



# Phase 3 Infill Drilling at Bulga Project Confirms High Priority Targets

# HIGHLIGHTS

- Phase 3 (200m x 100m infill) auger drilling campaign completed with an additional 1,338 holes for a total of 3,685 holes drilled at the Project.
- 24 targets have been confirmed and refined including 13 Ni-Cu-PGE targets and 11 LCT pegmatite targets.
- Two high priority Ni-Cu-PGE targets defined close to the highly prospective Ida Fault and Holmes Dyke junction and are untested to the south.
- Site-based geologists undertaking mapping and ground truthing of Ni-Cu-PGE and LCT pegmatite targets.
- Follow-up exploration planned including:
  - Phase 4 Auger program has commenced at newly granted permits (priority to test southern extension to high priority Ni-Cu-PGE targets)
  - Airborne electromagnetic (EM) survey to define potential massive sulphides across the 13 Ni-Cu-PGE targets
  - Maiden 5,000m Aircore/Reverse Circulation drilling program to follow airborne EM.

Western Yilgarn NL (**ASX: WYX**) ("**Western Yilgarn**" or "**the Company**") is pleased to provide an update on the Phase 3 infill auger geochemistry and mapping program which is now complete at its highly prospective Bulga Project, located ~50km southwest of the Agnew Gold Project in a fast-developing exploration region of Western Australia.

#### Peter Lewis, Chairman of Western Yilgarn commented:

"The Bulga Project continues to develop as a significant strategic asset for Western Yilgarn. We are encouraged by our exploration results to date including this confirmation of our key targets within the project area. The latest round of auger geochemistry is infill focused and designed to provide greater clarity of the highly encouraging first round of results that we achieved from a far broader grid pattern. Western Yilgarn remains focused on best-in-class exploration across its portfolio of strategic exploration projects including Bulga, Julimar West and Boodanoo."





### Overview

Western Yilgarn's Bulga Project is located ~50km to the southwest of Gold Fields' Agnew Gold Project and centred on the intersection of the Holmes Dyke and the Mt Ida Fault. The Project comprises six granted contiguous exploration licenses which cover a combined area of ~477km<sup>2</sup> plus an option to farm-in to an additional 207km<sup>2</sup> under an agreement with Fleet Street Holdings projects covering the Holmes Dyke (refer announcement 30/01/2024).

The Bulga Project is located nearby two Tier 1 world-class nickel projects operated by BHP (ASX:BHP), the Leinster and Mt Keith operations, along with several 2Moz+ gold operations including the Agnew, Lawlers and Bellevue mining operations. Bulga is also located ~60km north of Delta Lithium's (ASX:DLI) Mt Ida Lithium Project (12.7Mt @ 1.2% Li<sub>2</sub>O reported in October 2022) and ~90km south of Liontown Resources' (ASX:LTR) Kathleen Valley Lithium Project (156Mt at 1.4% Li<sub>2</sub>O (as of April 2021)).



Figure 1. Regional location of the Bulga Project





### **Geological Setting**

The Bulga Project is located at the intersection of the Holmes Dyke and the regional Ida Fault (Figure 1 above), which in turn is interpreted to be a fundamental, early steep structure effectively marking the boundary between the Eastern Goldfields Super Terrane in the east and the Youanmi Terrane to the west. The Ida Fault structure locally becomes the Mt Goode Rift, which hosts the Cosmos mineralised complex. Bulga stratigraphy is interpreted to be contiguous with the Cosmos trend.

The northward continuation of the Ida Fault can be traced on the west side of the Agnew-Wiluna greenstone belt as the Wahroonga Shear Zone (a locally important Au-associated structure), whilst the southern continuation correlates with the western margin to the Coolgardie, Widgiemooltha, and Chalice greenstone belts (Weinberg et al., 2002).

The Mount Holmes Gabbro is a large mafic/ultramafic dyke-sill complex with a strike length of >400km. Geological Survey of Western Australia age dating of the Mount Holmes Gabbro (1070 Ma) demonstrates that it is part of the Warakurna Large Igneous Province which is host to nickel copper sulphide mineralisation at BHP's Tier 1 Babel-Nebo Ni-Cu-PGE project. These zones are interpreted as dyke to sill transitions, which are highly favourable sites for accumulation of nickel copper sulphides within magmatic mafic/ultramafic complexes.



Figure 2. Bulga Project Plan





### **Auger Geochemistry Results**

Western Yilgarn has now completed its Phase 3, , 1,338-hole auger geochemistry program across the Bulga Project. Phase 1 holes were located on 1,600m lines spaced 100m apart (Release 05/04/2023) with the Phase 2 program infilling anomalies to 400m x 200m spacing (Release 22/09/2023) and Phase 3 infilling over 24 targets to 200m by 100m. Holes were drilled between 2m to 16m in depth with an interface sample taken below transported cover and soil material. The Phase 1 and 2 programs have been analysed by 4 Acid Digest with a multielement ICP-MS finish with the Phase 3 infill program being analysed by Western Yilgarn's new Vanta pXRF.

