectral data processing to define hydrothermal alteration minerals, which correlate well with historical mining centres along strike from the tenement. Westar anticipates conducting mapping and geochemical sampling during the 2024 field season.

***Westar Executive Director Lindsay Franker commented:***

*"The hyperspectral survey has returned exciting results at our Opaline Well Project. This cutting-edge technology has revealed a swarm of potential pegmatite targets, indicating significant lithium potential within the tenement. We have also discovered numerous hydrothermal alteration anomalies that indicate gold and base metal mineralisation, which corresponds to historical workings in the region. These findings represent a significant step forward in our exploration efforts, highlighting Opaline Well's potential. We look forward to the upcoming field season, when we'll conduct detailed mapping and geochemical sampling programs to validate these targets."*

# Opaline Well Project

The Opaline Well Project is located in Western Australia's Pilbara region, approximately 190km southeast of Port Hedland and 35km west of Nullagine (Figure 1). Exploration by Westar has already defined a number of anomalous gold and base metal targets, in addition to historical high grade gold workings (see 'Background' below).

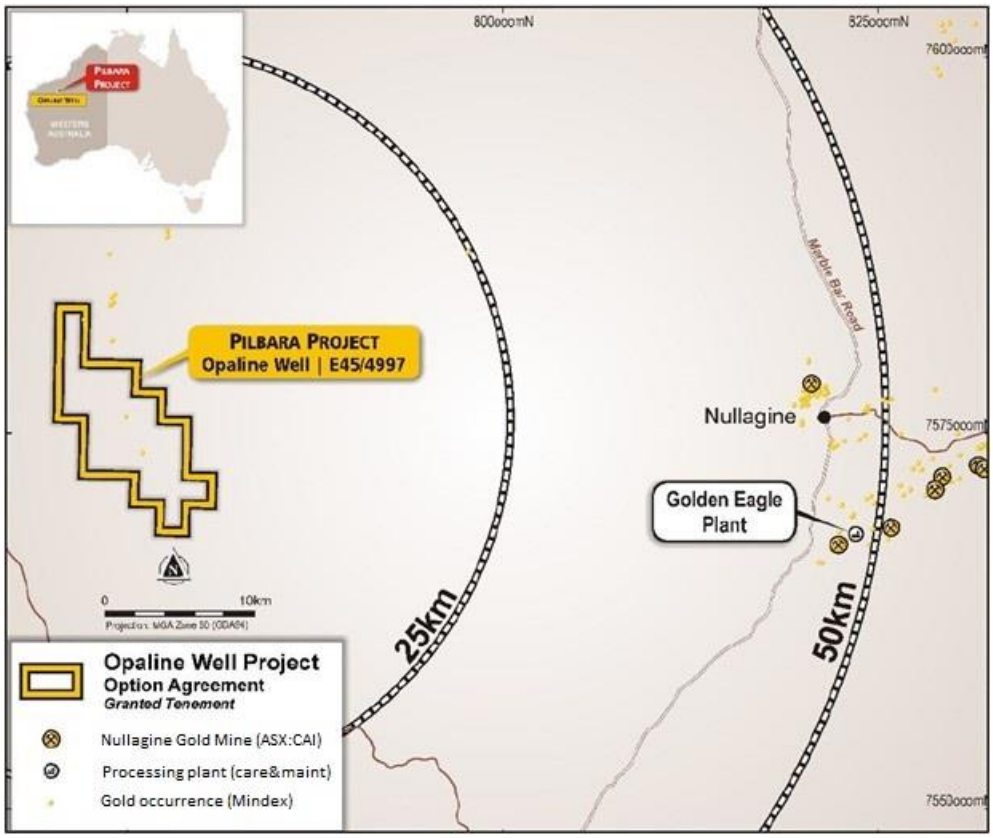



**Figure 1**. Regional location map with distance to Nullagine Gold Mine (ASX:CAI on care & maintenance)

Given that the western margin of the tenement is covered by granitic rocks ('granitoids'), situated in the lithium-endowered Pilbara region highlighted by multiple recent significant Li-discoveries within/adjacent to fertile source granitoids, it was decided to assess the potential for pegmatite host rocks. A significant portion of Opaline Well is covered in outcrop to subcrop, making it well-suited for using hyperspectral analysis as a mineralisation targeting tool for lithium, gold and base metals.

