# IMPACT.

## Excellence in Exploration

## ASX ANNOUNCEMENT

Date: 26 October 2017

No. 547/261017

### SEPTEMBER 2017 QUARTERLY REPORT SUMMARY

## 1. PILBARA GOLD PROJECT

- Nine new 100% owned exploration licences covering 1,300 sq km prospective for Witwatersand-style conglomerate hosted gold applied for in the East Pilbara.
- Licences are adjacent to ground held by Novo Resources including the Beatons Creek Deposit (>500,000 oz gold).
- Compilation of previous exploration work in progress.
- Reconnaissance field work to commence in November. Tenements likely to be granted in Q2 2018.

## 2. COMMONWEALTH GOLD-SILVER-BASE METAL PROJECT, N.S.W. (IPT 100%)

- Drill programme continuing to test extensions to gold-silver system at Silica Hhill and will commence in early November.
- 15 metres at 4.0 g/t gold and 61 g/t silver including 3 metres at 10 g/t gold and 20 g/t silver in Hole CMIPT56. Highest gold assay to date at Silica Hill.
- Significant potential for continuation of higher grade veins at depth and along trend.
- Interpreted edges of a base metal-rich "feeder" vein identified which returned 0.3 m at 6.2 g/t gold, 149 g/t silver, 8.4% zinc, 3.9% lead and 0.2% copper in Hole CMIPT063.
- Continuing indications of underlying porphyry copper-gold system.
- Extensive zones of gold and silver-bearing veins encountered in the upper lower grade parts of the system.

**Market Cap** A\$21.2 m (0.021 p/s)

**Issued Capital** 

1,011,071,085

## **Listed Options**

333,450,000 IPTOA

## Directors

Peter Unsworth Chairman

**Dr Michael Jones** Managing Director

Paul Ingram Non-Executive Director

Markus Elsasser Non-Executive Director

Felicity Gooding Non-Executive Director

Bernard Crawford Company Secretary

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## 1. PILBARA GOLD PROJECT

In early August Impact applied for nine new 100% owned Exploration Licences covering 1,300 sq km of ground prospective for Witwatersrand-style conglomerate-hosted gold in the Pilbara region of Western Australia (Figure 1).

This followed a review of the discovery of gold in conglomerates at the base of the Fortescue Group by Artemis Resources Limited and the subsequent joint venture with Novo Resources Corporation. This work indicated a significant breakthrough had been made in the search for Witwatersrand-style gold in the Pilbara and Impact immediately applied for available ground considered prospective for this style of deposit.

The licence applications have all now passed through the period for objections under the Mining Act and as such are now likely to be granted subject to the statutory Native Title notification and negotiation period which is expected to be completed by Q2 2018.

The licences cover various parts of the prospective contact between the older Pilbara granitegreenstone terrain and the overlying Fortescue Group rocks in the East Pilbara region including areas close to and adjoining licences held by Novo Resources Corporation (Figure 1 and shown in more detail in Figure 2).

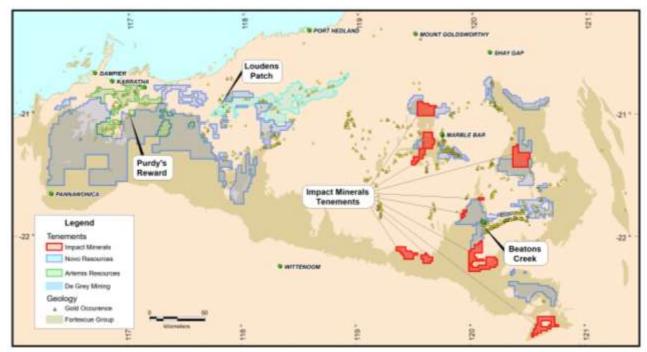


Figure 1. Location of Impact's new licences and significant conglomerate hosted gold occurrences.

The increasing recognition of extensive conglomerate-hosted gold across the entire Pilbara region at several different horizons within the Fortescue Group is, in Impact's view, confirming the long recognised potential for Witwatersrand-style gold in the area. It is worth noting that gold in the age-equivalent Witwatersrand Basin of South Africa occurs mostly within the **middle part** of the 6 km thick sedimentary sequence (as opposed to the basal units) mostly as fine to coarse gold associated with carbon seams as well as the characterisitic "watermelon seed" nuggets.

In the East Pilbara where Impact's licences are located, gold-bearing conglomerates were first recognised and mined 130 years ago in the Beatons Creek area (Figures 1 and 2) and form part of the Hardey Formation in the lower to middle parts of the Fortescue Group. The Beatons Creek project (resources >500,000 ounces of gold) is owned by Novo Resources and is already undergoing feasibility studies for development.

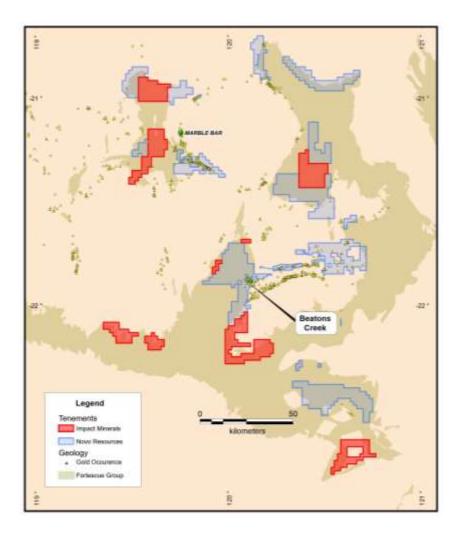


Figure 2. Detailed location plan of Impact's new licences in the East Pilbara.

In the West Pilbara the significant discoveries of gold-bearing conglomerates by Novo Resources and Artemis Resources Limited occur at the base of the Fortescue Group as does the more recent discovery of nuggets and conglomerates in the Central Pilbara by De Grey Mining Limited (Figure 1).

In the East Pilbara, nuggets in the same basal unit of the Fortescue Group have now been discovered by Haoma Mining Ltd (ASX: HAO), thus confirming the widespread occurrence of conglomeratehosted gold nuggets. The lower parts of the Fortescue Group are interpreted to underlie a significant proportion of at least 5 of Impact's new licences.

Impact recognised the significance of the breakthrough that had been made by Novo-Artemis in the search for Witwatersrand-style gold in the Pilbara and was a relatively early mover in the area and accordingly has been able to secure some very prospective tenements.

One of the overlooked breakthroughs made by Novo is in research published by Novo's CEO Dr Quinton Hennigh which clearly shows that many of the nuggets in the Witwatersrand may have been sourced from the reworking of gold deposited by microbial activity and basinal fluids early in the history of the sedimentary basin.

This removes the requirement for a source for the nuggets from the underlying granite-greenstone terrain, one of the criticisms levelled at the potential for these conglomerates to host significant gold. This was an important breakthrough by Dr Hennigh and once Impact understood that, the Company acted quickly to acquire the ground.

Impact has now commenced a review of previous exploration and will commence initial on-ground activities in early November under a Miners Right.

## 2. COMMONWEALTH GOLD-SILVER-BASE METAL PROJECT (IPT 100%)

During the Quarter the follow up drill programme to test and expand the high grade gold-silver mineralisation discovered by Impact at the Silica Hill prospect, part of the 100% owned Commonwealth Project 100 km north of Orange, New South Wales, continued. Following a recent short break in the programme, drilling is due to commence again in early November.

#### 2.1 Drill Assays

#### **CMIPT056**

Assays for Hole 56 a reverse circulation (RC) drill hole, have identified a deeper gold-silver rich zone and a shallower silver-rich zone to the mineralisation, similar to that seen in previous drill holes from Silica Hill (see announcement  $22^{nd}$  February 2017).

The deeper gold-silver rich zone has returned the highest grade gold intercept returned thus far from Silica Hill from about 100 m below surface (Figure 3):

20 metres at 3.3 g/t gold and 53 g/t silver from 149 m down hole; *including:* 15 metres at 4.0 g/t gold and 61 g/t silver from 152 m; *which includes:* 4 metres at 1.8 g/t gold and 217 g/t silver from 152 m; *and:* 3 metres at 10.4 g/t gold and 20 g/t silver from 160 metres. The shallower silver-rich zone has returned the following intercepts from about 30 m below surface:

## 12 metres at 0.3 g/t gold and 64 g/t silver from 46 metres down hole; *including* 3 metres at 0.4 g/t gold and 270 g/t silver from 47 metres *and* 2 metres at 0.1 g/t gold and 158 g/t silver from 56 metres.

