# IMPACT.

### ASX ANNOUNCEMENT

Date: 11 May 2021 Number: 755/110521

**ASX Code: IPT** 

#### Drilling to Start this week at the Broken Hill Ni-Cu-PGM Project, NSW

- Follow up diamond drilling to commence later this week at the Red Hill and Little Broken Hill Gabbro prospects.
- Exploration programme accelerated due to drill rig availability at short notice.
- At Red Hill drilling will test for massive sulphides at depth to follow up a significant drill intercept of 138 metres at 0.3 g/t 3PGE (palladium+platinum+gold) from surface *including* 12 metres at 1.5 g/t 3PGE, 0.3% nickel and 0.2% copper.
- At Little Broken Hill Gabbro drilling will test for down plunge extensions to follow up robust widths of up to 60 metres thick of strongly anomalous 3PGE mineralisation with individual metre assays of up to 2.6 g/t 3PGE, 1.1% nickel and 0.7% copper.
- Further interpretation of the extensive drill data from the 2020 campaign is still in progress and this will help drive a further follow up RC drill campaign that will commence in Q3.

Impact Minerals Limited (ASX:IPT) is pleased to announce that diamond drilling will commence later this week at the company's 100% owned Broken Hill nickel-copper-PGE project in New South Wales.

The drill rig became available at short notice and accordingly Impact has been able to now accelerate its planned exploration programme at its flagship project where drilling in late 2020 achieved breakthrough drill intercepts at all three of its key prospects, Reed Hill, Platinum Springs and Rockwell-Little Broken Hill Gabbro (ASX releases 2<sup>nd</sup> December 2020, 22<sup>nd</sup> December 2020, 21<sup>st</sup> January 2021, 9<sup>th</sup> March 2021, and 15<sup>th</sup> April 2021).

The diamond drill programme will be followed up with a more extensive reverse circulation (RC) programme in Q3, preparations for which are also underway.

Dr Mike Jones, Managing Director of Impact Minerals said "We are thrilled to have been able to secure a diamond rig at short notice for our flagship Broken Hill project at a time of record metal prices, in particular palladium and copper. Last years' extensive drill programme delivered exceptional drill results for palladium, platinum, nickel and copper at all three of our key prospects and whilst we are still working through the large amount of data we generated, we are in a position to commence the follow up programme immediately".

"We will test the Red Hill intrusion at depth for massive sulphides and also put the first ever diamond drill holes into the Little Broken Hill Gabbro to follow up the breakthrough drill results returned from the basal ultramafic unit which we demonstrated is carrying significant PGE mineralisation over many kilometres of trend. We are very excited to commence our 2021 campaign at Broken Hill."

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#### **Red Hill**

A stand out drill intercept was returned in the 2020 drill programme from the Red Hill prospect along the southern contact of the Red Hill chonolith intrusion (Figure 1 and ASX Release 21<sup>st</sup> January 2021).

Hole RHIPT034, drilled to test a soil geochemistry anomaly returned:

138 metres at 0.3 g/t 3PGM (Pd+Pt+Au) from surface which includes several higher grade intercepts of:

2 metres at 2.3 g/t 3PGE from 75 metres, and

12 metres at 1.5 g/t 3PGM and 0.2% copper from 103 metres *which includes* 2 metres at 2.3 g/t 3PGM, 0.3% copper and 0.3% nickel from 109 metres, *and also includes* 2 metres at 1.1 g/t 3PGM and 0.2% copper from 135 metres.

This result demonstrated for the first time that the chonolith-shaped (tube-like) ultramafic intrusion at the Red Hill body hosts significant thicknesses of disseminated PGM+/-copper+/-nickel mineralisation close to surface. The intercept is open at depth and this is the priority target area for the follow up drilling.

Of note is that the higher grade intercepts with the drill hole, which extend from 103 metres to 135 metres down hole, all lie within 25 metres of the contact of the intrusion with the surrounding rocks (Figure 1).

A review of all 12 drill holes that have penetrated the margin of the Red Hill chonolith showed that ten of them contained strongly anomalous intercepts of 3PGM, with variable copper and nickel, within about 30 metres of the contact with the surrounding rocks (Figure 1).

Together these intercepts all define a "ring of PGM" around the intrusion at depth where the mineralisation occurs within the so called "chilled margin" of the intrusion (Figure 1).

Other key intercepts in the chilled margin from the 2020 drill programme include:

RHIPT030 returned **33 metres at 0.2 g/t 3PGM** *including* 7 metres at 0.5 g/t 3PGM and 0.3% copper from110 metres which includes 1 metre at 0.6 g/t 3PGM and 0.45% copper from 112 metres.

### RHIPT027 returned **17 metres at 0.3 g/t 3PGM from 2 metres down hole** *including* **2 metres at 1.2 g/t 3PGM and 0.2% copper from 8 metres down hole.**

The presence of extensive mineralisation in the margin of the Red Hill intrusion indicates that the parental magma of the Red Hill was extremely fertile and carrying significant amounts of PGM and likely copper and nickel. Therefore, the potential exists to form a massive sulphide deposit in an appropriate trap site at depth. Figure 1 shows the most likely area at depth to host such a deposit and this target will be tested in the upcoming programme (Figure 1, Target Zone).

