

## ASX ANNOUNCEMENT

Date: 2 May 2022

### MARCH 2022 QUARTERLY REPORT

#### 1. BROKEN HILL PROJECT (IPT 100%-IGO earning 75%)

- A large strong EM conductor 420 m by 85 m in dimension identified 350 m below surface at the Platinum Springs prospect in joint venture with IGO.
- The conductor is about 1,000 metres along trend from, and with similar conductance to, a narrow drill intercept of massive sulphide which returned: **0.6 metres at 11.5 g/t platinum, 25.6 g/t palladium, 1.4 g/t gold, 7.6% copper, 7.4% nickel and 44.3 g/t silver from 57.1 metres down hole**
- The conductor lies within a possible feeder zone for the extensively mineralised nine-kilometre long Moorkai Trend and is a prime drill target.

#### 2. HOPETOUN PROJECT (IPT earning 80%)

- Diamond drilling of the Top Knotch and Silverstar copper-gold-silver targets commenced and still in progress.
- The Hopetoun Project interpreted to cover an interpreted extension of the Ravensthorpe greenstone belt which contains multiple mines and deposits of lithium, nickel and copper-gold.

#### 3. JUMBO (IPT earning 80%)

- High priority targets for nickel-copper-Platinum Group Elements (PGM) (3), lithium-caesium-tantalum (LCT) pegmatites (3), Rare Earth Metals (REE) and extensive areas of anomalous rubidium identified in a reconnaissance soil geochemistry survey.
- The soil anomalies occur over significant areas of at least several hundred metres. Further anomalies are expected with more comprehensive coverage of the project area.
- Very high success rate of anomaly identification targets validates Impact's targeting methodology working in conjunction with its joint venture partner.

#### 4. OTHER PROJECTS

##### Arkun Ni-Cu-PGM, WA (IPT 100%)

- Land Access Negotiations in progress with about 30 land holders.
- Follow up soil geochemistry completed at Beau. Results due in May.

##### Narryer-Dalgaranga

- No work done.

#### 5. CORPORATE

- Placement completed raising \$2 million before costs.
- \$1.7 million cash as at 31st March 2022

#### Market Cap

A\$26 m (0.012 p/s)

#### Issued Capital

2,190,461,586

#### Directors

**Peter Unsworth**  
Chairman

**Dr. Michael Jones**  
Managing Director

**Paul Ingram**  
Non-Executive Director

**Dr. Frank Bierlein**  
Non-Executive Director

**Bernard Crawford**  
Company Secretary

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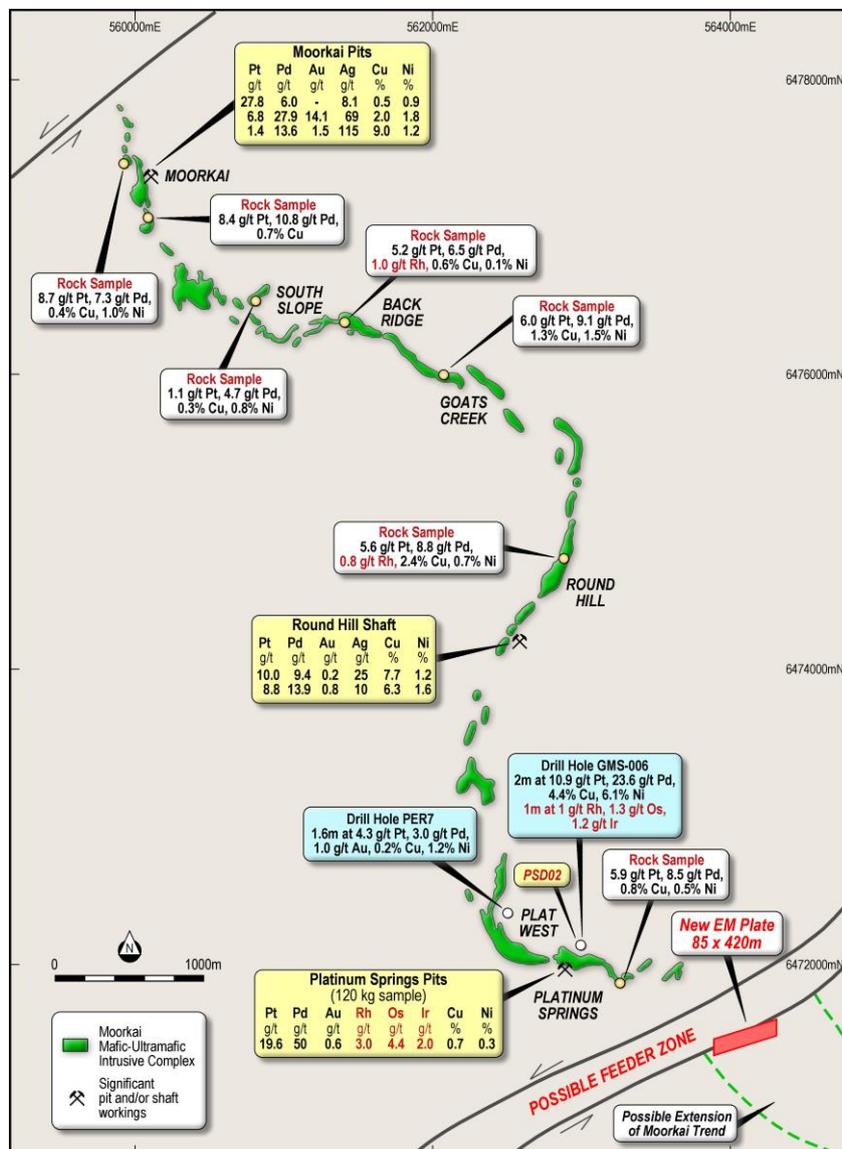
[www.impactminerals.com.au](http://www.impactminerals.com.au)

## 1. BROKEN HILL PROJECT

A significant electromagnetic (EM) conductor was identified in the extensive ground EM survey that is still in progress at the company's Broken Hill Project in NSW and which is being funded by joint venture partner IGO Limited (ASX:IGO) (Figure 1 and ASX Releases 9<sup>th</sup> November 2021 and 27<sup>th</sup> January 2022).

The new EM conductor has been modelled to have a high conductance of about 8,000 siemens and with the top edge of the modelled EM plate centred at a depth of about 350 metres below surface. It has a length of about 420 metres and extends for at least 85 metres down dip moderately to the south.

The conductor is considered prospective for massive sulphide mineralisation based on its discrete dimensions and modelled high conductance. It is a priority target for follow-up work.



**Figure 1.** Location of newly identified EM plate in relation to the 9 km long Moorkai Trend with previous rock chip and drill results (pre-Impact work).

