

## ASX ANNOUNCEMENT

Date: 16 April 2021  
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### UPDATE ON WESTERN AUSTRALIAN PROJECTS: ARKUN-BEAU Ni-Cu-PGE AND DOONIA Au

- **Arkun Project**

Located along trend from the Julimar discovery in the emerging nickel-copper-PGE province of SW Western Australia.

Field checking and interpretation of magnetic data indicates mafic and ultramafic rocks are likely to be far more abundant than shown on regional geological maps.

Limited first pass rock chip samples return low level PGE's in several places throughout the project area which is very encouraging.

Interpretation of the bedrock geology to identify target areas for detailed follow up work is in progress.

Interpretation of the surface geology indicates that the majority of the project is amenable to soil geochemistry which will help in the rapid identification of drill targets.

- **Beau Project.**

Tenement recently granted and close to the major Arkun project.

Significant untested magnetic anomaly of similar size and shape to Gonneville (Chalice Gold NL) and Newleyine (Mandrake Resources Ltd).

Soil geochemistry survey along gazetted roads to commence in May.

- **Doonia Gold Project:**

Native Title agreement signed with Ngadju Group. Tenement to be granted shortly.

Strong geophysical and geochemical similarities to the recent Burns discovery located 20km west of Doonia.

Statutory approvals process commenced for drilling including heritage surveys and environmental approval.

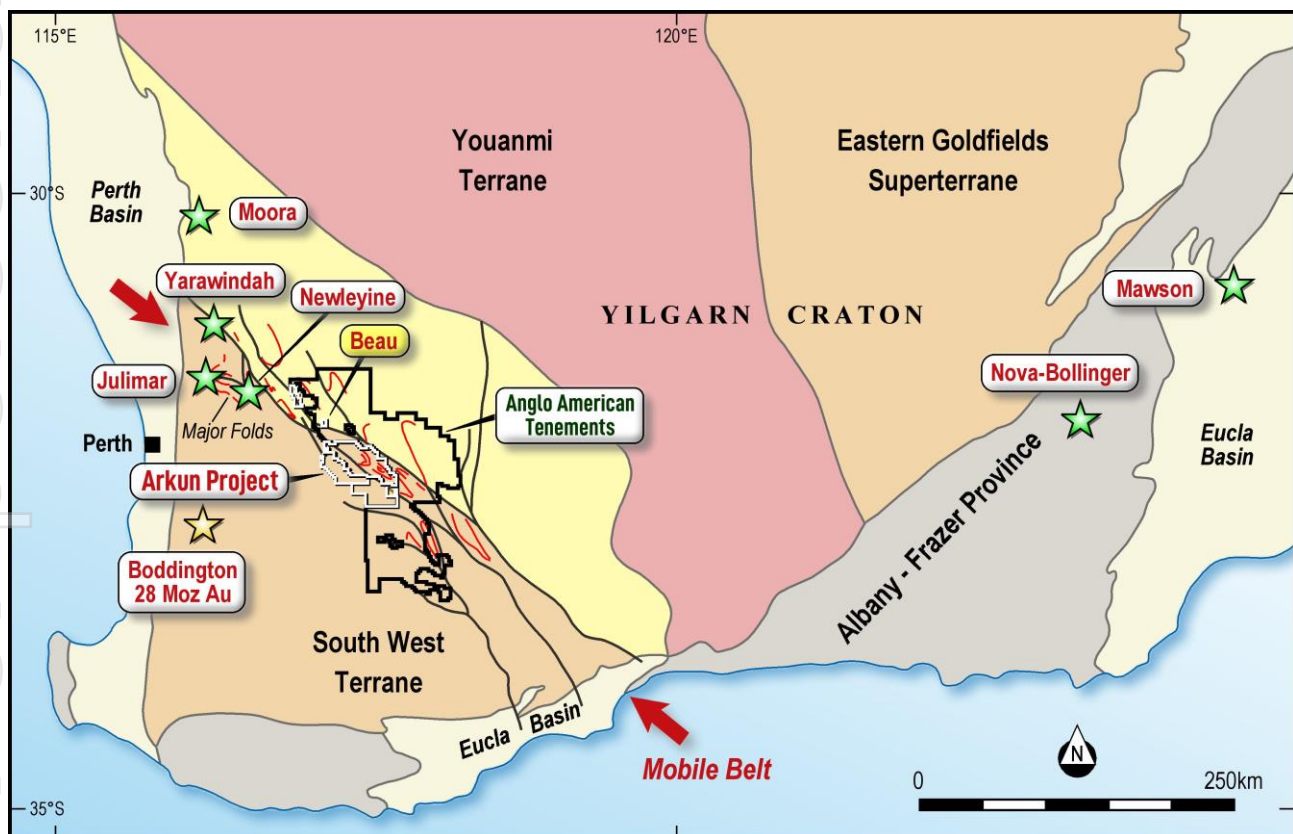
Drilling to commence in Q3-4 following completion of drill programmes at the Apsley copper-gold (on-going) and Broken Hill PGE-copper-nickel projects.