24 exploration targets have been defined (see Figure 3) that require follow up staged exploration. These targets include.

- 13 Ni-Cu-PGE targets
- 11 LCT Pegmatite targets



Figure 3. Priority targets defined by auger geochemistry program (Base WA 1VD Magnetic image from GSWA)





## Ni-Cu-PGE targets (N1 to N4)

Two Ni-Cu-PGE targets have been defined by the historical drilling and additional 11 targets by auger geochemistry work by WYX. The 11 new targets have been ranked from 1 to 4 by the CP and a specialist geochemist.

BHP targets BHP-1 and BHP-2 were outlined in the WYX ASX Announcement dated 8 May 2023, with historical Aircore (AC) and Reverse Circulation (RC) drilling by BHP and St George defining exciting nickel intercepts including:

- HWAC12 45m @ 0.55% Ni (incl. 20m @ 0.83% Ni)
- HWAC06 48m @ 0.34% Ni (incl. 18m @ 0.51% Ni)
- HWRC001 27m @ 0.31% Ni (incl. 7m @ 0.51% Ni)

These Intercepts were located over a 9km trend on ~500m spaced lines with holes between 100m to 2km apart. The intercepts define a highly fertile and poorly explored ultramafic belt. WYX considers these drill intercepts to be related to nickel laterite (given low Cu and PGE numbers) but considers potential for Ni-Cu-PGE at depth in fresh rock and along strike with geophysical work planned for immediate follow up.

The BHP-1 and BHP-2 Ni targets have been poorly defined by auger geochemistry. WYX consider this BHP-1 and BHP-2 targets to be highly leached and will be assessed further by airborne EM.

11 Targets have been prioritised below by WYX CP and specialist geochemist. Two priority targets N1 (~6km strike) and N4 (~3km strike) as shown in the figure below are currently open to the south (in the recently granted WYX permit E36/01066). Extensional auger drilling has commenced across these targets. N1 and N4 anomalies (Release 22/09/2023) returned Ni (up to 954ppm Ni or 30 times background), Cu (up to 295ppm Cu or 15 times background), PGE\* (up to 9ppb Pt & 8ppb Pd or ~4 times background).



*Figure 4.* Ni-Cu-PGE targets (Underlying image is WA 40m 1VD magnetic image)



### **LCT Pegmatite Targets**

11 targets have been prioritised below by WYX CP and an external specialist geochemist. All targets (WYX ASX Announcement 22/09/2023) present coincident Li-Cs-Ta anomalies along with Nb, Be, Sn and Rb. Li (up to 109ppm Li or 5 times background), Cs (up to 16ppm Cs or 7 times background), Ta (up to 10ppm Ta or 10 times background).



Figure 5. LCT pegmatite priority targets (underlying image is WA 40m 1VD magnetic image)

Authorised for release by the Board of Western Yilgarn NL.

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Western Yilgarn has 5 exploration projects with a total area of 1,540km<sup>2</sup> (including application areas) located across Western Australia.

The projects are prospective for Ni-Cu-Co-PGE, Au and Li and include:

- Julimar West
- Bulga
- Boodanoo
- Sylvania
- Melbourne



Location of Western Yilgarn portfolio

#### **Forward Statements**

This release includes forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning the Company's planned exploration programs and other statements that are not historical facts. When used in this release, the words such as "could", "plan", "estimate", "expect", "anticipate", "intend", "may", "potential", "should", "might" and similar expressions are forward-looking statements. Although the Company believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve known and unknown risks and uncertainties and are subject to factors outside of the Company's control. Accordingly, no assurance can be given that actual results will be consistent with these forward-looking statements.

#### **Competent Person Statement**

The reported Exploration Results were compiled by Beau Nicholls, a Fellow of the Australian Institute of Geoscientists. Mr. Nicholls has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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. Nicholls is a Principal Consultant with Sahara Operations (Australia) Pty Ltd. He represents as the Competent Person for Western Yilgarn. He holds options in the Company.