These new assays from Hole 56 are interpreted to be the north west extension of, and materially better than, the gold-rich zone discovered by Impact in Hole 43 (Figure 3) which returned:

## 68 metres at 0.5 g/t gold and 43 g/t silver (1.3 g/t gold equivalent) from 99 metres; including the upper silver-rich zone of 37 metres at 0.1 g/t gold and 71 g/t silver (2.3 ounces) and the lower gold-rich zone of 18 m at 1.7 g/t gold and 24 g/t silver from 149 metres.

Individual results of note in Hole 43 are:

- High grade silver intercepts (with gold) in the upper part of the assayed zone:
  - 1 m at 122 g/t (4 ounces) silver and 0.2 g/t gold from 108 metres;
  - 1 m at 146 g/t silver (5 ounces) and 0.1 g/t gold from 118 metres;
  - 2 m at 373 g/t (12 ounces) silver and 0.2 g/t gold from 123 metres including
  - 1 m at 525 g/t (17 ounces) silver and 0.1 g/t gold from 124 metres; and
  - 1 m at 337 g/t (11 ounces) silver and 0.1 g/t gold and from 134 metres.

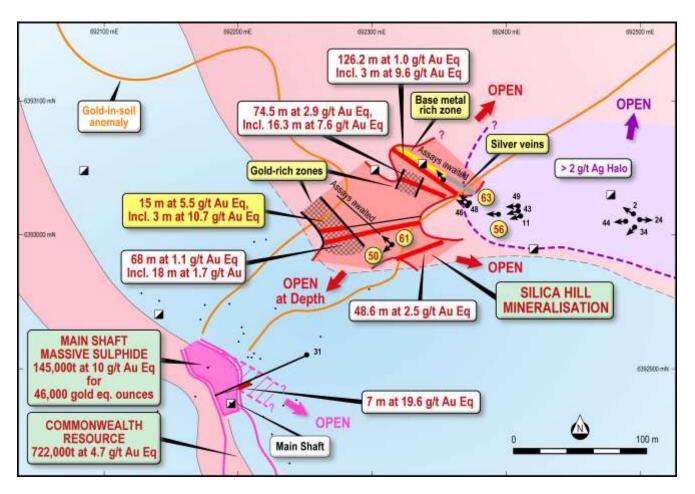


Figure 3. Significant drill results at Silica Hill. The mineralisation is open in all directions.

## Significant gold assays in the lower part of zone: 1 m at 2.3 g/t gold and 64 g/t (2 ounces) silver from 153 metres; and 1 m at 6.4 g/t gold and 18 g/t silver (0.5 ounces) from 155 metres.

Holes 56 and 43 are about 15 metres apart with the gold grades increasing to the north west. These results indicate significant potential to increase the contained ounces of gold and silver within the envelope of mineralisation already discovered with closer spaced drilling.

## СМІРТ063

Further drill assays also continue to confirm and expand the bulk-tonnage potential close to the nearsurface high grade massive sulphide resource at Main Shaft, with only 10% of the target area tested to date close to surface.

In addition the closed spaced drilling completed to date has elucidated further important structural controls on high grade shoots as well as the broad vertical and lateral metal zonation within the stockwork vein system (Figures 8, 10 and 11).

East-west trending structures have now been identified as an important control on the high grade zones and shoots within the overall north east trending zone of mineralisation, and it has been shown that the entire vertical extent of the mineralised system has been preserved from an upper barren silica-pyrite zone that passes progressively down and laterally through low grade silver +/- gold veins; higher grade gold and silver veins; and a lower zinc-lead-copper zone containing "feeder veins" of massive base metal sulphides that also have high grade gold and silver in places.

Hole CMIPT063 tested a modest north east extension of the mineralised zone and returned a 116 metre thick zone of veins from 57 metres down hole and comprised a lower 70 metre thick zone of silver and base metal-rich veins and an upper 40 metre thick zone of silver-rich veins.



Figure 4. High grade "feeder vein" at 114.5 metres depth in Hole 63 containing silver, zinc, lead and copper with accessory molybdenum, antimony, tin and bismuth.

The lower zone comprises veins of zinc, lead and copper sulphides that are up to a few centimetres thick and spaced every 50 cm to 1 metre down hole. There are thicker veins up to 20 cm thick in places (Figure 4).

The nature of the veins and the unique metal assemblage are interpreted to be characteristic of the edges of a high grade "feeder zone" to the large mineralised system at Silica Hill. This is the first indication of this type of feeder vein at Silica Hill and which were postulated to be present in a previous announcement by Impact (ASX announcement <u>6 June 2017</u>). The feeder zone is interpreted to possibly extend for a further 1,000 metres to the north east.

Such feeder zones occur within **gold-rich volcanogenic massive sulphide deposits** (**gold-rich VMS**), a class of deposit only recognised within the past 20 years and which the Commonwealth-Silica Hill mineralisation is interpreted to belong to.

The type-deposit of the gold-rich VMS systems is the well known Eskay Creek deposit in British Columbia, Canada which was mined mostly during the early 2000's and contained over 4 million ounces of gold and 180 million ounces of silver in numerous very gold and silver-rich ore shoots over a vertical extent of at least 700 metres (see ASX announcement <u>9 May 2017</u>).

The upper silver rich zone in Hole CMIPT063 comprises veins of pyrite-arsenopyrite sulphide up to 5 cm thick that occur individually or as stockworks of veins in zones up to 25 cm thick and spaced every 30 cm or so down hole (Figure 5).



Figure 5. Quartz-pyrite-arsenopyrite-silver vein and stockwork from 77 m depth in Hole 63.

In addition the wallrock is mineralised in a few places places and is "flooded" with so called "ruby silver" minerals (proustite and pyrargyrite) (Figure 6). Native silver may also be present (and as seen in previous drill holes).



Figure 6. Extensive "christmas tree" of ruby silver minerals adjacent to sulphide vein.

Hole CMIPT063 has returned:

98 metres at 0.7 g/t gold and 53 g/t silver from 58 metres down hole *including* 

**31 metres at 1.3 g/t and 70 g/t silver from 58 m down hole** *which includes*; **0.6 metres at 0.8 g/t gold and 2,090 g/t silver and 0.2% zinc** from 85.4 m;

and

0.3 metres at 6.2 g/t gold, 149 g/t silver, 8.4% zinc, 3.9% lead and 0.2% copper – "feeder vein" – see announcement  $4^{\text{th}}$  August 2017);

#### and

10 metres at 0.5 g/t gold and 232 g/t silver from 146 m *which includes:* 1 metre at 0.7 g/t gold and 1,285 g/t silver from 150 metres;

#### and

1.2 metres at 0.3 g/t gold, 37 g/t silver, 1.6% zinc, 1.1% lead and 0.1% copper from 166.8 metres.

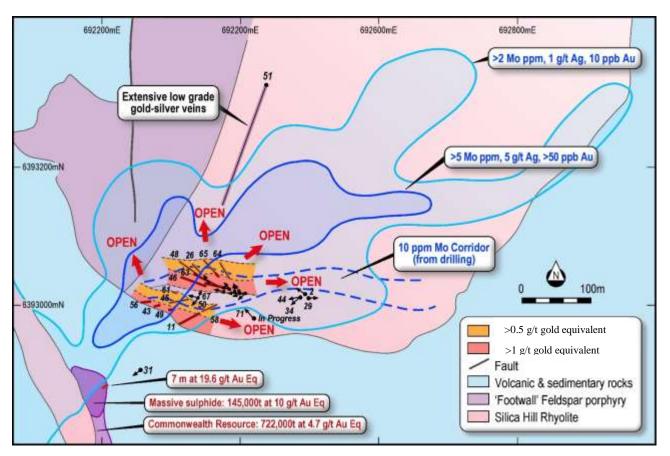
Diamond drill hole CMIPT061 was drilled to test the north west extension of mineralisation and has intersected a 90 metre thick zone comprising an upper 30 metre thick zone of silver rich veins and a lower 60 metre thick zone of 50 ppm to 200 ppm molybdenum that occurs in narrow fractures and as fine grained disseminations in the rhyolite host rock.

The upper silver rich quartz veins also contain visible ruby silver minerals in places (Figure 7) and returned 10 metres at 86 g/t silver.



Figure 7. Quartz-ruby silver vein with pyrite and arsenopyrite from 55 m depth in Hole 61.

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**Figure 8.** Overview of the Silica Hill Prospect showing drill hole locations and east-west trending gold-rich zones within a north east trending corridor defined by a gold-silver-molybdenum-in-soil anomaly. Note that the drilling has only tested the near surface portion of 10% of the target area.

Hole CMIPT060 was drilled below Hole CMIPT063 and was an RC hole that failed to reach depth and **ended in mineralisation** at 88 metres and which returned:

## 37 metres at 1.0 g/t gold and 31 g/t silver from 51 metres.

Drill holes CMIPT64 and 65 were also drilled above Hole 60 and intersected stockworks of narrow veins as previously reported. These holes were sampled at practical sample widths of about 1 metre and have returned significant widths of anomalous gold and silver assays showing that they are part of the upper lower grade silver+/- gold part zone of the system.