The EM plate is located approximately 1,000 metres southeast along strike from the main Platinum Springs Prospect where previous drilling by Impact returned a narrow intercept of high-grade massive sulphide mineralisation in PSD002 (Figure 1 and ASX Release 23<sup>rd</sup> February 2016) that returned:

**0.6 metres at 11.5 g/t platinum, 25.6 g/t palladium, 1.4 g/t gold, 7.6% copper, 7.4% nickel, 44.3 g/t silver, 0.16% cobalt, 1.3 g/t rhodium, 1.7 g/t iridium, 2.0 g/t osmium and 0.8 g/t ruthenium from 57.1 metres down hole (Figure 2).**

A down hole EM survey of PSD002 indicated the massive sulphide had a high conductance greater than 5,000 siemens and similar to that modelled for the new conductor (Figure 2).



**Figure 2.** High grade massive sulphide from PSD02. The sulphide has a conductance in excess of 5,000 siemens and similar to that modelled for the new conductor.

## 1.1 About the Platinum Springs Prospect and Moorkai Trend

The Platinum Springs Prospect lies at the southern end of the Moorkai Trend, a nine kilometre long ultramafic to mafic dyke and chonolith complex that is very poorly explored (Figures 1 and 3).

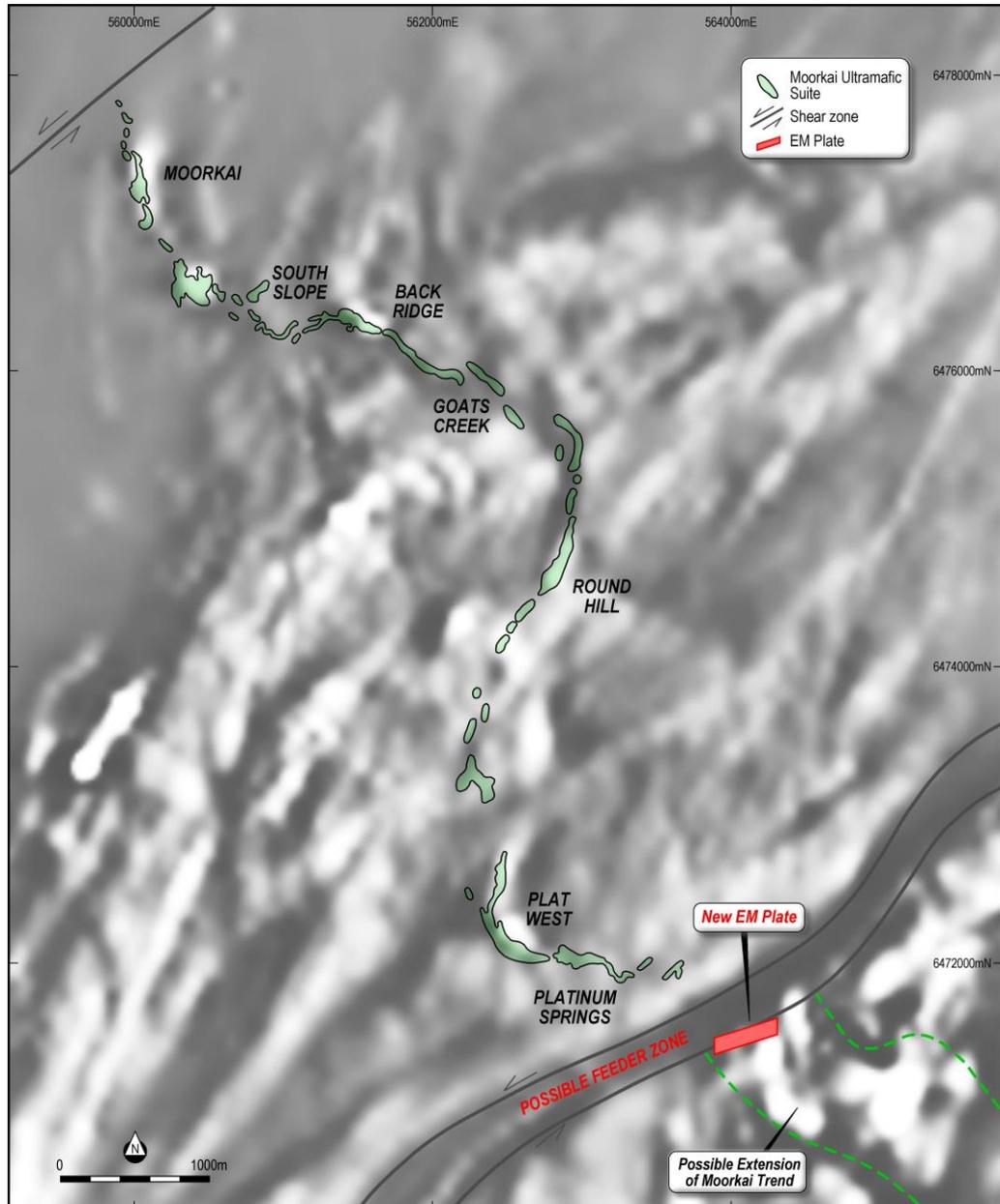
Although high grade rock chips occur along the entire Trend, only the southern end has been explored in detail but with limited success prior to Impact's work in the area. This is because the mineralisation appeared to be discontinuous and erratic and the controls on its distribution were poorly understood.

Work by Impact, including extensive drilling, identified high grades of nickel-copper-PGM's in a channel-like structure at the base of the ultramafic unit and which has yet to be followed up (ASX Release 9<sup>th</sup> March 2021).

The channel-like structure was identified in close-spaced drilling using Impact's proprietary ratio for PGM mineralisation and was the first coherent zone of mineralisation defined in the area in over 30 years of exploration. This work has led to a new geological framework within which to understand the Moorkai Trend (ASX Release 9<sup>th</sup> March 2021).

The EM conductor is located within a major structure to the southeast of the main outcrops of the Moorkai intrusive complex (Figures 1 and 3). It is possible that the Moorkai Trend formed in a large (now folded) perpendicular structure between two major shear zone structures which bound the intrusive complex (Figure 3).

These shear zones may be feeder zones to the Moorkai Trend and also raise the possibility that the Trend continues to the south to southeast where similar strongly magnetic rocks occur under thin cover (Figure 3).



**Figure 3.** 1VD mag image showing location of new EM plate in relation to the Moorkai intrusive trend with interpreted feeder zone.