High spectral resolution ('hyperspectral') remote sensing systems involve the measurement of the spectral radiance of the surface to identify and map surface minerals. Many rock forming minerals have a unique spectral signature that can be used to determine rock type (lithology). For exploration purposes, processing and interpretation of image data acquired during the airborne survey can detect the characteristic signature of hydrothermal alteration associated with gold and base metal mineralisation. In the context of lithium exploration, minerals associated with potentially mineralised pegmatites can be targeted including various micas and spodumene. Whilst the presence of white mica does not necessarily assure that the host lithology is a pegmatite ) it does offer distinct exploration targets for ground-truthing.

Brian Bennett, a well-respected hyperspectral specialist from Western Geospectral, was engaged to process, analyse, and interpret existing multiclient hyperspectral data and resultant imagery with the ultimate outcome of defining areas of interest for (but not limited to) lithium, gold and base metal mineralisation.

## Lithium: A Significant Number of Excellent Targets

A high number of linear features within/adjacent to the granitoids have been generated from the hyperspectral interpretation, defined by the 'white mica' signature (Figure 2). In the northern part of the Project a swarm of these features strike over 5km, offering a significant exploration target for potential pegmatites. White mica enriched linear features also occur over the southern margin of the tenement which may also be pegmatites.

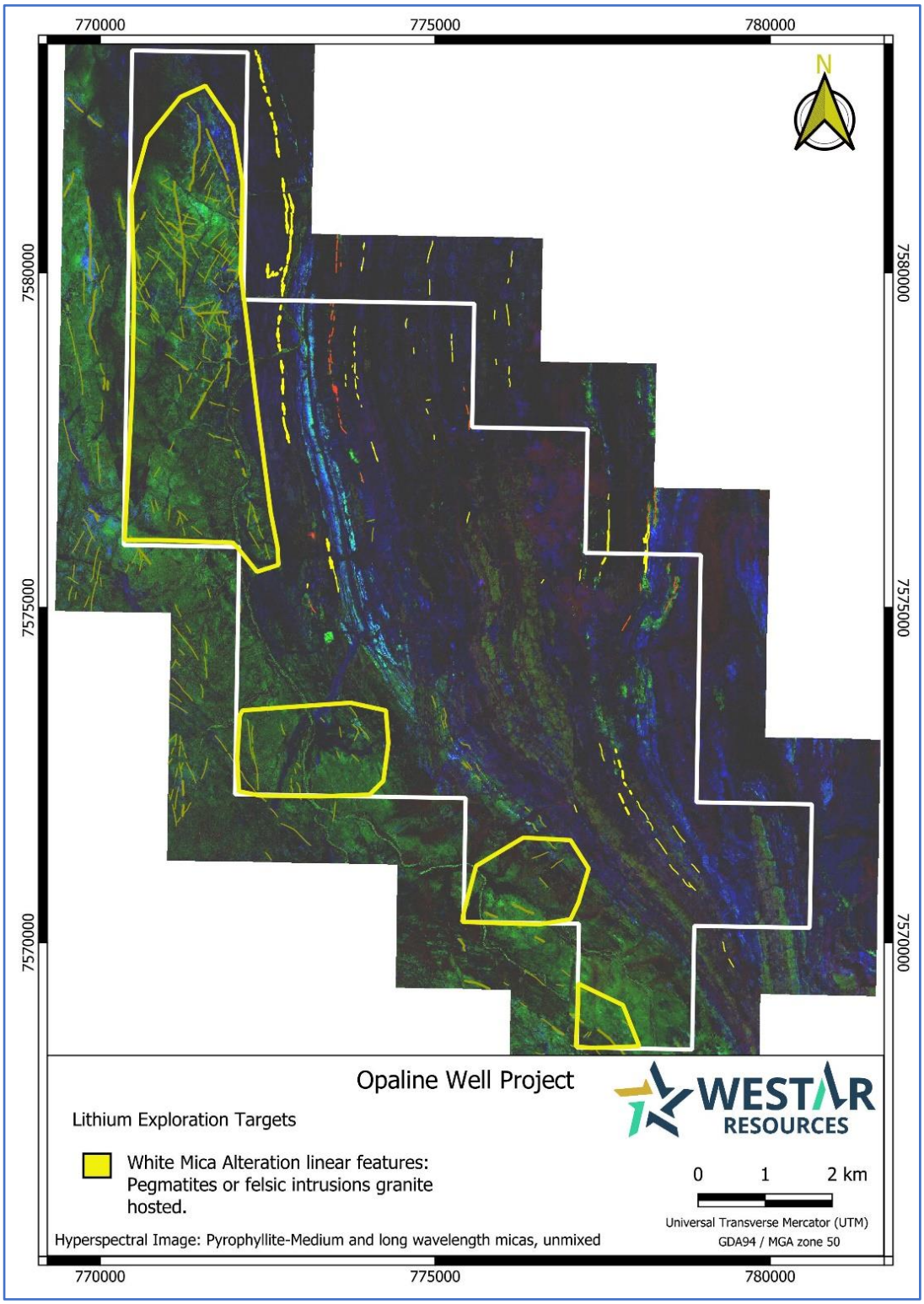



**Figure 2**. Hyperspectral image of white mica minerals defining linear features which are potential lithium targets

## Gold and Base Metals: Numerous Distinct Coherent Targets

Hydrothermal alteration minerals generally associated with gold and base metal mineralisation in the East Pilbara region and vicinity of Opaline Well include white mica, pyrophyllite (a silicate mineral), chlorite and to a lesser extent tourmaline. For example the operating Warrawoona gold mine (75km to the NNE) has a parallel linear trend of pyrophyllite associated, along with white mica. Locally, historic gold workings +/- base metal occurrences along strike 4.5km-21km north of the tenement have in some cases strong pyrophyllite-white mica +/- chlorite alteration features. A small tourmaline feature lies over one of the old workings.

Hyperspectral analysis over the Project area has generated distinct coherent hydrothermal alteration mineral features (Figure 3). Of significance are numerous white mica anomalies up to 5.5km long, of which the two major trends are both along strike from the above-mentioned historic workings. These are compelling exploration targets. There are also discrete pyrophyllite, chlorite+mica and tourmaline features which seem closely associated with white mica and are also priority targets.