Hole 64 returned **84 metres at 0.3 g/t gold and 18 g/t silver** and hole 65 returned **62 metres at 0.5 g/t gold and 17 g/t silver**, with individual one metre samples returning up to 75 g/t silver.

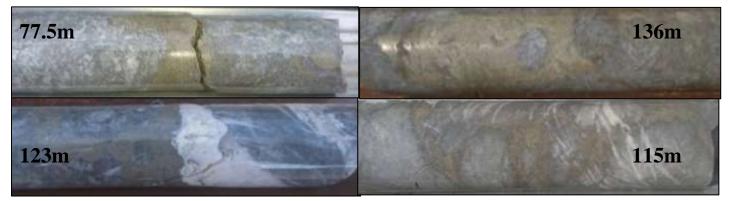
Drill hole CMIPT071 has been completed to test below these strongly anomalous intercepts to test the lower gold-rich zone and also in particular to also test down dip extension of the high grade base metal massive sulphide veins in Hole 63. Results from Hole 71 are pending.

A significant expansion of the exploration potential over at least several hundred metres along trend and also at depth has been revealed in the on-going drill programme.

Diamond drill holes (CMIPT64 to 66) have now extended the mineralised vein system, which comprises a stockwork of quartz-sulphide veins about 40 metres wide, a further 50 metres along trend

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to the north east and comprising multiple narrow veins (Figure 9). The vein system is now about 250 metres in length and is still open along trend and at depth (see announcements dated <u>15 August 2017</u> and <u>4 August 2017</u>).



**Figure 9.** Examples of pyrite-arsenopyrite vein styles and orientations from Hole CMIPT64 from down hole depths shown. Similar veins are seen in Holes 65 and 66. All contain silver .

Final interpretation of all drill results is in progress.

### 2.2 Potential Expansion of Silica Hill Mineralisation to the north east

Diamond drill hole CMIPT51 was drilled about 300 metres north of and back towards the mineralized zone at Silica Hill (Figures 10 and 11). It was previously reported that this hole was abandoned at 270 metres depth because of poor drilling conditions (see announcement <u>20 July 2017</u>).

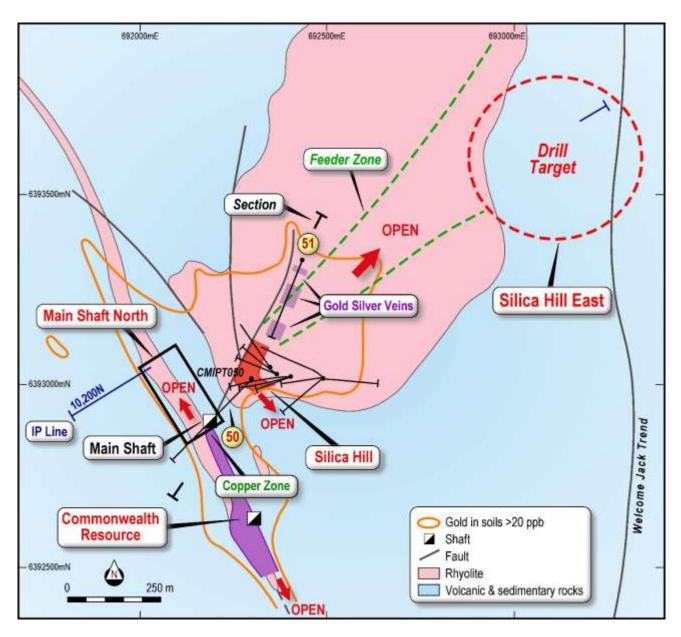
Hole 51 intersected a variably developed stockwork of narrow quartz-sulphide veins **over the entire 270 metre length of the drill hole** with three better developed zones 25 metres, 50 metres and 30 metres thick (Figure 11).

Assays of the drill core demonstrate that **most if not all of the veins** carry anomalous gold-silver and pathfinder metals that are identical to weakly mineralised veins that lie above and adjacent to the high grade gold-silver veins being drilled to the south (Figure 10).

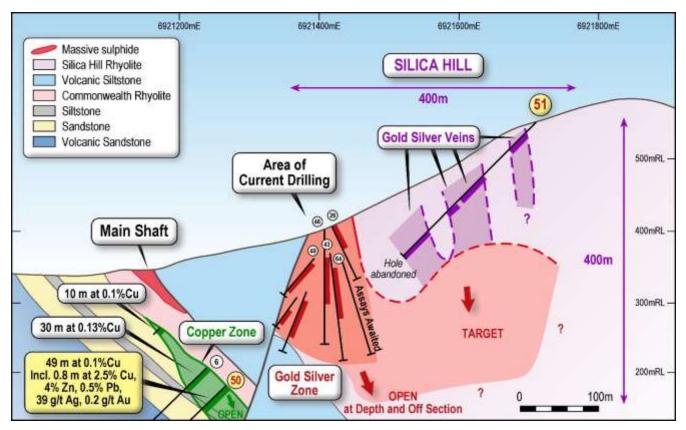
Accordingly there is significant potential for these vein systems to expand and become better mineralised at depth and also to join up with the well-mineralised zone currently being drilled. This is very encouraging and a priority drill target has been identified at depth below Hole 51 and will be drilled in this current programme (Figure 11).

The veins in Hole 51 are mostly too small to sample in a meaningful manner and the majority of assays are from samples of between 30 cm to 2 m of core which have diluted the veins with unmineralised rock. In the better developed zones of veins, assays vary up to 0.1 g/t gold and 5 g/t silver throughout.

One vein sampled individually returned 0.3 metres at 0.24 g/t gold, 7 g/t silver and 0.1% zinc from 166 metres downhole. A zone of more extensive narrow veins returned 2 metres at 0.1 g/t gold from 108 metres downhole.



**Figure 10.** Geology of the Silica Hill-Commonwealth area and locations of Holes CMIPT50 and 51. Note that the low grade gold-silver veins in Hole 51, drilled from north east to south west, overlies an interpreted north east trending feeder zone. Hole 50 tested a conductor below Main Shaft and intersected a broad zone of copper sulphide mineralisation.



**Figure 11.** Cross section looking north west from Main Shaft to the south and Silica Hill to the north (see Figure 10 for location). Three components to the mineralised system are evident: an upper zone of weakly mineralised gold-silver veins; a middle zone of high grade gold-silver +/- base metal veins and a lower zone of massive sulphide and increasing copper-gold-silver at depth.

## 2.3 Increasing evidence of a copper-gold system at depth.

Diamond drill hole CMIPT50 was drilled to test an Induced Polarisation conductor at depth below the massive sulphide lens at Main Shaft and intersected a broad zone of visible disseminated copper sulphide mineralisation (Figure 3 and see announcement <u>20 July 2017</u>).

Assays returned:

## 49 metres at 0.1% copper from 269 metres down hole *including*: 0.8 metres at 2.5% copper, 4% zinc, 0.5% lead, 38 g/t silver and 0.2 g/t gold

This is materially better than the previous best intercept in Hole 6 located 30 metres above Hole 50 which returned:

## 30 metres at 0.13% copper including:

1 metre at 0.7% copper, 1.1% zinc, 0.4% lead, 31 g/t silver and 0.4 g/t gold (see announcement 25 May 2017).

These results have identified a copper-dominant zone that is increasing in size and grade at depth (Figure 11). This strongly supports Impact's long held premise that the entire Commonwealth-Silica Hill system is underlain and driven by a porphyry copper-gold system.

The source of the IP conductor has not been found and a down hole EM survey will be required.

Together, the results from drill holes CMIPT50 and 51 and previous work demonstrate a mineralised system that extends over at least 700 metres of strike and a vertical extent of at least 400 metres. The drill programme is on-going and will continue to test this very large system which clearly has the potential to host a major deposit.

## 2.4 Discussion

An initial interpretation of these results combined with detailed logging of the diamond core, shows that the overall north east trending corridor of mineralisation at Silica Hill is resolving into several mineralised domains related to east-west trending, steeply south dipping structures (Figure 8). The intersection of the east-west and north east trending structures appears to be a strong control on the higher grade portions and shoots of the mineralised system.

At least two east-west structures have been identified, each over at least 400 metres of strike and both open along trend and at depth.

One structure occurs along the southern contact of the Silica Hill rhyolite and includes the high grade assays from Holes 43 and 11 (e.g. 23 metres at 1 g/t gold and 224 g/t silver including 0.9 metres at 2.4 g/t gold and 3,146 g/t silver - see announcement <u>22 February 2017</u> for details).