## 1.2 The Importance of Feeder Zones

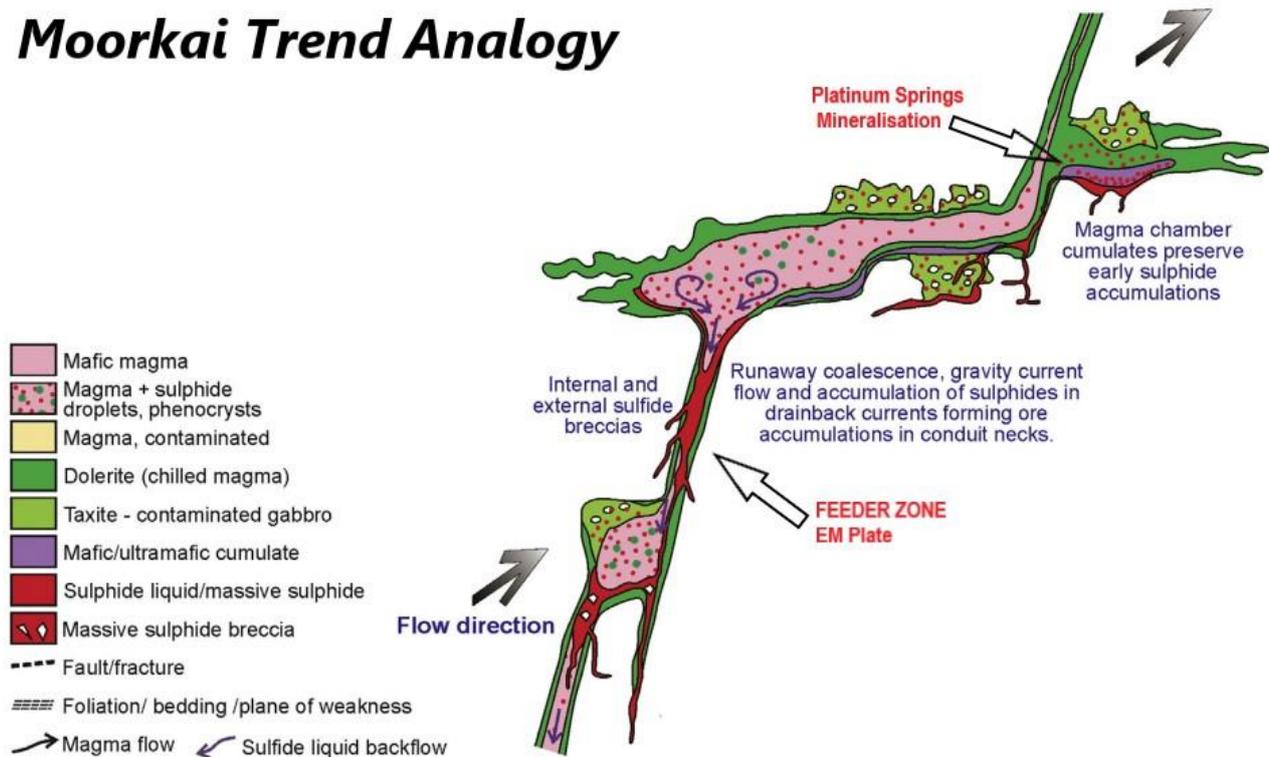
Recently published scientific work, and by the CSIRO in particular, has shown that many chonoliths and other steeply dipping mafic-ultramafic intrusions that host significant massive sulphide deposits, commonly have mineralisation within conduits that act as feeder zones to the entire intrusive complex.

These feeder zones are priority target areas because the research work has also shown that within intrusions with strong vertical magma flow, massive sulphides are often deposited as the magma slows its

ascent and drains back down into the main conduit. This “back flow” can cause deposition of massive sulphides in the feeder zone as proposed in a very elegant model for chonolith development developed by Professor Steve Barnes and co-workers at CSIRO (Figure 4).

Impact has been using this model to help drive its exploration programme at Broken Hill (ASX Release 21<sup>st</sup> January 2021). Accordingly, the Company views the new conductor identified by IGO as a compelling target.

## Moorkai Trend Analogy



**Figure 4.** Model for the formation of nickel-copper-PGM deposits within evolving magma conduits including chonoliths. Note the massive sulphide within the feeder zones/conduit necks (from Barnes, S.J. et al. Ore Geology Reviews Volume 76, July 2016, Pages 296-316)

### 1.3 Next Steps

The new EM conductor is considered a prospective target for massive nickel sulphide mineralisation due to its strong conductance and geometry, as well as its proximity to a large (possible feeder) structure and previous massive sulphide intersections.

It is hoped that further conductors will be identified as the survey, which is expected to take about three months to complete, progresses across the Impact-IGO joint venture tenements.

IGO has indicated that it will wait until the end of the survey to assess any conductors identified for further work.

#### **1.4 About the Broken Hill Joint Venture**

IGO has the right to earn an interest EL7390 and EL8234, two of the 11 tenements that comprise Impact's holdings around Broken Hill, as follows:

1. IGO can spend \$6 million over four years to earn a 51% interest in the project (Stage 1 earn in). An unincorporated joint venture between IGO and Impact will be formed at this time.
2. IGO can spend a further \$12 million over a further four years to earn a 75% interest in the project (Stage 2 earn in).
3. After Stage 2 is complete, the parties can elect to contribute pro-rata or dilute. If one party's interest dilutes to less than 10% then its interest will convert to a 1% Net Smelter Royalty.
4. If, after completing Stage 1, IGO elects not to proceed to Stage 2 or, during Stage 2 does not meet its expenditure requirements, IGO will revert to a 49% interest in the project giving Impact a majority 51% interest.
5. A minimum expenditure of \$500,000 in the first year is required. IGO can withdraw prior to the minimum expenditure being reached by paying the lesser amount of either the balance of unspent minimum expenditure or \$200,000.

The farm-in applies to only two tenements, EL7390 and EL8234, of Impact's extensive tenement holdings at Broken Hill. The remaining tenements, which are all 100% owned by Impact, are considered by Impact to be one of the most under explored parts of Australia given the long history of mining at the nearby Broken Hill deposit itself.