# **JORC Tables**

# Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	<ul> <li>Auger Geochemistry samples were taken by 4-inch open flight Auger.</li> <li>Holes drilled vertically.</li> <li>Meter by meter ~2kg samples taken using a small scoop. Typically targeting an interface sample below transported and soil cover into B and C horizon (Often B horizon is limited)</li> <li>Samples are sieved to 1mm into Chip trays (Typically the interface sample only)</li> <li>Phase 1 and 2 2kg samples were dispatched to Intertek in Perth for 4 Acid Digest with a multielement ICP-MS finish.</li> <li>Phase 3 samples were sieved and analysed by a new M Series Vanta Olympus pXRF.</li> </ul>
Drilling techniques	Open flight auger 4-inch drill bit
Drill sample recovery	<ul> <li>A sampling foot was utilised to ensure sample transferred direct to plastic container.</li> <li>Samples were not weighed but recoveries are considered high given the method utilised.</li> </ul>
Logging	<ul> <li>Chips were logged for basic colour and lithology.</li> <li>A geologist accompanied phase 3 and also undertook surficial mapping of available outcrop</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>Samples were taken dry and moist. When wet the hole was terminated as quality is poor.</li> <li>Sample method is appropriate for Auger Geochemistry which is looking for precision over accuracy and relative anomalies to background.</li> <li>Field Duplicates were taken every 10<sup>th</sup> hole, one at interface and one at refusal (Upto 16m deep)</li> <li>Samples are sieved to 1mm into Chip trays (Typically the interface sample only)</li> <li>Sample size is considered appropriate for Auger Geochemistry</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>Phase 1 &amp; 2 - 2kg samples were submitted to Intertek Laboratory in Perth for Sample preparation (Code – SP03) followed by a 4 Acid Digest with a ICP – MS finish. (4A/MS48).</li> <li>Gold, Platinum and Palladium were analysed by Fire Assay (FA50/OES) prepared</li> <li>Field Duplicates were undertaken every 10m and standard laboratory QAQC from Intertek was undertaken including certified standards and blanks.</li> <li>Phase 3 infill samples to 200m x 100m were analysed by a Vanta pXRF. Comparisons were made spatially of each targets between 4 acid digest and pXRF with each element assessed for confidence given lower LOD provided from pXRF. All prior targets were infilled successfully to high confidence</li> </ul>
Verification of sampling and assaying	Sampling protocol was prepared by the Sahara Competent Person and undertaken by Sahara field technicians personnel.
Location of data points	<ul> <li>Collars were surveyed by handheld GPS to ~5m accuracy in XY.</li> <li>Grid system used was GDA94/MGA94 Zone 51</li> <li>This is sufficient accuracy for grass roots exploration</li> </ul>
Data spacing and distribution	Lines were infilled to 200m apart and holes drilled 100m to 200m apart along lines.
Orientation of data in relation to geological structure	<ul> <li>Vertical holes appropriate for interface geochemistry</li> <li>Lines were planned East – West which is perpendicular to interpreted geology and considered appropriate</li> </ul>
Sample security	Samples taken by Sahara field personnel to Sahara warehouse in Perth and dispatched to commercial laboratory and/or analysed by pXRF in Sahara warehouse
Audits or reviews	No independent audits or reviews of sampling techniques and data has been conducted.



# **Section 2 Reporting of Exploration Results**

(Criteria listed i	n the preceding	section also ap	pply to this	section.)
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Criteria	Commentary
Mineral tenement and land tenure status	Tenure covered includes WYX 100% owned E36/1010, E36/1011, E36/1028, E36/1065 and E36/1066 and Fleet Street Holdings Farm-in agreement for E36/1020, E 57/1235, E 36/1081; E36/1046 •
Exploration done by other parties	<ul> <li>2010 – 2014 - BHP/Nickel West in 2010 to 2014 with 20 aircore holes for 944m completed. BHP Also completed fixed look electromagnetics (FLEM).</li> <li>2014 to 2021 - St George Mining completed 4 RC holes and FLEM &amp; Moving Loop EM (MLEM) surveys.</li> </ul>
Geology	<ul> <li>The Bulga Project is located on the western edge of the Kalgoorlie Terrane. The project straddles the lda Fault, a significant Craton scale structure that marks the boundary between the Kalgoorlie Terrane (and Eastern Goldfields Superterrane) to the east and the Youanmi Terrane to the west. The Bulga Project geology comprises mainly granite with minor greenstone rocks, adjacent to the Mt Ida fault. The project is considered prospective for :-</li> <li>Li bearing Pegmatites being target are considered to occur in swarms in proximity to granite and greenstone lithologies. No pegmatites are recorded in the region but the region has extensive sand cover.</li> <li>Layered intrusions associated with Ni-Cu-PGE are potentially located in the project as defined by magnetic data and nearology of projects along strike.</li> <li>Gold is prospective in the region</li> </ul>
Drill hole Information	Auger holes are all vertical and positions and intercepts are provided in the figures in this release.
Data aggregation methods	Data has been analysed using the IoGAS software by the CP along with a 3 <sup>rd</sup> party specialist geochemist
Relationship between mineralisation widths and intercept lengths	No new drilling results have been reported
Diagrams	See table, map, photos and diagrams in this report
Balanced reporting	All Results are reported
Other substantive exploration data	No other public available information is available
Further work	<ul> <li>Ground truthing anomalies will continue with mapping and grab sampling.</li> <li>Infill geochemistry will be assessed with ongoing analysis being undertaken by a specialist Geochemistry along with potential to undertake and airborne EM survey along with Aircore and RC drilling to test anomalies defined.</li> </ul>