Impact Minerals Limited (ASX:IPT) is pleased to provide the following update on its activities at its Western Australian projects. The projects comprise the Arkun-Beau project area located in the emerging nickel-copper-platinum-metal-group metal province of south west WA and the Doonia gold project located in the Eastern Goldfields province.

## Arkun (100% IPT)

The Arkun Project, which covers about 1,900 square kilometres, is centred between York and Corrigin 130 km east of Perth and was staked following the recent significant PGE discovery at Julimar just 75 km north east of Perth by Chalice Mining NL. (Figure 1 and ASX Release 29<sup>th</sup> May 2020).

Arkun was first identified as an area of anomalous nickel-copper-gold anomalies in publicly available regional geochemistry data sets. A subsequent interpretation of regional magnetic data by Impact identified the area as lying within a major deformation zone or **mobile belt** that trends NW-SE from the Moora-Julimar-Yarawindah area through Arkun and which may contain deformed and metamorphosed equivalents of those rocks (Figure 1: ASX:IPT Release 29<sup>th</sup> May 2020).



**Figure 1.** Location and Regional Geology of the Arkun Project and showing key nickel-copper-PGE deposits and recent discoveries.

The mobile belt is about 500 km long and up to 30 km wide, and is of a scale that suggests it may mark an ancient terrane boundary or proto-craton margin. Such geological provinces (of varying ages) are well known around the world as prospective terranes for hosting major nickel-copper-PGE deposits with examples such as Nova-Bollinger and Mawson (Proterozoic age – Figure 1), the Thomson fold belt in Canada and the recent discoveries at Yarawindah and Julimar in Western Australia.

Anglo American plc, one of the world's leading mining companies lodged Exploration Licence applications covering a vast area of some 10,130 square kilometres surrounding three sides of the Arkun project on the afternoon of 29<sup>th</sup> May 2020 a few hours after Impact made its first announcement on Arkun (Figure 1 and ASX Release 10<sup>th</sup> June 2020).

Impact has completed some early stage work on the project including reconnaissance field checking and rock chip sampling along a few gazetted roads. In addition, an interpretation of the surface geology to assess the effectiveness of the previous soil geochemistry surveys has been completed and this will help to determine the best surface geochemistry technique to use for follow up surveys. In addition, a detailed interpretation of the bedrock geology from the regional magnetic data is close to completion.

This work has shown the following:

1. It is likely that mafic and ultramafic rocks are more widespread than shown on the regional Geological Survey maps.
2. The mafic and ultramafic rocks contain low levels of PGE up to 25 to 30 ppb platinum+palladium+gold in rock chip samples in at least several places. The assay values are not considered material but do attest to the significant prospectivity of the area.
3. Most of the project area is covered by residual soils and ferricrete with limited transported cover. Accordingly, it is likely that the previous regional soil geochemistry surveys were moderately effective and that conventional soil geochemistry techniques can be used for follow up soil sampling. This will allow quick assessments of target areas to be made.