A second east west structure occurs 50 m to 75 m to the north and is defined in part by extensive low grade molybdenum with lesser tin and shown as the "molybdenum corridor" on Figure 8. The metal assemblage is interpreted as futher evidence that the mineralising fluids may be sourced from a late stage intrusive at depth. Further drilling will also test these structures along trend and at depth.

Drilling to date at Silica Hill has only tested 10% of the combined soil-geochemical and IP geophysical target area. Larger spaced step out drilling will commence in early November.

Together, these results and previous work demonstrate a mineralised system that extends over at least 700 metres of strike and a vertical extent of at least 400 metres (Figure 11). The drill programme is on-going and will continue to test this very large system which clearly has the potential to host a major deposit.

## 3. BROKEN HILL PGM-Ni-Cu PROJECT (Impact 100%)

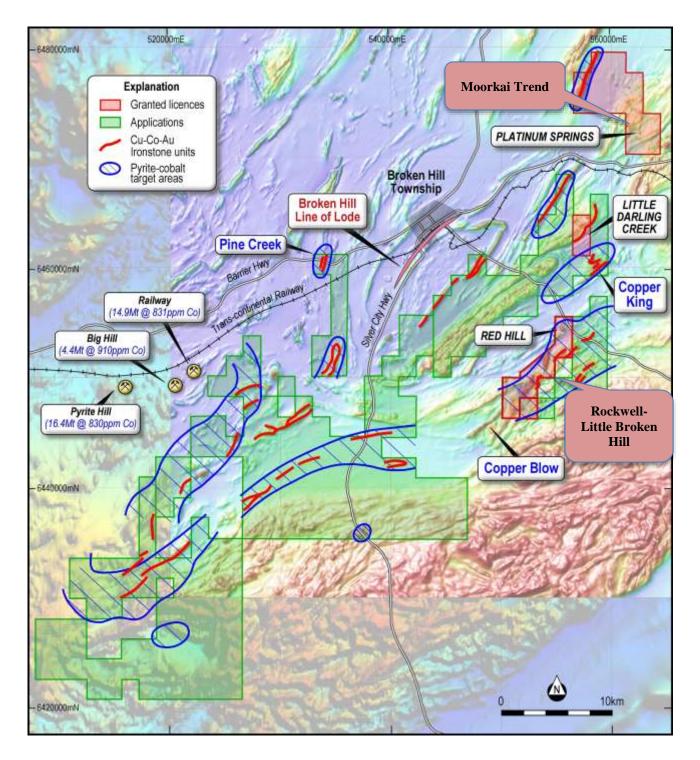


Figure 12. Image of magnetic data showing Impact's tenements at Broken Hill and key prospects.

The Broken Hill Project comprises four granted exploration licences (EL7390, EL8234, EL8609, EL8636) and one application (ELA5265) (Figure 12) that cover 727 square kilometres of rocks prospective for three distinct styles of mineralistion:

- 1. PGE-copper-nickel associated with ultramafic rocks;
- 2. Zinc-lead-silver in "Broken Hill-style" deposits hosted mostly by metasedimentary rocks and amphibolites; and
- 3. Copper +/- cobalt +/- gold associated with ironstones and massive pyrite.

Impact owns 100% of five of the licences. Under previous owners, the mineral rights for the fifth licence, EL7390, were split in the early 2000's and Impact is now in joint venture with Silver City Minerals (ASX: SCI) for zinc-lead-silver Broken Hill style mineralisation. Impact will free-carry Silver City's 20% interest to a Decision to Mine.

Golden Cross has a 1% gross production royalty on all metals to which Impact has rights for. Impact, at its election, also has the right to buy back the royalty for \$1.5 million at anytime up to a Decision to Mine, or leave the royalty uncapped during any production.

No significant work was completed during the Quarter.

## 4. MULGA TANK (IMPACT 100%)

Impact owns 100% of the Mulga Tank Project that covers about 509 sq km of the Minigwal greenstone belt located 200 km north east of Kalgoorlie in Western Australia. The project is prospective for gold and nickel deposits.

Impact discovered high tenor nickel and copper sulphides at the Mulga Tank Dunite in its maiden drill programme (see announcement <u>29 January 2014</u>).

Three styles of nickel-copper mineralisation were identified:

- Extensive disseminated nickel in the Mulga Tank Dunite with assays of:
   2 m at 1.3% nickel including 1 m at 2% nickel and multiple 0.5 m thick zones of 0.5% to
   1.2% nickel within an intercept of 115 m at 0.3% nickel;
   Other thick intercepts including 21 m at 0.4% nickel and 59 m at 0.3% nickel.
- High tenor veins at the base of the Mulga Tank Dunite with assays of:
   0.25 m at 3.8% nickel, 0.7% copper and 0.7 g/t PGE and 0.3 m at 0.7% nickel; and
- 3. High tenor nickel sulphide in multiple komatiites in a flow channel in the upper part of the dunite with assays of:

**0.75 m at 0.85% nickel, 0.35% copper and 0.28 g/t PGE (Pt+Pd+Au); and 6.7 m at 0.5% nickel.** 

The style of mineralisation and the nature of the rocks are similar to those that host the significant nickel deposits at Perseverance (1 Mt of contained nickel) and Mt Keith (>2 Mt of contained nickel) near Leinster in WA). In addition the project area occurs in the same geological terrain as the recently discovered Gruyere deposit of more than 5 million ounces of gold. The Mulga Tank project has been poorly explored for gold and this will also be a focus of the forward programme.

Earlier in the year, 20 targets for gold and 16 targets for nickel were identified at Mulga Tank. Many of these targets are drill-ready and Impact is considering its options to fund this work.

## 5. CORPORATE

During the Quarter Impact placed the Shortfall from the Share Purchase Plan (SPP) to existing Shareholders and the offer of the Shortfall to the SPP which was announced on 11 May 2017 and was approved by shareholders at a General Meeting held on  $20^{\text{th}}$  June 2017.

Under the SPP, each Eligible Shareholder was entitled to subscribe for up to \$15,000 of new fully paid ordinary shares (New Shares) at an issue price of 1.8 cents per New Share without incurring brokerage or other transaction costs. Eligible Shareholders were also offered three free attaching listed options (Free Attaching Options) exercisable at \$0.04 with an expiry date of 15 June 2020 for every two New Shares subscribed for.

Any New Shares and Free Attaching Options (offer Securities) not subscribed for under the SPP Offer formed the Shortfall Offer.

The Company raised \$1,073,971 under the SPP through the issue of 59,665,051 Shares and 89,497,590 free attaching Quoted Options.

As announced to ASX on 31 August 2017, the Company raised \$2,000,000 from sophisticated and professional investors by the issue of a portion of the shortfall from the Recent SPP, being 111,111,111 Shares and 166,666,667 free attaching Quoted Options.

In addition a further \$927,429, being 57,523,833 Shares and 77,285,750 free attached Quoted Options, was raised from a major shareholder who increased their relevant interest in the Company to 10%.

The cash balance at the end of September was \$3.2 million.

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Dr Michael G 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.

The information in this report which relates to Mineral Resources is based upon information compiled by Ian Glacken, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Ian Glacken is an employee of Optiro Pty Ltd and has sufficient experience which is relevant to the style of mineralisation and type of deposit 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 Reposting of Exploration Results, Mineral resources and Ore Reserves. Ian Glacken consents to the the inclusion in the release of a summary based upon his information in the form and context in which it appears.

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## **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
Commonwealth, NSW			-
EL5874	Granted	100%	100%
EL8212	Granted	100%	100%
EL8252	Granted	100%	100%
EL8504	Granted	100%	100%
EL8505	Granted	100%	100%
EL8632	Granted	-	100%
Broken Hill, NSW			
EL7390	Granted	100%	100%
EL8234	Granted	100%	100%
EL8636	Granted	-	100%
ELA5265	Application	-	-
EL8609	Granted	-	100%
Mulga Tank,WA			
E39/988	Granted	100%	100%
E39/1072	Granted	100%	100%
E39/1439	Granted	100%	100%
E39/1440	Granted	100%	100%
E39/1441	Granted	100%	100%
E39/1442	Granted	100%	100%
E39/1513	Granted	100%	100%
E39/1761	Granted	100%	100%
E39/1766	Granted	100%	100%
E39/1767	Granted	100%	100%
E39/1768	Granted	100%	100%
E39/1997	Granted	-	100%
E39/2018	Granted	-	100%
E39/2019	Granted	-	100%
E39/2022	Application	-	-
Clermont, Qld			
EPM14116	Granted	100%	100%
Pilbara, WA		- I	
E45/4971	Application	-	-
E45/4972	Application	-	-
E45/4973	Application	-	-
E45/5009	Application	-	-
E46/1171	Application	-	-
E46/1172	Application	-	-
E46/1186	Application	-	-
E46/1188	Application	-	-
E46/1189	Application	-	-