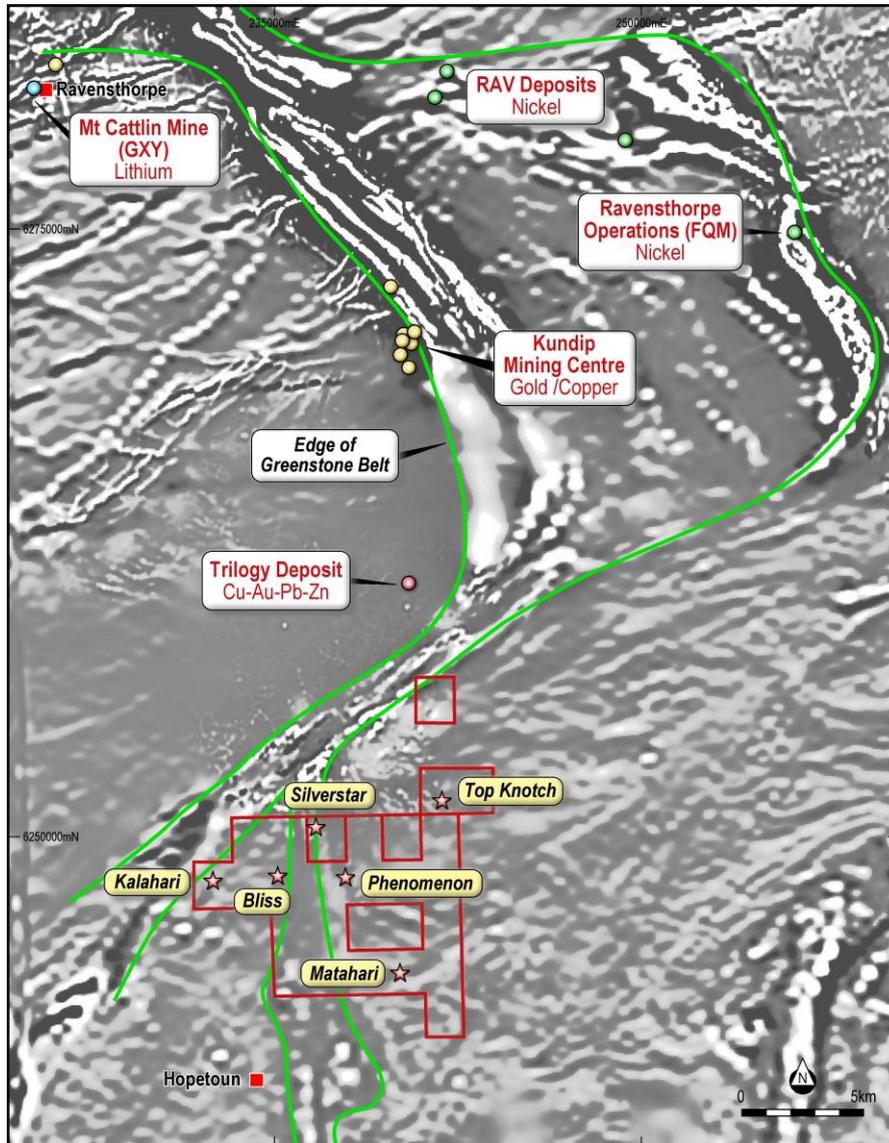
There has been limited exploration for the best part of 30 years in the area and there is significant potential on this ground for the discovery of major deposits of silver-lead-zinc and in particular copper. The company is considering its options for progressing exploration on these tenements.

#### **2. HOPETOON (Impact earning 80%)**

The Hopetoun project comprises two tenements (E74/563 and E74/679) covering 75 km<sup>2</sup> and is located just north of the town of Hopetoun, close to the Ravensthorpe mining centre (Figure 5). The project covers part of the Albany Fraser Mobile Belt which is considered prospective for a variety of mineral deposits. The project contains at least five drill ready targets for base and precious metals of which two are fully permitted.

A diamond drill programme was commenced during the Quarter to test the Top Knotch and Silverstar copper-gold-silver prospects.

At the Top Knotch copper-gold Prospect a previous reverse circulation (RC) drill programme intersected four metres of modest pyrite at the very end of the deepest drill hole, and within a zone of extensive potassic alteration with variable low level copper that is at least 75 metres thick (Figure 6).

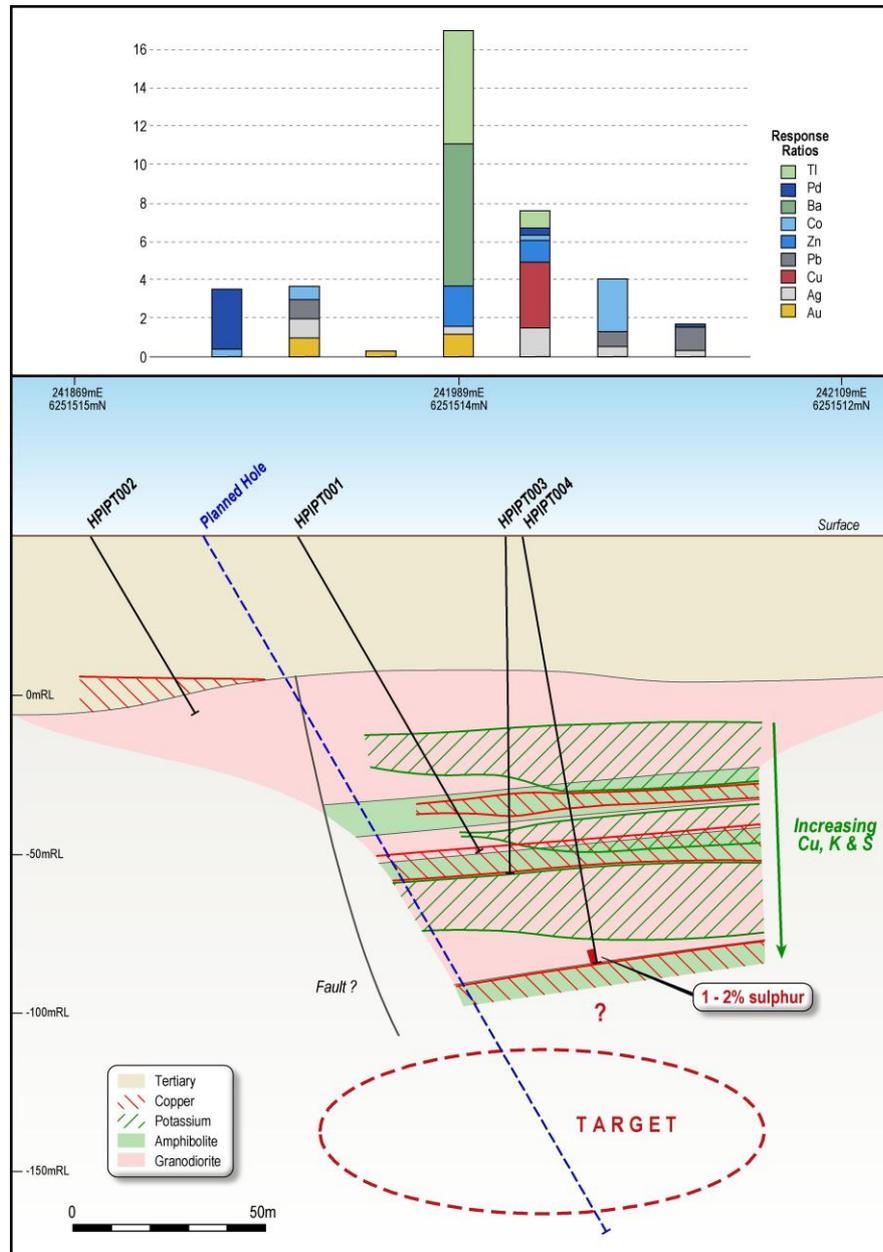


**Figure 5.** Image of airborne magnetic data over the Ravensthorpe-Hopetoun area showing the interpreted extension of the Ravensthorpe greenstone belt south of the Jerdacuttup Fault.