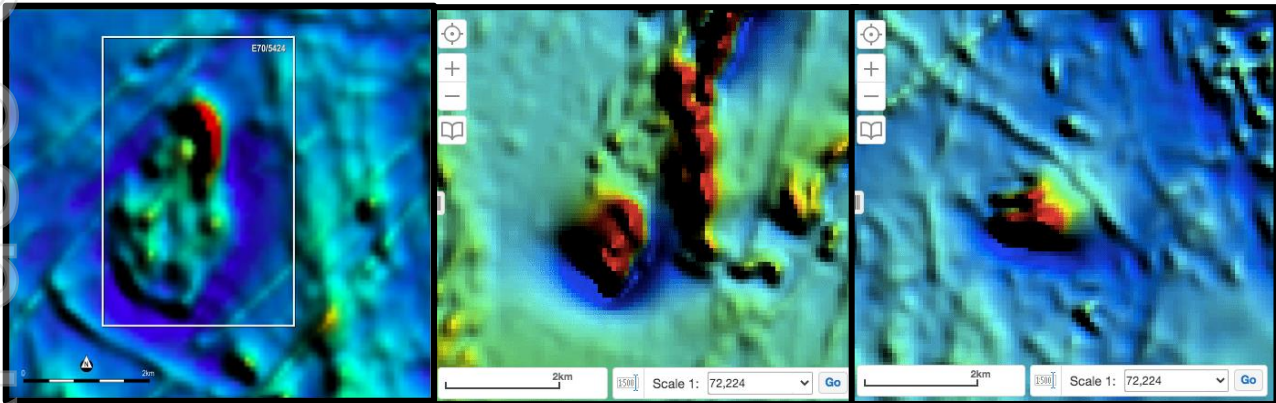
The interpretation of the regional magnetic data will be used to identify priority areas for follow up work which will include detailed field checking and follow up soil geochemistry surveys together with ground geophysical surveys where appropriate. The soil geochemistry surveys will commence in May.

## **The Beau Project**

The Beau Project comprises one exploration licence, EL70/5424, which covers 16 square kilometres and is located about 15 km north of Impact's Arkun nickel-copper-platinum group element (PGE) project close to Perth in Western Australia. It lies completely within the exploration licence applications owned by Anglo American plc (Figure 1).

The project covers a prominent oval magnetic anomaly 3,000 metres by 1,500 metres in dimension that lies under shallow cover (likely to be less than 30 metres) and which has never been explored (Figure 2).

The anomaly is of a similar size and geometry to the Gonneville Intrusion, host to the significant PGE-copper-nickel mineralisation discovered recently at Julimar (Chalice Mining NL) and also the Newleyine intrusion and also proven to host nickel-copper-PGE mineralisation (Mandrake Resources Limited) (Figures 1 and 2).



**Figure 2.** Image of regional magnetic data showing the magnetic anomalies at Beau (left), Gonneville (Chalice Gold centre) and Newleyine (right) for comparison.

The tenement has recently been granted and is now a priority area for follow up work. A soil geochemical survey along gazetted roads that cross the magnetic anomaly will be undertaken in May.

## **Doonia (IPT 80%)**

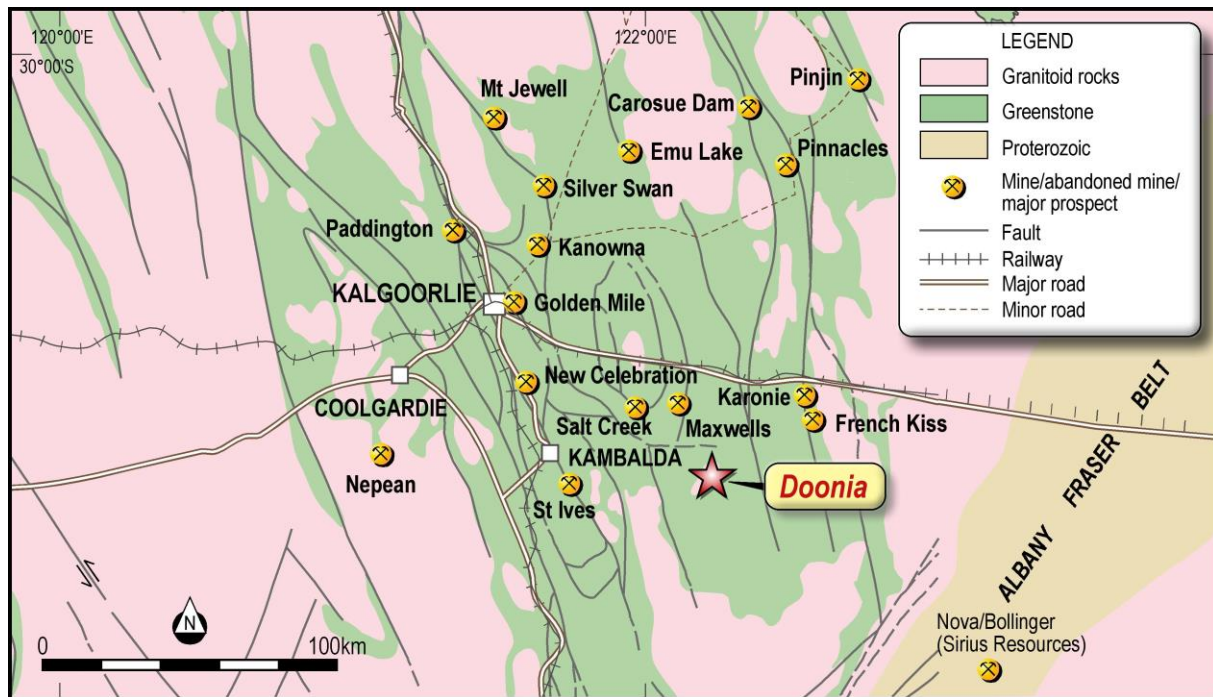
Impact's 80% owned Doonia gold project is located 75 kilometres east of the world class St Ives gold mining centre in Western Australia and was identified following a review of the Eastern Goldfields for intrusion-hosted gold deposits in light of the recent major Hemi discovery, hosted by felsic intrusions, in the Pilbara (ASX:DEG) (Figure 3 and ASX Release 17<sup>th</sup> November 2020).