In addition, there is scope for the discovery of veins containing high grade PGE mineralisation such as those found immediately west of the Red Hill intrusion and including an exceptional intercept from RHD012 which returned (ASX Release 23<sup>rd</sup> October 2015):

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3.5 metres at 162.4 g/t (5.3 ounces) 7PGE comprising:

5.7 g/t rhodium, 2.6 g/t iridium, 2.0 g/t osmium, 1.1 g/t ruthenium, 144 g/t (4.6 ounces) palladium, 5 g/t platinum, 6 g/t gold, 2.9% nickel, 2.3% copper and 14.5 g/t silver from 67.3m down hole.

This intercept also included a vein of very high grade mineralisation that returned:

1.2 metres at 335.8 g/t (10.8 ounces) 7PGE comprising:

4.6 g/t rhodium, 7.2 g/t iridium, 5.6 g/t osmium, 3.1 g/t ruthenium, 294 g/t (9.5 ounces) palladium 10.4 g/t platinum, 10.9 g/t gold, 7.4% nickel, 1.8% copper and 19 g/t silver.

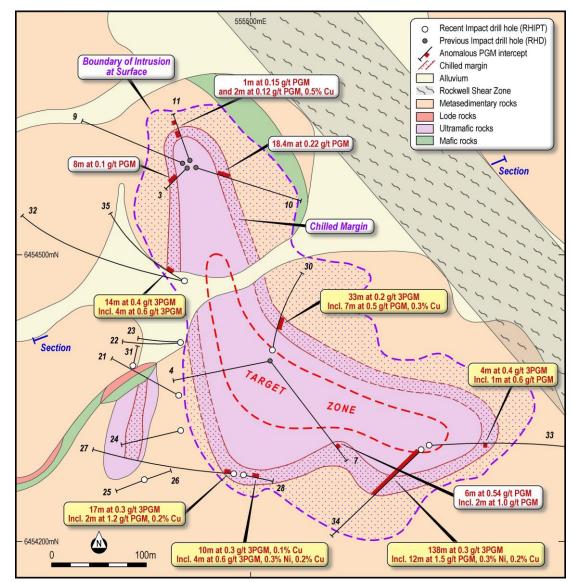


Figure 1. Geology of the Red Hill prospect with significant drill results. Yellow labels are 2020 drill results and white labels from previous drill programmes. Note the almost continuous ring of anomalous PGM+/-Cu+/-Ni around the intrusion. This ring lies within 25 metres of the margin of the chonolith and is part of the chilled margin to the intrusion. The deeper target zone for follow up drilling is also highlighted.

### impact. MINERALS

#### **Rockwell-Little Broken Hill Gabbro**

The Little Broken Hill Gabbro comprises a large, layered ultramafic to mafic intrusion that is about 7 kilometres long and up to 1 km wide located a few kilometres from Red Hill.

Impact completed an extensive drill programme here in 2020 in what was the first ever drilling to test the intrusion below 25 metres from surface. Robust widths of up to 60 metres thick of strongly anomalous 3PGE mineralisation with individual metre assays of up to 2.6 g/t 3PGE, 1.1% nickel and 0.7% copper were returned from the basal ultramafic unit in all of the areas drilled. This demonstrates that the Little Broken Hill Gabbro has the potential to host a significant deposit at depth or along trend.

Examples of the key drill results at Rockwell, the priority area for follow up include (Figure 2):

61 metres at 0.4 g/t 3PGE from 31 metres RWIPT003 including: 12 metres at 1.4 g/t 3PGE and 0.2% copper from 73 metres which includes 1 metre at 2.3 g/t 3PGE, 0.4% nickel and 0.2% copper from 73 metres and 1 metre at 2.6 g/t 3PGE, 0.7% nickel and 0.2% copper from 79 metres

56 metres at 0.2 g/t 3PGE from 63 metres in RWIPT006 including 14 metres at 0.8 g/t 3PGE and 0.1% copper from 105 metres which includes 8 metres at 1.3 g/t 3PGE and 0.2% copper from 107 metres which also includes 1 metre at 2.6 g/t 3PGE, 0.7% nickel and 0.3% copper from 113 metres.

Mineralisation is increasing in thickness and grade at depth and to the south but is still open in all directions.

The diamond drill programme will test the down plunge extension of the mineralisation and is also designed to get a better geological understanding of the mineralisation given that this will be the first ever diamond drilling at Little Broken Hill Gabbro.