The alteration minerals (K-feldspar and biotite), copper values (up to 250 ppm as measured with a hand held XRF instrument) and sulphide intensity all increase down hole and are open at depth and along trend (ASX Release 22<sup>nd</sup> December 2022 – assays pending).

The target could not be tested further because of extremely difficult drilling conditions for the RC drill rig in the transported overburden (Figure 6 and ASX Release 21<sup>st</sup> December 2021). It is anticipated that the diamond drill rig will be able to penetrate this cover sequence.

The Top Knotch target was identified in proprietary geophysical data and ionic leach soil geochemistry data by Impact’s joint venture partner. The ionic leach soil geochemistry data highlights a weak to modest copper-gold-silver anomaly with stronger responses in the pathfinder elements cobalt-barium-thallium (Figure 6).



**Figure 6.** Cross section from the Top Knotch Prospect showing the soil geochemistry responses and highlighting the sub-horizontal zones of alteration and copper which are increasing in intensity down hole. The location of the diamond drill hole is also shown.

The Hopetoun project is one of four recently announced joint venture projects where Impact is earning an 80% interest (Figure 7 and ASX Release 8<sup>th</sup> December 2021).

The project contains six drill ready targets of which two, Top Knotch and Silverstar, are currently being drill tested (Figure 5). Statutory approvals are being sought for the other targets, and these are likely to be drilled later in the year.

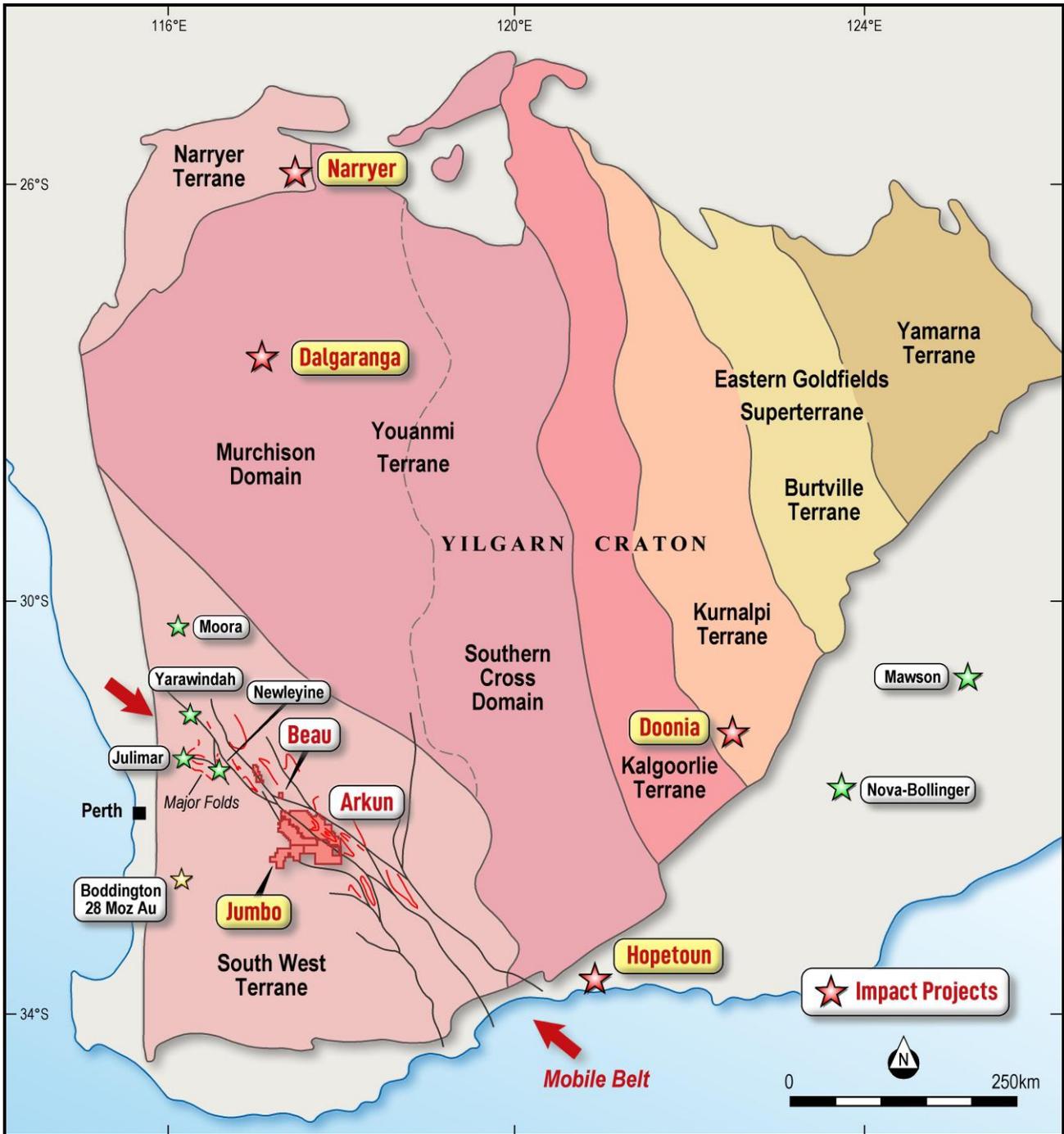


Figure 7. Location of Impact's projects in Western Australia with the new projects shown in yellow.

### 3. JUMBO JOINT VENTURE PROJECT (Impact earning 80%)

The Jumbo joint venture project comprises one tenement (E70/5852) covering 360 km<sup>2</sup> and is adjacent to Impact’s Arkun project centred about 150 km south east of Perth (Figure 7).