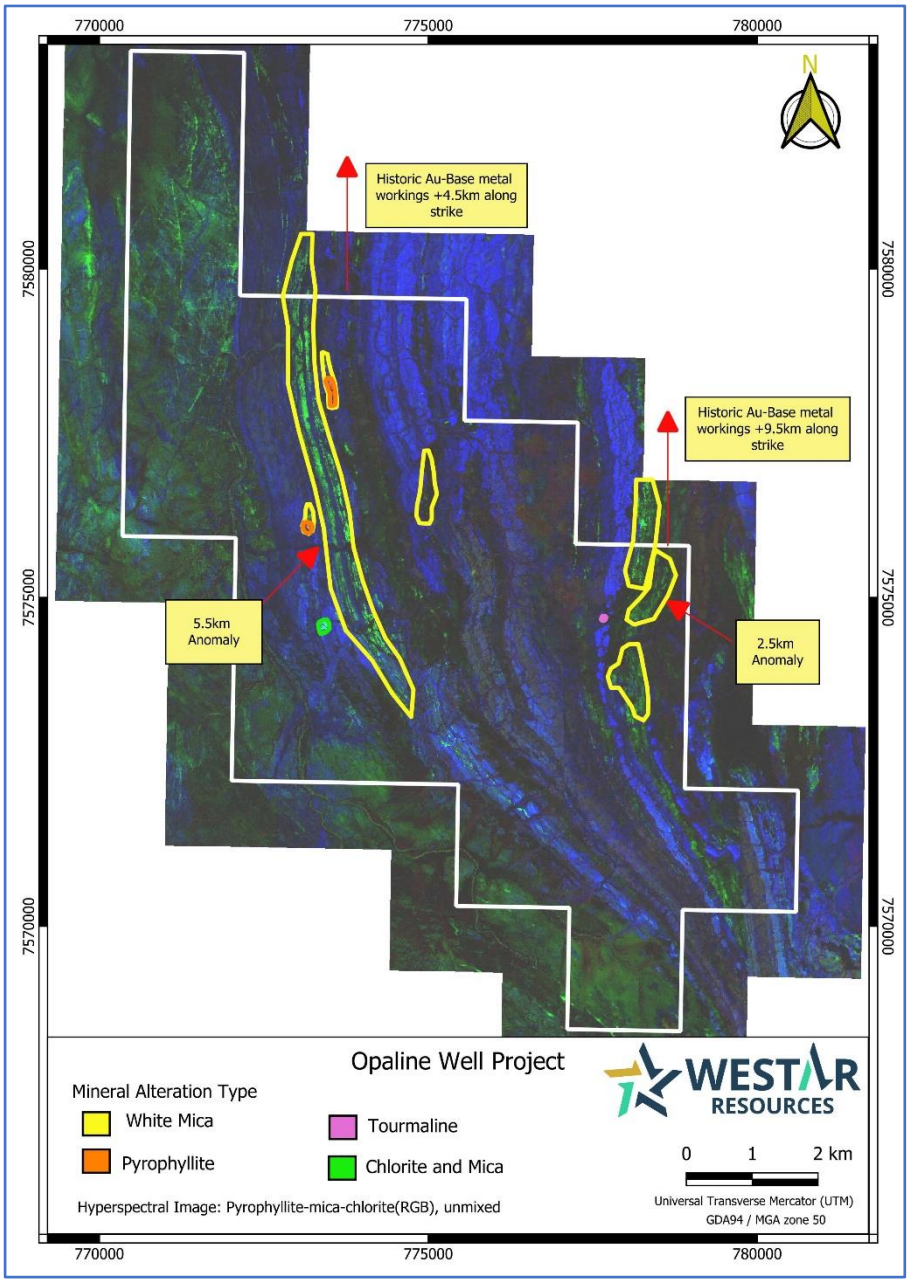



**Figure 3**. Hyperspectral image of hydrothermal alteration minerals associated with gold / base metal mineralisation

## Next Steps

Potential lithium targets need to be field checked to determine if the linear features are pegmatites or other types of intrusions such as quartz veins and porphyries. If pegmatite then they will be sampled to determine if they are lithium-rich. Any intrusions which may show other Australian critical/strategic minerals of interest such as tin, tantalum, tungsten and molybdenum will also be sampled.

Gold and base metal hyperspectral alteration features are now being correlated with Westar and historic geochemical/geophysical datasets to prioritise areas for further field work, including mapping and geochemical sampling programs.

## Background: Significant Gold and Base Metal Mineralisation Already Discovered

Historical gold workings on the tenement include the Triberton Creek A + B Prospects (which includes a small shaft) and Opaline Well 1 +2 Prospects. Previous explorers sampled the Triberton workings and surrounds, returning outstanding rock chip gold assay results including 6.32g/t Au, 13.77g/t Au, 44.6g/t Au and 200g/t Au[1] (Figure 4). Rock chip samples taken by previous explorers in proximity to the Opaline Well 1 and 2 workings returned excellent precious + base metal assays up to 1.15% Cu, 1.85% Zn, 155g/t Ag, 0.41g/t Au[1] (Figure 4).