#### **BROKEN HILL APPENDIX 1 - SECTION 1 SAMPLING TECHNIQUES AND DATA**

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	<ul> <li>Rock Chip Samples</li> <li>Random rock samples were taken at surface which represented favourable geology and alteration to known mineralisation in the region. Samples are variably weathered.</li> <li>Soil Samples</li> <li>Soil samples were taken at 50 m intervals from a hole 15-20 deep and sieved to -2mm to collect about 250 g of material.</li> <li>Diamond Drilling</li> <li>Diamond drilling was used to produce drill core either with a diameter of 63.5 mm (HQ) or 47.6 mm (NQ). A handheld XRF instrument was used to analyse the drill core at 50 cm intervals.</li> </ul>
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	Rock Chip Samples         Representative rock chip samples at each sample site weigh between 0.8 and 1.2 kg. Soil samples are taken at a consistent depth below surface and sieved.         Soil Samples and Drill Samples         Sample representivity was ensured by a combination of Company Procedures regarding quality control (QC) and quality assurance / testing (QA).         Examples of QC include (but are not limited to), daily workplace and equipment inspections, as well as drilling and sampling procedures.         Examples of QA include (but are not limited to) collection of "field duplicates", the use of certified standards and blank samples approximately every 50 samples.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information	Rock Chip and Diamond Drill Samples Rock samples and split diamond core were sent to Intertek Adelaide where they were crushed, dried and pulverised (total prep) to produce a 25-30 g sub-sample for analysis by four acid digest with an ICP/AES finish for ore grade base metal samples and either lead collection or nickel sulphide fire assay with AAS or MS finish for gold and the PGMs. Weathered samples contained gossanous sulphide material. Soil samples were sent to SGS Perth for analysis by the MMI digest. The XRF data is qualitative only. A comparison between the XRF results and wet chemical assay data will be completed on receipt of final results.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Diamond Drilling comprises NQ (47.6 mm diameter) and HQ (63.5 mm diameter) sized core. Impact diamond core is triple tube and is oriented. Historical diamond core was not oriented.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed	Diamond core recoveries for all holes are logged and recorded. Recoveries are estimated to be approximately >97% for the Red Hill Prospect. No significant core loss or sample recovery problems are observed in the drill core.

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Criteria	JORC Code explanation	Commentary	
	Measures taken to maximise sample recovery and ensure representative nature of the samples	Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the driller.	
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No sample bias has been established.	
Logging		Geological logging of samples followed company and industry common practice. Qualitative logging of samples included (but not limited to); lithology, mineralogy, alteration, veining and weathering. Diamond core logging included additional fields such as structure and geotechnical parameters.	
	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Magnetic Susceptibility measurements were taken for each 0.5 m diamond core interval.	
		For diamond core, information on structure type, dip, dip direction, texture, shape and fill material has been recorded in the logs. RQD data has been recorded on selected diamond holes. Handheld XRF analysis was completed at 50 cm intervals on diamond core.	
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	All logging is quantitative, based on visual field estimates. Systematic photography of the diamond core in the wet and dry form was completed.	
		All diamond drill holes were logged in full.	
	The total length and percentage of the relevant intersections logged	Detailed diamond core logging, with digital capture was conducted for 100% of the core by Impact's on-site geologist.	
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	All core samples were sampled by half core. Selected intervals of quarter core will be selected for check assays if required.	
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	No RC drilling results are reported.	
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Company procedures were followed to ensure sub-sampling adequacy and consistency. These included (but were not limited to) daily work place inspections of sampling equipment and practices, as well as sub-sample duplicates ("field duplicates").	
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Laboratory QC procedures for rock sample and diamond drill core assays involve the use of internal certified reference material as assay standards, along with blanks, duplicates and replicates.	
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	Rock and Soil Samples Field duplicates were taken at selected sample sites.	
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Diamond Core Samples Quarter core duplicate samples are taken randomly every 50 samples. Sample sizes at Red Hill are considered adequate due to mineralisation style.	

Criteria	JORC Code explanation	Commentary
Quality of assay data and aboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	An industry standard fire assay technique for samples using lead collection with an Atomic Absorption Spectrometry (AAS) finish was used for gold and aqua regia digest for base metals and silver.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical tools were used to determine material element concentrations. A handheld XRF was used for qualitative analysis only.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Rock Chip SamplesFor the rock chips, quality control procedures for assays were followed via internal laboratory protocols.Accuracy and precision are within acceptable limits.Diamond Drill SamplesReference standards and blanks are routinely inserted into every batch of samples at a rate of 1 in every 50 samples.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	The results have not been verified by independent or alternative companies. This is not required at this stage of exploration.
	The use of twinned holes.	No drilling results are reported.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary assay data for rock chips has been entered into standard Excel templates for plotting in Mapinfo. All historical drill data has been entered digitally by previous explorers and verified internally by Impact.
	Discuss any adjustment to assay data.	There are no adjustments to the assay data.
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Sample locations and drill holes were located by hand held GPS.
	Specification of the grid system used.	The grid system for Broken Hill is MGA_GDA94, Zone 54.
	Quality and adequacy of topographic control.	Standard government topographic maps have been used for topographic validation. For the diamond holes, down-hole single shot surveys were conducted by the drilling contractor. Surveys were conducted at 15 m, 30 m and then approximately every 30 m down-hole.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Sample spacing for the soil survey was on a 50 m by 50 m grid. Reconnaissance drill spacing is approximately 200 m.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Estimations of grade and tonnes have not yet been made.
	Whether sample compositing has been applied.	Sample compositing has not been applied.
Orientation of data in relation to	Whether the orientation of sampling achieves unbiased sampling of possible	Not relevant to soil and rock chip results.

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Criteria	JORC Code explanation	Commentary
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Not relevant to soil and rock chip results or early stage exploration drill results.
Sample security	The measures taken to ensure sample security.	Chain of custody is managed by Impact Minerals Ltd. Samples for Broken Hill are delivered by Impact Minerals Ltd by courier who transports them to the laboratory for prep and assay. Whilst in storage, they are kept in a locked yard. Tracking sheets have been set up to track the progress of batches of samples.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	At this stage of exploration a review of the sampling techniques and data by an external party is not warranted.

#### SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Broken Hill Project currently comprises 1 exploration licences covering 100 km <sup>2</sup> . The tenement is held 100% by Golden Cross Resources Ltd. Impact Minerals Limited is earning 80% of the nickel-copper-PGE rights in the licence from Golden Cross. No aboriginal sites or places have been declared or recorded over the licence area. There are no national parks over the license area.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenement is in good standing with no known impediments.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	There has been no significant previous work at this prospect.
Geology	Deposit type, geological setting and style of mineralisation.	Nickel-copper-PGE sulphide mineralisation associated with an ultramafic intrusion.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul></li></ul>	See Table in text.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	All reported assays have been length weighted. No top cuts have been applied. A cut-off of approximately 0.1% Cu, 0.4% Cu and 1.0% Cu has been applied for reporting of exploration results.

Criteria	JORC Code explanation	Commentary
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	High grade massive sulphide intervals internal to broader zones of disseminated sulphide mineralisation are reported as included intervals.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents have been reported.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	The orientation of mineralisation in RHD001 is yet to be determined.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figures in body of text.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All results reported are representative
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Assessment of other substantive exploration data is not yet complete however considered immaterial at this stage.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	Follow up work programmes will be subject to interpretation of results which is ongoing.

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#### **COMMONWEALTH APPENDIX 1 - SECTION 1 SAMPLING TECHNIQUES AND DATA**

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	Rock chip samples         Representative samples at each sample site weigh between 0.8 and 1.2 kg. Sample sites were chosen due to historic rock and soil assay results and the geophysical surveys conducted on the Commonwealth Project. Historic rock sample methods are unknown but are considered immaterial.         Soil Samples and Drill Samples         Sample representivity was ensured by a combination of Company Procedures regarding quality control (QC) and quality assurance / testing (QA).         Examples of QC include (but are not limited to), daily workplace and equipment inspections, as well as drilling and sampling procedures.         Examples of QA include (but are not limited to) collection of "field duplicates", the use of certified standards and blank samples approximately every 50 samples
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information	Rock chip samplesRock samples were sent to SGS Perth where they were crushed, dried and pulverised (total prep) to produce a 25-30 g sub-samples for analysis initially by Aqua Regia digest with ICP-MS finish for base metals then by four acid digest with an ICP/AES finish for ore grade base metal samples and lead collection fire assay with AAS finish for gold.Soil SamplesSoil samples were sent to ACME Laboratories in Vancouver for analysis by aqua regia digest or to SGS Laboratories in Perth for analysis by the MMI digest.RC and diamond drill samplesRC samples and cut samples of core were submitted to ALS in Orange, NSW. Laboratory sample preparation involved: sample crushed to 70% less than 2mm, riffle/rotary split off 1 kg, pulverise split to >85% passing 75 microns.RC samples analysed by MEICP41 or MEOG46 for ore grade samples, aqua regia digest with ICP OES analysis and AA24 fire assay with AAS finish.Historical diamond and RC samples were sent to Fox Anamet, Brookvale NSW where gold was determined by fire assay, base metals by DCP and AAS methods.Weathered samples contained gossanous sulphide material and fresh samples containing visible pyrite, galena, sphalerite and chalcopyrite.