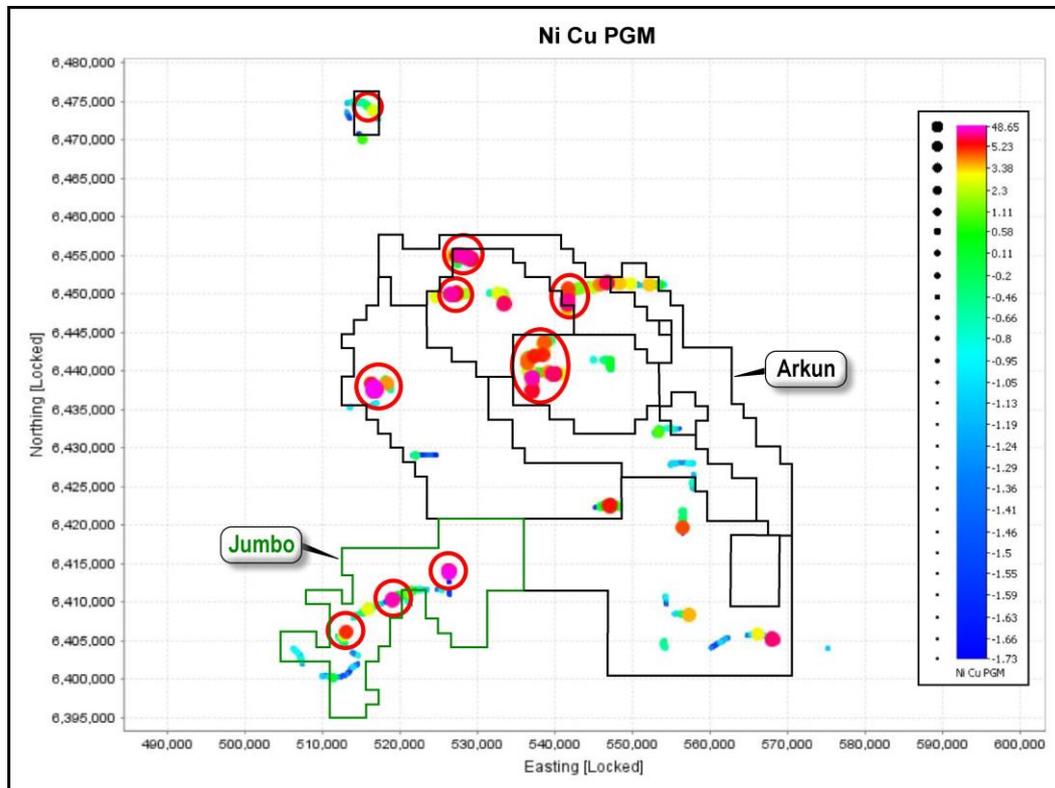
The project contains many of the same geological features and extensions of the similar structures as those considered prospective at Arkun and is therefore a natural addition to Impact’s large strategic ground holding in this very under explored part of Western Australia.

During the Quarter significant high priority targets for a wide range of battery and strategic metals were identified in new soil geochemistry results from Jumbo.

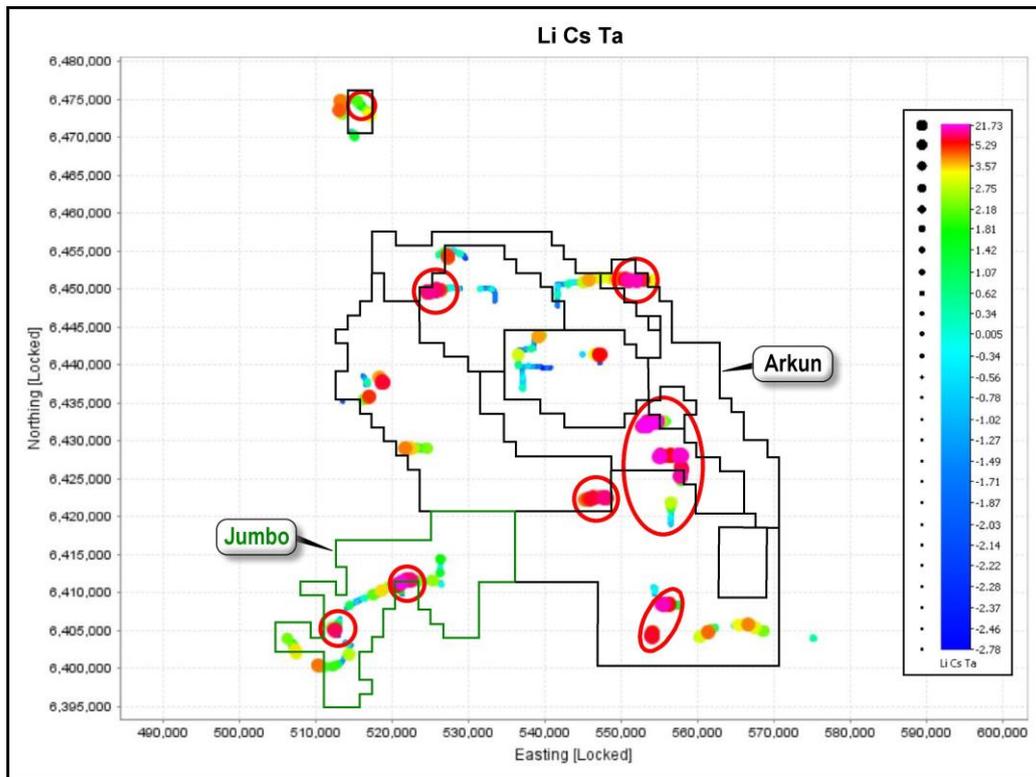
The soil geochemistry survey was limited to one major access road across the project area and samples were taken mostly at about 100 metre spacings at the side of the road over a distance of about 30 kilometres (Figures 8 – 11). This length of traverse has allowed samples to be taken in areas of “background” in order to establish the relative anomalism of the various metals in the target above background.

The traverse was designed to get as close as possible to first pass geophysical anomalies identified by Impact’s joint venture partner.

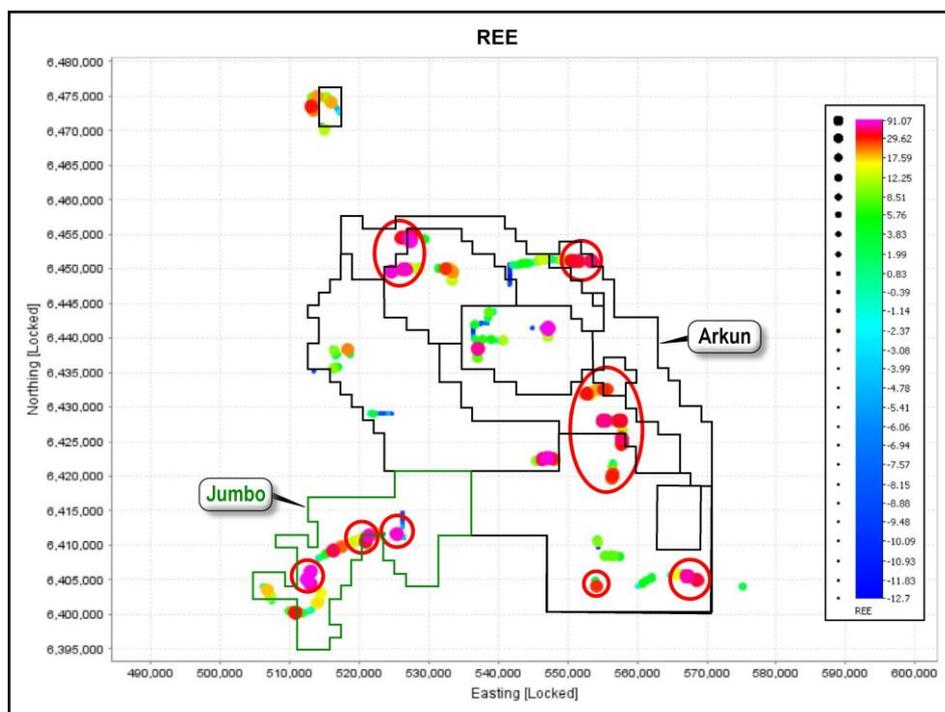
The results of the soil geochemistry survey (combined with the Arkun soil results) are presented as additive Z scores in Figures 8 to 11.