Rock chips assays returned from field reconnaissance programs by Westar include 1.3g/t Au, 3.1g/t Ag, 0.8% Pb, 0.2% Zn[2,3] (Figure 4). An airborne electromagnetic ('AEM') survey completed by Westar identified highly prospective conductors which remain unexplained despite field traversing / sampling, with the possibility of confined sulphide bodies occurring beneath not showing any surface expression.[4,3]

**References in this release:**

1 WSR ASX Announcement, 6 December 2020, "Prospectus"
2 WSR ASX Announcement, 20 September 2021, "Opaline Well – Exploration Update"
3 WSR ASX Announcement, 27 September 2022, "Opaline Well Exploration Defines Base Metal Mineralisation Trend"
4 WSR ASX Announcement, 02 March 2022, "AEM Survey Identifies Conductors at Opaline Well"

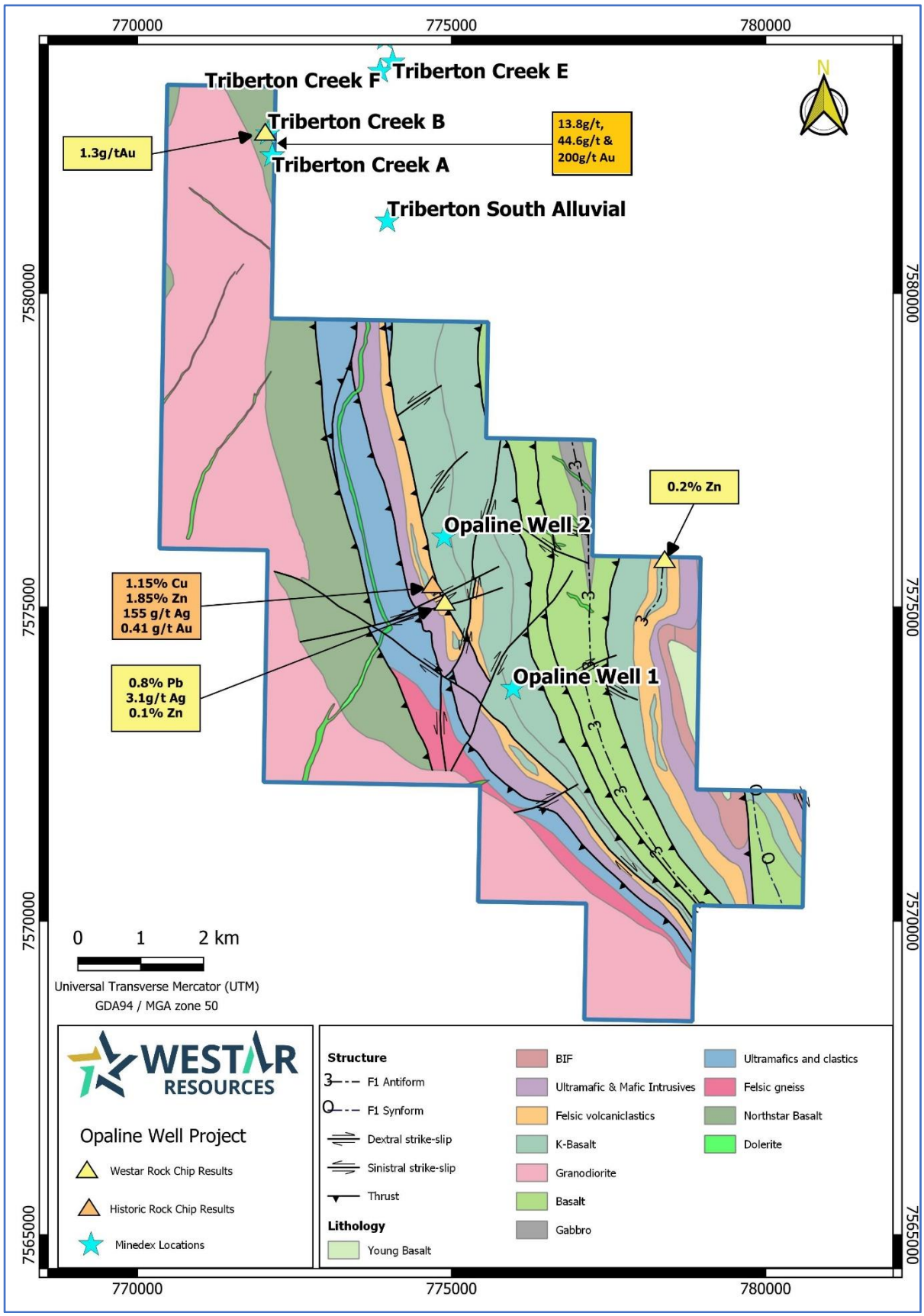
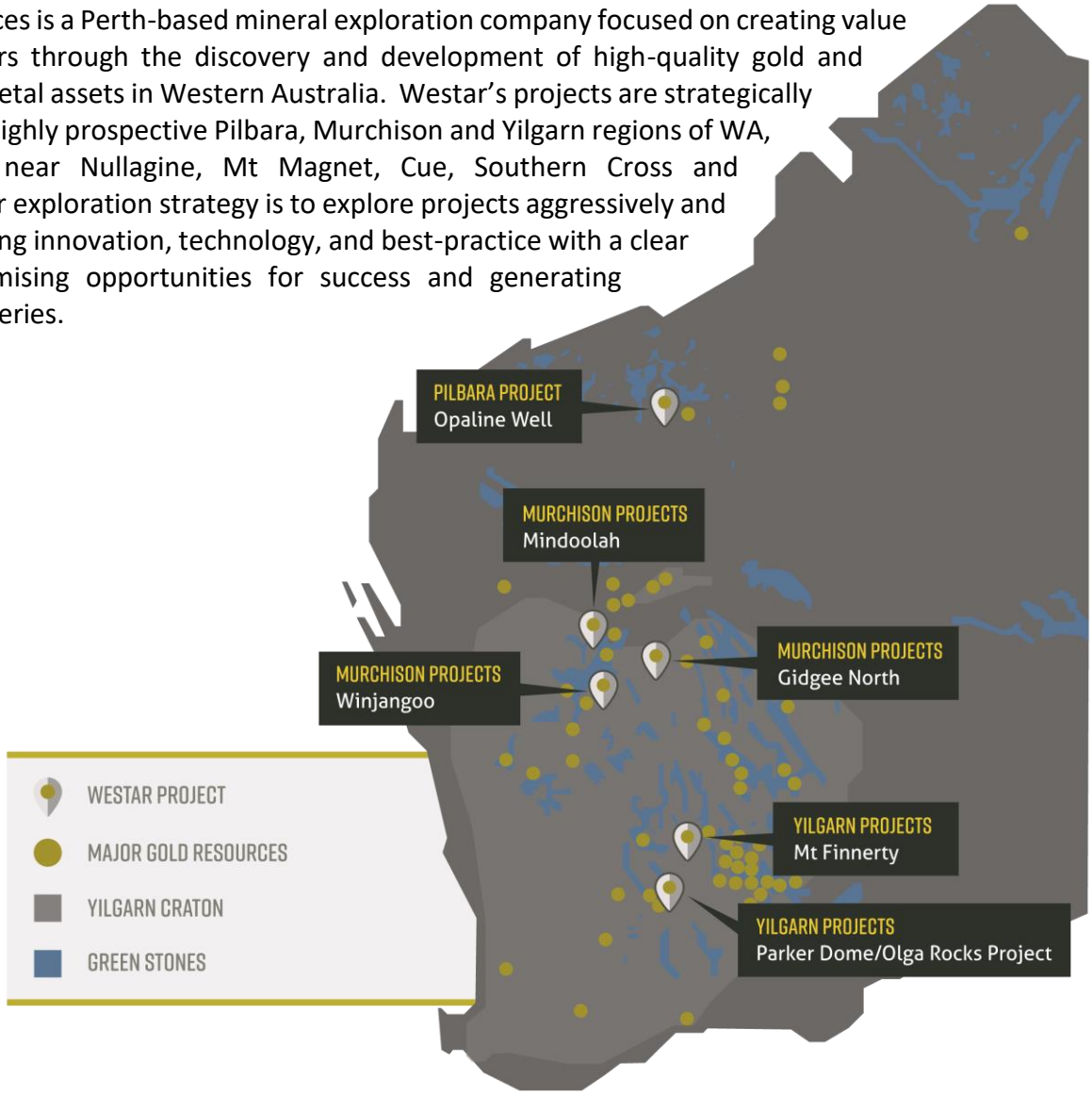