Criteria	JORC Code explanation	Commentary
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Diamond drilling accounts for about 50 % of the drilling and comprises NQ (47.6 mm diameter) and HQ (63.5 mm diameter) sized core. Impact diamond core is triple tube and is oriented. Historical diamond core was not oriented. RC drilling accounts for about 50% of the drilling and comprises 4 inch hammer.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed	Diamond core recoveries for all holes are logged and recorded. Recoveries are estimated to be approximately >97% for the Commonwealth Project. No significant core loss or sample recovery problems are observed in the drill core or historic reports. RC samples were visually checked for recovery, moisture and contamination.
	Measures taken to maximise sample recovery and ensure	Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the driller.
	representative nature of the samples	The RC samples are collected by plastic bag directly from the rig-mounted cyclone and laid directly on the ground in rows of 10. The drill cyclone and sample buckets are cleaned between rod-changes and after each hole to minimise down-hole and/or cross contamination.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No sample bias has been established.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Geological logging of samples followed company and industry common practice. Qualitative logging of samples included (but not limited to); lithology, mineralogy, alteration, veining and weathering. Diamond core logging included additional fields such as structure and geotechnical parameters. Magnetic Susceptibility measurements were taken for each 1m RC sample and each 1m diamond core interval. For diamond core, information on structure type, dip, dip direction, texture, shape and fill material has been recorded in the logs. RQD
		data has been recorded on selected diamond holes. Handheld XRF analysis was completed at 50 cm and 1 m intervals on diamond core and for every metre for RC samples.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	All logging is quantitative, based on visual field estimates. Systematic photography of the diamond core in the wet and dry form was completed.
		Chip trays with representative 1m RC samples were collected and photographed then stored for future reference.
		All diamond drill holes were logged in full.
	The total length and percentage of the relevant intersections logged	All RC chips samples were geologically logged by Impact's on-site geologist on a 1m basis, with digital capture in the field.
		Detailed diamond core logging, with digital capture was conducted for 100% of the core by Impact's on-site geologist.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	All core samples were sampled by half core. Selected intervals of quarter core will be selected for check assays if required.

Criteria	JORC Code explanation	Commentary
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples were split using a riffle splitter.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Company procedures were followed to ensure sub-sampling adequacy and consistency. These included (but were not limited to), daily work place inspections of sampling equipment and practices, as well as sub-sample duplicates ("field duplicates").
	Quality control procedures adopted for all sub-sampling stages to	Laboratory QC procedures for rock sample assays involve the use of internal certified reference material as assay standards, along with blanks, duplicates and replicates.
	maximise representivity of samples.	The QC procedure for historical diamond and RC samples is unknown but is assumed to have been minimal; however, the impact of historical samples has been somewhat mitigated by recent drilling.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	Sample duplicates from the historical drilling were taken from selected intervals and compared to the original assay. Quarter core was taken for diamond samples and riffle resplits for RC samples.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The samples sizes at Commonwealth are considered appropriate since gold has been identified as predominantly fine-grained by thin section analysis which would indicate the nugget effect is minimal.
Quality of assay data and laboratory tests		An industry standard fire assay technique for samples using lead collection with an Atomic Absorption Spectrometry (AAS) finish was used for gold and aqua regia digest for base metals and silver.
		The quality of historical drill sample assays is unknown; however it is reasonable to assume that core samples were representative of the mineralisation.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical tools were used to determine material element concentrations. A handheld XRF was used for qualitative analysis only.
		For the rock chips, quality control procedures for assays were followed via internal laboratory protocols. Accuracy and precision are within acceptable limits.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Reference standards and blanks are routinely inserted into every batch of samples at a rate of 1 in every 25 samples in the Impact drilling. Impact's inserted standards in general showed results within expected ranges. The calculated means for Lab standards are very close to expected for the majority of standards and are within industry expectations.
		Laboratoy repeat checks and original samples correlated very well.
		There is minimal quality control of historical drill sample assays. Twin holes have been drilled to verify historical drilling.
		The QAQC results indicate that the assays used for resource estimation are a fair representation of the material that has been sampled.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections from drilling have not been verified by independent or alternative companies or by Impact.

Criteria	JORC Code explanation	Commentary
	The use of twinned holes.	Two twin diamond holes versus historic RC holes have been drilled at Commonwealth South and Main Shaft.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary assay data for rock chips has been entered into standard Excel templates for plotting in Mapinfo and Target. All historical drill data has been entered digitally by previous explorers and verified internally by Impact.
	Discuss any adjustment to assay data.	No significant adjustments have been required.
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Recent drill holes have been located by DGPS. Historical drill holes and mine shafts have been verified by DGPS.
	Specification of the grid system used.	The grid system for Commonwealth is MGA_GDA94, Zone 55.
		Standard government topographic maps have been used for topographic validation. The DGPS is considered sufficiently accurate for elevation data.
	Quality and adequacy of topographic control.	For the diamond holes, down-hole single shot surveys were conducted by the drilling contractor. Surveys were conducted at 6m, 18, 30m and then approximately every 30m down-hole.
		For the RC drill holes, downhole dip surveys were taken at approximately 30m intervals and at the bottom of the hole.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Drill spacing of drill holes ranges between 10 and 30 m which is considered adequate for Exploration Results.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Spacing of drill holes ranges between 10 m and 50 m on section and are considered adequate for Mineral Resource estimation procedures.
	Whether sample compositing has been applied.	Sample compositing has been applied for quoting drill composite results only.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Drilling is oriented sub-perpendicular to the mineralised trend and stratigraphic contacts as determined by field data and cross section interpretation.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No significant sample bias has been identified from drilling due to the optimum drill orientation described above. Where present, sample bias will be reported.
Sample security	The measures taken to ensure sample security.	For rock samples, chain of custody is managed by Impact Minerals Ltd. Samples for Commonwealth are delivered by Impact Minerals Ltd personnel to ALS in Orange, NSW or to SGS Perth for prep and assay. Whilst in storage, they are kept in a locked yard. Tracking sheets have been set up to track the progress of batches of samples. Security of historic drill samples is unknown however is considered immaterial.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	A review of the sampling techniques and data both of historic drill holes and of Impact's procedures has been completed by Optiro Consultants of Perth, WA.

#### SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Commonwealth Project currently comprises 3 exploration licences covering 315 km <sup>2</sup> . The tenements are held 100% by Endeavour Minerals Pty Ltd, a subsidiary company of Impact Minerals Limited. No aboriginal sites or places have been declared or recorded in areas where Impact is currently exploring. There are no national parks over the license area.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenements are in good standing with no known impediments.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	A total of 66 drillholes have been completed over 300 m strike between the Commonwealth main shaft and Commonwealth South by previous explorers to an average depth of 53 m.
Geology	Deposit type, geological setting and style of mineralisation.	The Commonwealth and Commonwealth South deposits are considered gold-rich volcanic hosted massive sulphide (VMS) deposits that occur at and below the contact with a porphyritic rhyolite and overlying volcanic sedimentary rocks. The mineralisation may have been overprinted by epithermal mineralisation.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul></li></ul>	See Table in text.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	All reported assays have been length weighted. No top cuts have been applied in the reporting of the drill assays. A nominal cut-off of approximately 0.5 g/t Au has been applied.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	High grade massive sulphide intervals internal to broader zones of disseminated sulphide mineralisation are reported as included intervals.

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Criteria	JORC Code explanation	Commentary
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Gold equivalent values have been used in the long section and in the resource calculation. Australian metal prices used for the gold equivalent were \$1,580/oz gold, \$22/oz silver, \$2,740/t zinc, \$2,396/t lead and \$7,320/t copper. Given the high grade results, it is assumed that very high recoveries will be achieved. However no metallurgical studies have been completed to verify this. Such studies will be done as and when appropriate.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	Historical drill holes to date have been sub-perpendicular to the mineralised trend and stratigraphy so intervals are close to true width or otherwise stated.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figures in body of text.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All results reported are representative
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Assessment of other substantive exploration data is not yet complete however, it is not considered material at this stage to a Mineral Resource Estimate.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	Follow up work programmes will be subject to interpretation of recent and historic results which is ongoing.

#### SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES

Criteria	JORC Code explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	A visual comparison is completed between assay results and original logs (if hand drawn/logged) and detailed print outs and down hole logs for each hole. All errors are corrected.
	Data validation procedures used.	Impact's database has industry standard protocols to ensure that only valid data is accepted. For example, only geological codes that form part of the Impact logging code system can be accepted into the database.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits. The geology competent person, Dr Mike Jones has been with Impact since its inception and is closely in Commonwealth project. He was present during a significant part of the drill programme and helped sup interpretation of the deposit. The majority of the work was compiled by Mr Leo Horn who is also a Com reporting of Exploration Results and has been responsible for all aspects of the exploration programmes Project.	
	If no site visits have been undertaken indicate why this is the case.	
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological	There is a high level of confidence in the geological interpretation due to the historical operating experience and the readily identifiable stratigraphic control on mineralisation.
	interpretation of the mineral deposit.	Wireframes are used to constrain the estimation and are based on drill hole intercepts and geological boundaries. All wireframes are constructed to 0.5 g/t Au cut-off grades for shape consistency.
	Nature of the data used and of any assumptions made.	The mineralisation is generally quite consistent and drill intercepts clearly define the shape of the mineralised body with limited options for large scale alternate interpretations.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	The controls on and interpretation of mineralisation is relatively straightforward and no alternative interpretations have been considered.
	The use of geology in guiding and controlling Mineral Resource estimation.	Wireframes are used to constrain the estimation and are based on drill hole intercepts and geological boundaries.
	The factors affecting continuity both of grade and geology.	Wireframes are constructed to 0.5 g/t Au cut-off grade for shape consistency.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource	The mineral resource at Commonwealth comprises two main areas, being Main Shaft and Commonwealth South, which have a total strike length of 400 m and extend vertically for approximately 120 m below surface. Main Shaft has been historically mined from surface to 40 m below surface.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	<ul> <li>Grade estimation using Ordinary Kriging (OK) was completed using Datamine software for six elements; Au, Ag, Cu, Pb, Zn and As. Drill grid spacing was between 10 m and 30 m.</li> <li>Variogram orientations were largely controlled by the strike of mineralisation and downhole variography. Variograms for estimation were determined individually for each element.</li> <li>Other estimation parameters, such as search distance, minimum and maximum sample numbers was derived from KNA. Search distances varied depending on the element being estimated.</li> </ul>
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	There has been no previous resource estimation on the Commonwealth Project, hence no comparisons are available. The resource model has not been compared to any reconciliation data.
	The assumptions made regarding recovery of by-products.	No assumptions have been made regarding recovery of any by-products.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	Arsenic was the only deleterious element estimated.
		The block model dimensions and parameters were based on the geological boundaries and average drill grid spacing. Sub-blocks were used to ensure that the block model honoured the domain geometries and volume. Block estimates were controlled by the original parent block dimensions. The individual parent block dimensions were 5 mE by 15 mN by 10 mRL, with sub-blocking allowed. Estimation into parent blocks used a discretisation of 5 (X points) by 10 (Y points) by 8 (Z points) to better represent estimated block volumes.
	Any assumptions behind modelling of selective mining units.	No selective mining units were modelled in this estimate. It is assumed that the SMU is equal to the block model parent cell or smaller.
	Any assumptions about correlation between variables.	Multi-element analysis was conducted on the composites. There was a strong correlation between silver and lead and between lead and zinc.
	Description of how the geological interpretation was used to control the resource estimates.	Drillhole sample data was flagged using domain codes generated from three dimensional mineralisation domains. Sample data was composited to a one metre downhole length. Mineralisation domains were treated as hard boundaries in the estimation process.
	Discussion of basis for using or not using grade cutting or capping.	Top cuts were established by investigating univariate statistics and histograms of sample values. A top cut level was selected if it affected outliers, reduced the sample variance and did not materially change the mean value.

Criteria	JORC Code explanation	Commentary
	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	Model validation was carried out using visual comparisons between composites and estimated blocks, checks for negative or absent grades, and statistical comparison against the input drillhole data and graphical profile (swath) plots.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages are estimated on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied	The resource model is modelled to a nominal wireframe cut-off grade of 0.5 g/t Au with a minimum width of 1 m to encapsulate the entire mineralised body. The edges of the resource shapes may be narrower than potential minimum mining widths, which suggests that a small proportion of the shape is unlikely to be mineable; however the inclusion of these zones adds to the orebody continuity and the ore/waste discrimination of the Reserve process.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	No minimum mining assumptions were made during the resource wire framing or estimation process. Mining parameters, including minimum width assumptions, will be applied during the conversion to Ore Reserves.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	No metallurgical factors or assumptions are made during the resource estimation process as this will be addressed during conversion to Ore Reserve. The resource block model has been populated with multi-element data which is required for the metallurgical analysis during the Ore Reserve process.

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made	The Commonwealth Project is a historic brown-fields mine with a 20 year operating history. No environmental factors or assumptions are made during the resource estimation process.
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	Bulk density (specific gravity) measurements are taken using conventional weight in air vs weight in water methodology.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit,	All drill core within the mineralisation is in fresh rock and solid, so no coatings are applied to reduce water penetration.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	A zinc grade vs. density regression formula was used to assign specific gravity (SG) values to the block model. The regression formula of "SG = (0.0815*Zn%)+2.67" was used.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories	Classification of the resource models is based primarily on drill density and geological understanding, in conjunction with increased confidence from areas of historic mining.
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	The classification takes into account the relative contributions of geological and data quality and confidence, as well as grade confidence and continuity.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The classification reflects the view of the Competent Person.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	This is the maiden Mineral Resource estimate, therefore no audits or reviews have been carried out.

#### Excellence in Exploration

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate	The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. The statement relates to global estimates of tonnes and grade.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used	The estimate is considered to be relevant to a global report of tonnage and grade.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available	The resulting estimates are supported by limited historical production.

#### **MULGA TANK APPENDIX 1 - SECTION 1 SAMPLING TECHNIQUES AND DATA**

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	<ul> <li>The soil samples were taken at a depth of 15 – 20 cm below surface and sieved to -2mm mesh size. The targets at Mulga Tank have been drilled by Reverse Circulation (RC) and diamond drill holes (DD). Eight holes for 3,025 m were completed.</li> <li>A hand held Olympus XRF machine was used to take multi-element readings on the samples bags from the RC drill pre-collars (I reading every I metre) and at 25 cm to 50 cm intervals on the diamond core. These readings are a guide only and do not constitute an accurate or precise assay. Impact has conducted a number of quality control experiments to determine the optimal reading time and number of readings per sample site. A correlation of these readings against the assay data suggests that at values greater than 1% nickel, the XRF analyser gives a good approximation to the chemical assay value.</li> <li>Drill holes were oriented to intersect the dip of electromagnetic conductors as interpreted by Impact's consultants Newexco.</li> </ul>