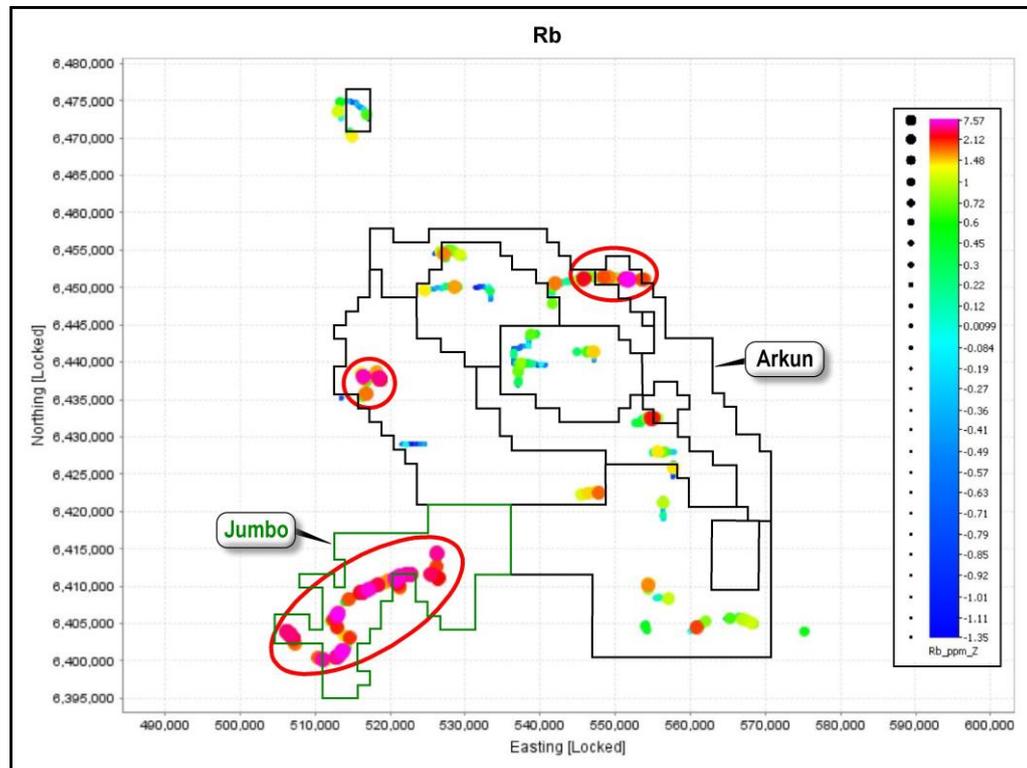
**Figure 8.** Additive Z scores for Ni-Cu-Pd-Pt-Au across the Jumbo-Arkun project area. Nine priority areas for follow-up work are highlighted including three new ones at Jumbo. Other areas of elevated response are also evident including the Beau target to the north.



**Figure 9.** Additive Z scores for Li-Cs-Ta across the Jumbo-Arkun project area. Eight priority areas for follow up work are highlighted including two new areas at Jumbo. Other areas of elevated response are also evident throughout the project area which will also require follow-up work.



**Figure 10.** Additive Z scores for all REE across the Jumbo-Arkun project area. Seven priority areas for follow up work are highlighted including three new areas at Jumbo. Note that there several other areas with strong responses within the Jumbo project which will also require follow-up work.



**Figure 11.** Rubidium assay values across the Jumbo-Arkun project area. The Jumbo project stands out as a very elevated area for rubidium compared to most of the Arkun project. This may reflect a higher background for rubidium in this area and therefore may be more prospective for this valuable alkali metal

New targets have been identified at Jumbo as follows:

**Nickel-copper-Platinum Group Elements-Gold** (Figure 8): three new priority targets identified. The eastern most target has a significant gold-dominant response, and which covers an area of several hundred metres across trend.

**Lithium-caesium-tantalum** (Figure 9): two new priority targets identified with several lower priority areas also warranting follow up. The two priority targets are at least a few hundred metres wide.

**Rare Earth Elements** (Figure 10): three new priority targets identified with numerous other lower priority areas also warranting follow up.

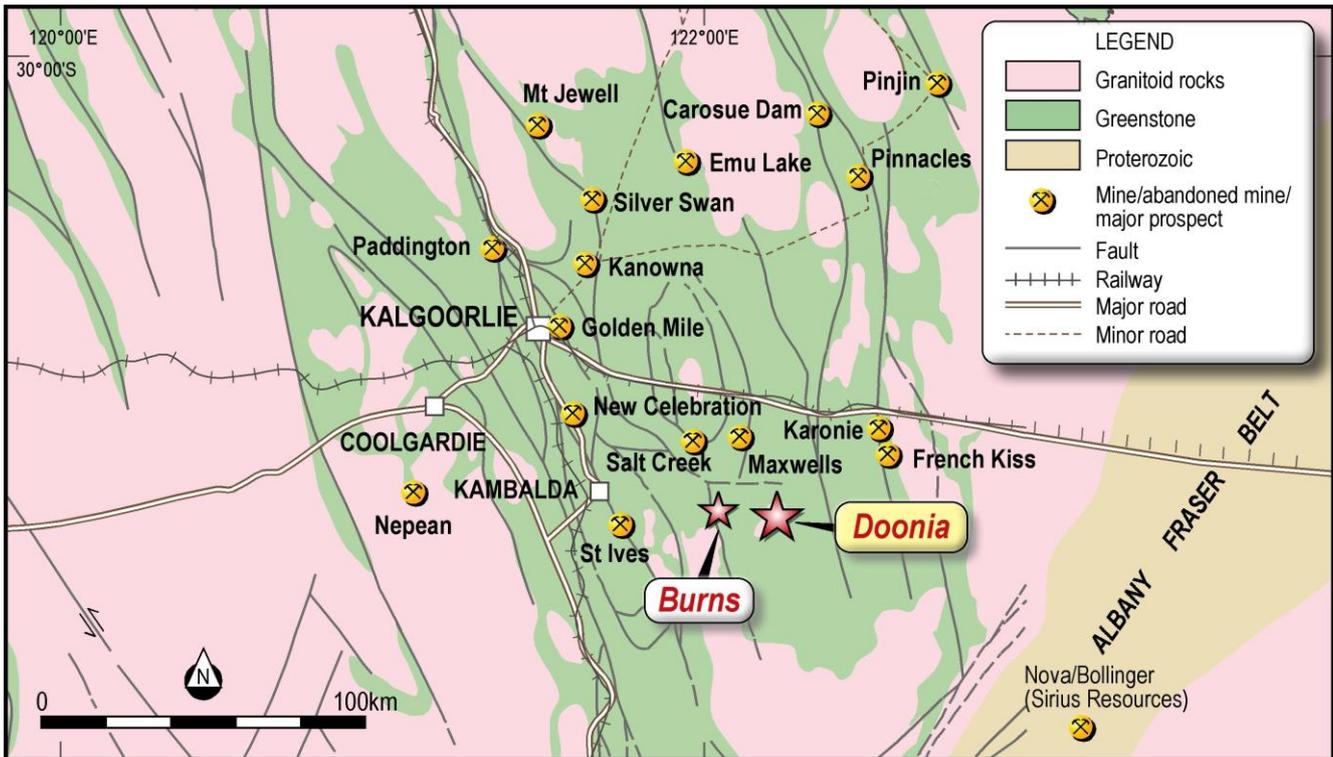
**Rubidium** (Figure 11): the entire soil geochemistry traverse stands out as being elevated in rubidium, in particular in comparison with Arkun.