In addition, interpretation of the extensive assay data generated in the 2020 drill programme is on-going. This includes detailed studies on the nature of the mineralisation at the Platinum Springs prospect where a standout drill result was returned from RC drill hole PSIPT030 of:

#### 1 metre at 22.7 g/t 7PGE, 3.3 % nickel, 1% copper, 23 g/t silver and 755 g/t cobalt

The 7PGE grade comprises: 10.9 g/t palladium, 7.3 g/t platinum, 0.9 g/t rhodium, 1.3 g/t osmium, 1.4 g/t iridium and 0.6 g/t ruthenium and 0.1 g/t gold.

Once complete, the interpretation, together with the results of the new diamond programme, will be used to help design an extensive follow up RC drill programme at all three of the prospects and likely to start in Q3 this year.

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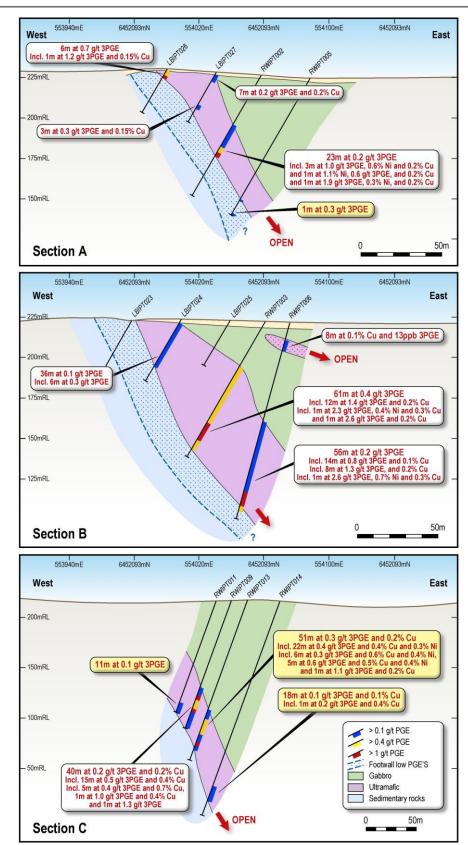
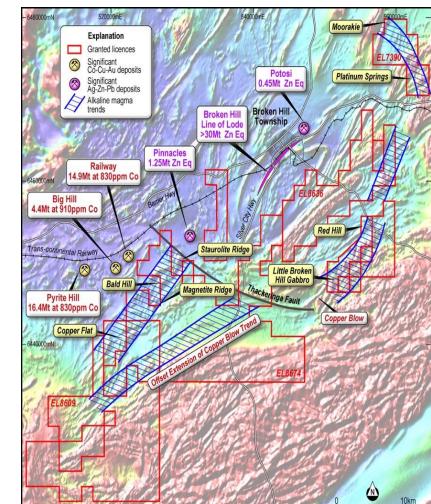


Figure 2. Cross-sections through the Rockwell Prospect with new drill results in yellow. Note the increasing PGE content with width of the basal ultramafic unit.

#### ABOUT THE BROKEN HILL PROJECT

The Broken Hill Ni-Cu-PGM Project covers a suite of mafic to ultramafic intrusions that occur in a 40 km long belt from Little Broken Hill in the south west to Red Hill, Darling Creek, Platinum Springs and Moorkai in the north east (Figure 3).



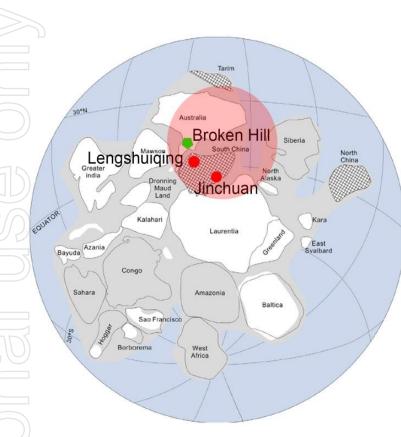
**Figure 3.** Impact's ground holdings in the Broken Hill area showing key prospects including Red Hill, Platinum Springs and Little Broken Hill Gabbro.

The ultramafic intrusions are all about 827 million years old and related to the break-up of a supercontinent called Rodinia by a rising "plume" of mafic to ultramafic magma likely derived from the core-mantle boundary (Figure 4, Wingate et al 1998).

At that time, Broken Hill was located close to Jinchuan, one of the world's largest nickel-copper-PGE deposits (>550Mt at 1.2% Ni 0.7% Cu 0.5 g/t PGM) which is also of a similar age (Figure 4). This geodynamic framework of a rising mantle plume is widely recognised as a crucial component to the formation of major magmatic nickel-copper-PGE sulphide deposits and accordingly this model underpins Impact's exploration philosophy for the region (ASX Release 6<sup>th</sup> March 2019).

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**Figure 4.** Position of the proposed mantle plume head (red circle) responsible for the breakup of Rodinia showing the location of Broken Hill in relation to the Jinchuan and Lengshuiqing Ni-Cu- Co-PGE deposits at about 800 million years ago (after Huang et al., 2015).

#### **COMPLIANCE STATEMENT**

This report contains no new Exploration Results.

#### 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 Australiasian 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.