The Native Title agreement with the Ngadjju People for the Doonia licence was signed recently and final grant of the tenement is due shortly. Impact thanks the Ngadjju People for the straightforward manner in which the agreement was reached and the Company looks forward to working with them.

Specific drill sites have now been identified at Doonia and heritage surveys are currently being organised with a view to drilling in Q3-Q4 this year.

In addition, an interpretation of the surface geology and magnetic data over the project has been completed.





**Figure 3.** Location of the Doonia Project in the Eastern Goldfields of Western Australia.

The Doonia project has been further enhanced by the recent discovery of significant gold-copper mineralisation hosted by a magnetic intrusion at the Burns project located just 20 km west of Doonia by Lefroy Exploration Limited (ASX:LEX, Figure 3 and ASX Release 4<sup>th</sup> March 2021).

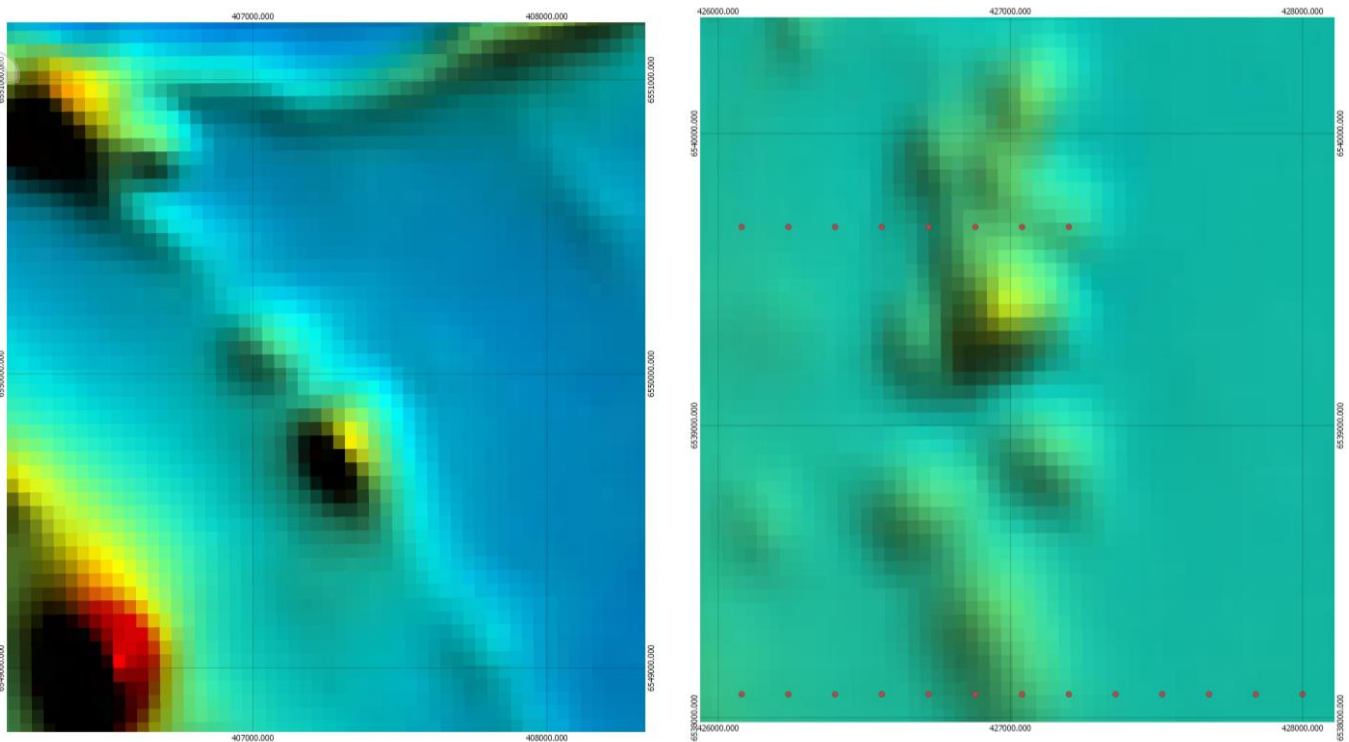
The Burns project area was first identified in the same regional exploration programme by WMC Resources Limited that identified Doonia. Both areas were subject to broad spaced aircore drilling but despite modest gold anomalism being returned in places, further work was not recommended.