**Figure 4**. Westar and previous explorer precious / base metal rock chip results, on geological interpretation

# About Westar Resources

Westar Resources is a Perth-based mineral exploration company focused on creating value for shareholders through the discovery and development of high-quality gold and future facing metal assets in Western Australia. Westar's projects are strategically located in the highly prospective Pilbara, Murchison and Yilgarn regions of WA, with projects near Nullagine, Mt Magnet, Cue, Southern Cross and Sandstone. Our exploration strategy is to explore projects aggressively and intelligently using innovation, technology, and best-practice with a clear focus on optimising opportunities for success and generating material discoveries.




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

ENQUIRIES

**Lindsay Franker**, Executive Director | lindsay@westar.net.au | Ph: 08 6556 6003

The Exploration Results have been compiled under the supervision of Mr. Jason Boladeras who is a full-time employee of Westar Resources Ltd and a Registered Member of the Australian Institute of Geoscientists. Mr. Boladeras has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the 2012 edition of the JORC Code.

## Appendix 1 - JORC Code, 2012 Edition Table 1 (Hyperspectral Report by Western Geospectral on Opaline Well)

### Section 1 Sampling Techniques and Data

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

| Criteria | Commentary |
|---|---|
| *Sampling techniques* | Reprocessing of a high-quality multi-client airborne hyperspectral data set acquired with De Beers AMS hyperspectral sensor. No drilling was undertaking during this program. The hyperspectral analysis was performed by independent consultants Western Geospectral.<br>The entire project was sampled at the same pixel size and using the same instruments during the survey.<br>The hyperspectral dataset does not directly detect mineralisation. The hyperspectral instrument measures the response of certain minerals across a variety of spectral ranges from the visible and near infrared to the short-wave infrared from approximately 530nm to 25000nm in 96 different wavelength bands. |
| *Drilling techniques* | Not applicable as no drilling was undertaken. |
| *Drill sample recovery* | Not applicable as no drilling was undertaken. |
| *Logging* | As no samples were collected, no logging was required. |
| *Sub-sampling techniques and sample preparation* | The entire project was sampled at the same pixel size and using the same instruments during the survey.<br>The AMS sensor is fully calibrated enabling the data to be reduced to apparent surface reflectance. Three principal spectral processing methods were employed: 1) end-member analysis and spectral unmixing; 2) matched filter applied using an external spectral reference library; 3) spectral indices. Targets were selected by interactive analysis using the spectral profiles of the respective pixels for validation. |
| *Quality of assay data and laboratory tests* | As no samples were collected there are no assaying techniques.<br>The AMS sensor is a 3-spectrometer opto-mechanical line scanning system that records imagery in 96 channels across the reflective solar region of the electromagnetic spectrum. Specifications of instrument calibration are provided by the laboratory-based calibrations performed by the manufacturer during periodic servicing events, either annually, or more frequently when this has been required. |
| *Verification of sampling and assaying* | There has been no independent assessment of the consultant's report.<br>During active surveys data was recorded directly onto DLT III and DLT III XT flight tape. Post survey data was backed up using the same tape system following which pre-processing corrections were performed writing data to local hard drives. The archive is currently stored on NAS drives.<br>As there is no assay data associated with this program there has been no adjustment to the assay data. |
| *Location of data points* | Geo-location of image data aquired prior to 2001 is providedby the on-board Ashtech GPS system. |
| *Data spacing and distribution* | Imagery was acquired with a nominal Ground Sample Distance at nadir of 5.8m. The products of spectral processing provided were resampled to 5m.<br>No sample compositing was undertaken during the hyperspectral analysis. |
| *Orientation of data in relation to geological structure* | The hyperspectral data was collected so as to not bias the understanding of the geology of the project. |