Criteria	JORC Code explanation	Commentary
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	RC samples have been collected by riffle splitter. Diamond core was used to obtain high quality samples that were logged for lithological, structural, alteration and other attributes. Sampling was carried out under Impact Minerals Ltd protocols and QAQC procedures as per industry best practice. A combination of mapping, soil geochemistry, airborne magnetic data and ground EM surveys identified the Mulga Tank target.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information	Diamond core is mostly NQ2 size, sampled on geological intervals cut into half core to give sample weights under 3 kg. Reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised. Samples were crushed, dried and pulverised (total prep) to produce a sub-sample for analysis by four acid digest with an ICP/OES finish for base metals and lead collection fire assay with AAS finish for precious metals. The main sulphide types are expected to be pentlandite and chalcopyrite, with pyrite, and minor sphalerite. Non-sulphide nickel species in weathered and transitional material have not yet been identified.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Diamond drilling accounts for 75 % of the drilling and comprises HQ and NQ2 sized core. Pre-collar depths range from 50 m to about 150 m and hole depths range from 300 m to 570 m. The core was oriented using a down-hole orientation tool at the end of every run with 70% of orientations rated as "good". RC drilling in the pre-collar accounts for 20 % of the total drilling and comprises 140 mm diameter face sampling hammer drilling.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed	Diamond core and RC recoveries are logged and recorded in the database. Overall recoveries are >95% for Mulga Tank and there are no core loss issues or significant sample recovery problems.
	Measures taken to maximise sample recovery and ensure representative nature of the samples	Diamond core at Mulga Tank is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers. RC samples were visually checked for recovery, moisture and contamination.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No sample bias has been established because an insufficient number of samples have been assayed.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Information on structure type, dip, dip direction, alpha angle, beta angle, texture, shape and fill material is stored in the structure table of the database.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of diamond core and RC samples at Mulga Tank recorded lithology, mineralogy, mineralisation, structural (DDH only), weathering, colour and other features of the samples. Core was photographed in both dry and wet form.
	The total length and percentage of the relevant intersections logged	All drillholes were logged in full, apart from rock roller diamond hole pre-collar intervals of between about 50 m and 70 m depth.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Core for Mulga Tank was cut in half onsite using an automatic core saw. All samples were collected from the same side of the core.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples were split using a riffle splitter.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sample preparation of diamond core for Mulga Tank follows industry best practice in sample preparation involving oven drying, coarse crushing of the half core sample down to ~10 mm followed by pulverisation of the entire sample (total prep) using Essa LM5 grinding mills to a grind size of 85% passing 75 micron. The sample preparation for RC samples is identical, without the coarse crush stage.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Field QC procedures involve the use of certified reference material as assay standards, along with blanks, duplicates and barren washes. The insertion rate of these averaged 1:50.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	Field duplicates are done every 50 samples.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample sizes are considered to be appropriate to correctly represent the sulphide mineralisation at Mulga Tank based on the disseminated style of mineralisation, the thickness and consistency of the intersections, the sampling methodology and percent value assay ranges for the primary elements.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	See optiro. An industry standard fire assay technique using lead collection with an Atomic Absorption Spectrometry (AAS) finish was used for Au, Ag, Pt, Pd.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical tools were used to determine material element concentrations.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Quality control procedures for assays are as per Impact Minerals protocols. Accuracy and precision are within acceptable limits.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections have yet to be returned and therefore verification is not required.
	The use of twinned holes.	No twin holes have been drilled at Mulga Tank.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary data was collected using a set of standard Excel templates on Toughbook laptop computers using lookup codes. The information was sent to IOGlobal/Reflex for validation and compilation into a SQL database server.
	Discuss any adjustment to assay data.	

Criteria	JORC Code explanation	Commentary
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Drill holes and soil sample sites were located by hand held GPS. Down-hole surveys used single shot readings have been completed during drilling at least at 50 m intervals.
	Specification of the grid system used.	The grid system for Mulga Tank is MGA_GDA94, Zone 51.
	Quality and adequacy of topographic control.	Standard government topographic maps and hand held GPS have been used for topographic control. The land surface is flat and increased accuracy and precision for topographic contours is not required at this stage.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	This is a first pass reconnaissance drill programme designed to test geochemical and geophysical anomalies. Drill spacing is adequate for that and will change according to on-going results.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	This is a first pass reconnaissance drill programme designed to test geochemical and geophysical anomalies. Drill spacing is adequate for that and will change according to on-going results.
	Whether sample compositing has been applied.	Samples will be composited to one metre lengths and adjusted where necessary to ensure that no residual sample lengths have been excluded (best fit).
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The targets have been drilled sub-perpendicular to mineralisation within the stratigraphy, but subparallel to the orientation of some veins in the mineralised trend. Structural logging based on oriented core to determine the controls on mineralisation are on-going.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No orientation based sampling bias has been identified at Mulga Tank in the data at this point, although the vertical sulphide veins may cause hole orientations to be changed in future drill programmes.
Sample security	The measures taken to ensure sample security.	Chain of custody is managed by Impact Minerals Ltd. Samples for Mulga Tank are stored on site and delivered by Impact Minerals Ltd personnel to Kalgoorlie for initial sample preparation by Genalysis who then transport the samples to Perth for assay. Whilst in storage, they are kept in a locked yard. Tracking sheets have been set up to track the progress of batches of samples.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	At this stage of exploration a review of the sampling techniques and data by an external party is not warranted. An internal review of the sampling techniques and data will be completed at the end of the current programme.

#### SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Mulga Tank Project comprises 13 exploration licences covering 425 km <sup>2</sup> . Mulga Tank is located wholly within Exploration Licence E39/988. Impact Minerals Ltd (IPT) has a 20% interest in the tenement with Golden Cross Resources Limited (GCR: 80%). There is no Native Title Claim over the licence.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenement is in good standing with no known impediments. IPT has the right to earn 70% ownership with \$1.9M expenditure commitment before November 2017.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Limited bedrock-cover interface percussion drilling completed by previous explorers focused on the southern contact of the dunite, a circular, strongly magnetic feature 3.5 km by 4 km in diameter that is interpreted to represent a flat-lying ultramafic sill. A total of 28 RC and 4 diamond holes were completed.
Geology	Deposit type, geological setting and style of mineralisation.	Mulga Tank is interpreted as an ultramafic hosted primary magmatic nickel sulphide deposit, similar in style to the Perseverance and Rocky's Reward nickel mines at Leinster in Western Australia. The Mulga Tank Dunite is also similar to the unit that hosts the Mount Keith disseminated nickel sulphide deposit. There are two prospective units (Upper and Lower) that host the initial sulphide intersections at a depth of 300 and 350 metres vertically (respectively).
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul></li></ul>	Refer to Table 2 in body of text. Further details are not material for this early stage of exploration.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	All reported assays have been length weighted. No top outs have been applied. A nominal cut-off of 0.3% to 0.5% nickel has been applied.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	High grade massive sulphide intervals internal to broader zones of sulphide mineralisation are reported as included intervals.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used for reporting exploration results.

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	The Mulga Tank deposit is a flat lying ultramafic sill. Holes to date have been sub-vertical and whilst this is perpendicular to stratigraphy, steeply dipping sulphide veins are at a sub-optimal orientation to the drillhole.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figures in body of text.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All results reported are representative
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	The drill targets at Mulga Tank have been ranked on the basis of soil geochemistry and ground EM results. Information on structure type, dip, dip direction, alpha angle, beta angle, texture, shape, roughness and fill material is stored in the structure table of the database.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	Follow up work programmes will be subject to interpretation of assay results which is ongoing.

+Rule 5.5

## Appendix 5B

## Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

#### Name of entity

IMPACT MINERALS LIMITED	
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#### ABN

52 119 062 261

Quarter ended ("current quarter")

30 SEPTEMBER 2017

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	(1,221)	(1,221)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(65)	(65)
	(e) administration and corporate costs	(243)	(243)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	4	4
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Research and development refunds	-	-
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(1,525)	(1,525)

2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-

+ See chapter 19 for defined terms

1 September 2016

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	-	-

3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares	2,927	2,927
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares, convertible notes or options	(111)	(111)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	2,816	2,816

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	1,917	1,917
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,525)	(1,525)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4	Net cash from / (used in) financing activities (item 3.10 above)	2,816	2,816
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	3,208	3,208

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	3,208	1,917
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	3,208	1,917

6.	Payments to directors of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to these parties included in item 1.2	106
6.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-
6.3	Include below any explanation necessary to understand the transactio items 6.1 and 6.2	ns included in
Direc	tors' fees, salary payments and superannuation.	

## 7. Payments to related entities of the entity and their associates

- 7.1 Aggregate amount of payments to these parties included in item 1.2
- 7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

#### 1 September 2016

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		-		
		-		

8.	Financing facilities available Add notes as necessary for an understanding of the position	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
8.1	Loan facilities	-	-
8.2	Credit standby arrangements	-	-
8.3	Other (please specify)	-	-
			• • • • •

8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.

9.	Estimated cash outflows for next quarter	\$A'000
9.1	Exploration and evaluation	1,000
9.2	Development	-
9.3	Production	-
9.4	Staff costs	100
9.5	Administration and corporate costs	200
9.6	Other (provide details if material)	
9.7	Total estimated cash outflows	1,300

10.	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced				

10.	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.2	Interests in mining tenements and petroleum tenements acquired or increased	EL8632 (NSW)	Granted	-	100%
		EL8636 (NSW)	Granted	-	100%
		E39/1997 (WA)	Granted	-	100%
		E39/2018 (WA)	Granted	-	100%
		E39/2019 (WA)	Granted	-	100%
		E45/4971 (WA)	Application	-	-
		E45/4972 (WA)	Application	-	-
		E45/4973 (WA)	Application	-	-
		E45/5009 (WA)	Application	-	-
		E45/1171 (WA)	Application	-	-
		E45/1172 (WA)	Application	-	-
		E45/1186 (WA)	Application	-	-
		E45/1188 (WA)	Application	-	-
		E45/1189 (WA)	Application	-	-

#### **Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

AB Grow -d.

Sign here:

(Director/Company Secretary)

Date: 26 October 2017

**Bernard Crawford** Print name:

#### Notes

- 1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
- 2. If this guarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this guarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- Dividends received may be classified either as cash flows from operating activities or cash flows 3. from investing activities, depending on the accounting policy of the entity.