The Burns discovery indicates that the drill spacing used by WMC was inadequate for the regolith environment that occurs under and around salt lake environments as previously described by Impact for Doonia (ASX Release 17<sup>th</sup> November 2020).

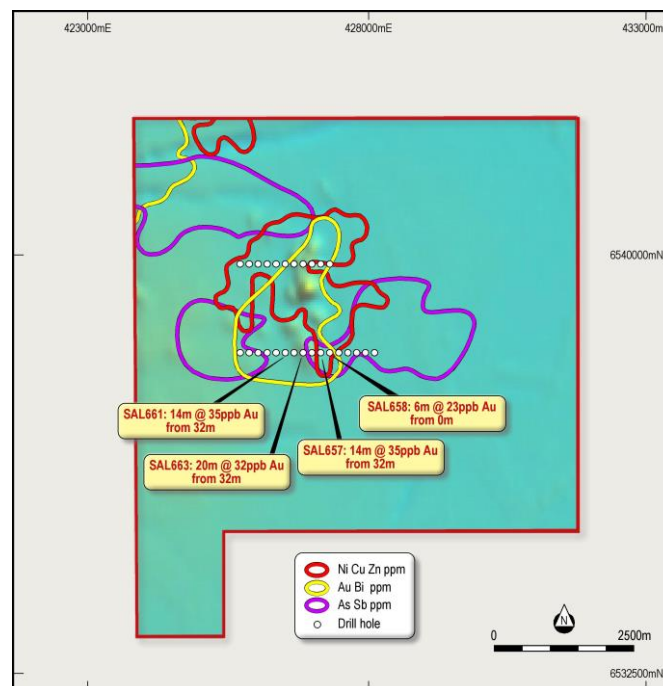
Doonia has a similar geological setting and similar sized modest positive magnetic anomaly to the Burns discovery where the magnetic response is at least in part directly associated with magnetite alteration related to the gold-copper mineralisation (Figure 4). The source of the magnetic anomaly at Doonia is unknown.

In addition, the mineralisation at Burns is characterised by a metal association of copper-molybdenum-silver-bismuth-tellurium-arsenic. Impact has identified a previously unrecognised distinct and coherent zoned soil geochemical anomaly centred over the numerous small magnetic anomalies visible in the regional magnetic data and which comprises a core area of gold+bismuth 2,500 metres long and up to 1,000 metres wide surrounded by a larger halo of arsenic+antimony (Figures 4 and 5).

These results are interpreted to be potentially related to a gold-bismuth mineralised system associated with a differentiated mafic to felsic intrusion. The system covers a large area and is a priority drill target.



**Figure 4.** Regional magnetic data over the Burns prospect (L) and Doonia project (R) at the same scale.



**Figure 5.** Image of the regional magnetic data showing the zoned soil geochemistry pattern with a core of gold+bismuth and an outer halo of arsenic+antimony which extends over several square kilometres centred over numerous magnetic anomalies. The nickel+copper+zinc anomaly is well developed over the magnetic anomalies and may reflect a buried intrusion.

**Dr Mike Jones**  
Managing Director

*The review of exploration activities and results contained in this report is based on information compiled by Dr Mike Jones, a Member of the Australian Institute of Geoscientists. He is a director of the company and works for Impact Minerals Limited. He has sufficient experience which is relevant to the style of mineralisation and types of deposits 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 (the JORC Code). Mike Jones has consented to the inclusion in the report of the matters based on his information in the form and context in which it appears.*