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| *Sample security* | No samples were collected during the hyperspectral analysis. |
| *Audits or reviews* | There has bene no audits or reviews of the hyperspectral analysis. |

## Section 2 Reporting of Exploration Results

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

| Criteria | Commentary |
|---|---|
| *Mineral tenement and land tenure status* | The hyperspectral study was conducted on granted Exploration License 45/4997 (the Opaline Well Project) located approximately 35km west of Nullagine in Western Australia. The tenement is held by Rouge Resources Pty Ltd, a 100% owned subsidiary of Westar Resources Limited.<br>The Yamatji Marlpa Aboriginal Corporation is the native title representative body to the native title holders over the area covering E45/4997.<br>The lease is within the Shire of East Pilbara. |
| *Exploration done by other parties* | In the 1980s, the area surrounding the current Opaline Well tenure was explored for uranium, copper, tin, gold and nickel mineralisation. Companies involved in mineral exploration at this time included Marathon Petroleum Australia Limited, Otter Exploration NL and Alcoa of Australia Limited.<br>In 1988, private explorers Matson and Hitchen undertook exploration and rock chip geochemical sampling (59 samples) around the historical Triberton workings with results including 6.32 g/t, 13.22 g/t, 13.77 g/t, 44.6 g/t and 200 g/t Au.<br>Between 1967 and 2003, exploration for diamonds was undertaken in the region by several companies including CRA Exploration Pty Ltd, Haoma Mining NL, De Beers Australia Exploration Limited, Alkane Exploration NL, Ocean Resources NL and Northling Pty Ltd.<br>Between 1994 and 1997, Great Southern Mines NL conducted several extensive soil, stream sediment and rock chip geochemical sampling programs throughout the greater region, including the current Opaline Well Project area.<br>Between 2006 and 2014, Gondwana Resources Limited explored for copper within the Kelly Greenstone Belt. Much of the work was limited to compilation of historical datasets, regional project evaluation, and interpretations, with some reconnaissance and geological mapping.<br>More recently, Atlas Iron Limited held the current tenure. Helicopter field reconnaissance by Atlas Iron Limited in 2017 failed to identify iron enrichment and the ground was subsequently surrendered.<br>To the north, northeast, east and along geological strike of the current Opaline Well Project is Greatland Gold Pty Ltd.'s Panorama project. Recent fieldwork by Greatland Gold Pty Ltd in July and August 2019 defined a trend of gold nuggets extending over a strike length of 6.1 km, terminating at the tenement boundary of Westar's Opaline Well Project. |
| *Geology* | 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.<br>The deposit style being sort is lithium in pegmatites and precious-base metals in mafic/ultramafics. |
| *Drill hole Information* | Not applicable as no drilling was undertaken. |

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| *Data aggregation methods* | There has been no data aggregation. |
| *Relationship between mineralisation widths and intercept widths* | No mineralisation is described in the hyperspectral analysis. |
| *Diagrams* | Suitable maps are included in the body of the announcement. |
| *Balanced reporting* | A range of hyperspectral image products have been delivered to Westar Resources by the consultant. All images were assessed, and appropriate images were then selected for inclusion in the announcement. |
| *Other substantive exploration data* | Westar completed an airborne magnetic and radiometric survey over Opaline Well. This was followed up with the commissioning of a litho-structural interpretation and targeting study of the Opaline Well Project using both Westar datasets and open-file data. Westar have also conducted several field programs including rock chip and reconnaissance work. |
| *Further work* | Westar intends to progress exploration activities at Opaline Well to advance lithium, gold and base-metal targets. Upcoming field activities currently in preparation include ground-truthing hyperspectral interpretation findings, including mapping and rock chip sampling programs. |