The large area covered by elevated REE and rubidium results suggests that the Jumbo area may be underlain by extensive areas of granitoid and pegmatite rocks that are enriched in these metals compared to Arkun. This is encouraging for future exploration.

First pass follow-up field checking and sampling will start next Quarter with the aim of prioritising areas for more detailed soil geochemistry and ground geophysics. Land access agreements will be required with relevant landowners and this process will also be commenced.

#### 4. DOONIA

At the 80% owned **Doonia Gold Project** located 30 km west of the recent Burns discovery by Lefroy Exploration Limited (ASX:LEX) (Figure 12) a reverse circulation drill programme was completed during the Quarter to test several soil geochemistry and geophysical targets.



**Figure 12.** Location of the Doonia Project in the Eastern Goldfields of Western Australia.

The principal target is a significant 2.5 km by 1 km sized gold-bismuth soil geochemistry anomaly that overlies a cluster of isolated magnetic anomalies in the centre of the project area that may represent targets for intrusion related gold similar to Burns where significant gold-copper-magnetite mineralisation is hosted by a magnetic porphyry intrusion (ASX Release 7<sup>th</sup> September 2021).

In addition, several other soil geochemistry and geophysical targets are being tested along an access track in the eastern part of the tenement.

Logistical issues and poor ground condition significantly impaired the drill programme and only six holes out of a planned 12 holes were completed. Assays are expected in May.

One drill hole intersected a pocket of abiogenic gas of unknown thickness and composition at about 100 metres down hole. Abiogenic gas is a common but not widely known phenomenon close to and within many gold and nickel mines as well as along major faults in the Goldfields of Western Australia. Impact is currently undertaking an assessment of the composition of the gas with respect to potential safety issues as well as the possible areal extent of the pocket and its significance.

## **5. OTHER PROJECTS**

### **5.1 Arkun Ni-Cu-PGM, WA (IPT 100%)**

The Arkun Project, which covers about 1,900 km<sup>2</sup>, is centred between York and Corrigin 130 km east of Perth and was staked following the recent significant PGM discovery at Julimar just 75 km north east of Perth by Chalice Mining Ltd (ASX:CHN) (Figure 1 and ASX Release 29<sup>th</sup> May 2020). Impact is one of the larger ground holders in the region.

During the Quarter land access negotiations were significantly progressed with agreements with about 30 land holders to be signed shortly.

A follow up soil geochemistry survey was completed at the Beau prospect with results expected in May 2022.

### **5.2 Narryer and Dalgara Projects (IPT earning 80%).**

No work was completed on these projects this Quarter.

## **6. CORPORATE**

### **Financial Commentary**

The Quarterly Cashflow Report (Appendix 5B) for the current period provides an overview of the Company's financial activities.

Cash exploration expenditure for the period was \$1.2 million. Corporate and other expenditure amounted to \$253,000. The total amount paid to directors of the entity and their associates in the period (item 6.1 of the Appendix 5B) was \$96,000 and includes salary, directors' fees and superannuation.

Cash at March 31<sup>st</sup> was \$1.7 million.

### **Placement**

During the quarter the Company also completed a Placement raising \$2,000,000 (before costs) via the issue of 166,666,667 shares at 1.2 cents per share.

**Dr Michael G Jones**  
**Managing Director**

### ***Competent Persons Statement***

#### ***Exploration Results***

*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). Dr 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.*

*Impact Minerals confirms that it is not aware of any new information or data that materially affects the information included in the previous market announcements referred to and in the case of mineral resource estimates, that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.*

**Tenement Information in accordance with Listing Rule 5.3.3**

Project / Tenement ID	Status	IPT Interest at start of quarter	IPT Interest at end of quarter
<b>Commonwealth, NSW</b>			
EL5874	Granted	100%	100%
EL8212	Granted	100%	100%
EL8252	Granted	100%	100%
EL8504	Granted	100%	100%
EL8505	Granted	100%	100%
EL8632	Disposed	100%	-
<b>Broken Hill, NSW</b>			
EL7390	Granted	100%	100%
EL8234	Granted	100%	100%
EL8636	Granted	100%	100%
EL8674	Granted	100%	100%
EL8609	Granted	100%	100%
EL9036	Granted	100%	100%
EL9037	Granted	100%	100%
EL9115	Granted	100%	100%
EL9294	Granted	100%	100%
ELA6324	Application	-	-
<b>Black Ridge, Qld</b>			
EPM26806	Granted	100%	100%
ML2386	Granted	100%	100%
EPM27571	Granted	100%	100%
EPM27410	Granted	100%	100%
<b>Arkun, WA</b>			
E70/5424	Granted	100%	100%
E70/5430	Granted	100%	100%
E70/5431	Granted	100%	100%
E70/5432	Granted	100%	100%
E70/5433	Granted	100%	100%
E70/5434	Granted	100%	100%
E70/5490	Granted	100%	100%
E70/5504	Granted	100%	100%
E70/5505	Granted	100%	100%
E70/5816	Granted	100%	100%
<b>Doonia, WA</b>			
E15/1790	Granted	80%	80%

Project / Tenement ID	Status	IPT Interest at start of quarter	IPT Interest at end of quarter
<b>Jumbo, WA</b>			
E70/5852	Granted	-	80%
<b>Dalgaranga, WA</b>			
E59/2620	Application	-	80%
<b>Narryer, WA</b>			
E52/3967	Application	-	80%
E52/3985	Application	-	80%
<b>Hopetoun, WA</b>			
E74/563	Earning In	-	-
E74/679	Earning In	-	-
<b>Dinninup, WA</b>			
E70/5842	Granted	100%	100%