



ASX ANNOUNCEMENT

Date: 26 March 2014

**ASX: IPT** Number: 341/260314

# ROCK CHIP RESULTS UP TO 18.2% COPPER and 58 g/t SILVER and EM CONDUCTORS DEFINE NEW HIGH GRADE COPPER PROSPECTS AT THE COMMONWEALTH PROJECT, NSW

Results extend exploration potential to 2,500 m of strike Further soil and rock chip sampling programme completed

**Results of IP Survey being interpreted** 

## Drill programme to commence in Q2 2014

High grade rock chip samples with assays of up to 18.2% copper and 58 g/t silver taken by Impact Minerals Limited (ASX: IPT) at the company's 100% owned Commonwealth Project in New South Wales have now extended the strike length of the known mineralised zone at the Commonwealth Mine from 600 m to at least 2,500 m (Figure 1).

In addition these new results have for the first time identified a copper-rich part of the mineralised trend which extends for 1,500 m of strike north west of the Commonwealth Mine and includes a line of workings associated with the dormant Coronation Mine (Figure 1). Several near surface weak to moderate electromagnetic conductors which require drill testing have been identified close to this line of workings in a recently completed ground electromagnetic survey (Figure 1).

The Commonwealth Project, acquired as part of the recent merger with Invictus Gold Limited, is located 95 km north of Orange in New South Wales and 50 km north of the Cadia-Ridgeway deposits that contain 70 million ounces of gold and 12 million tonnes of copper within the highly prospective Lachlan Fold Belt. The Belt is host to many major gold-silver-base metal mines (Figure 3).

#### Mineralised trend extended to 2,500 m of strike

Field checking of the area between the Commonwealth Mine and the Coronation Mine has identified numerous old shafts and workings over a strike extent of at least 1,500 m that contain extensive copper oxide minerals, in particular malachite and azurite as well as copper sulphide minerals (Figures 1 and 2). The old workings have not been drilled.

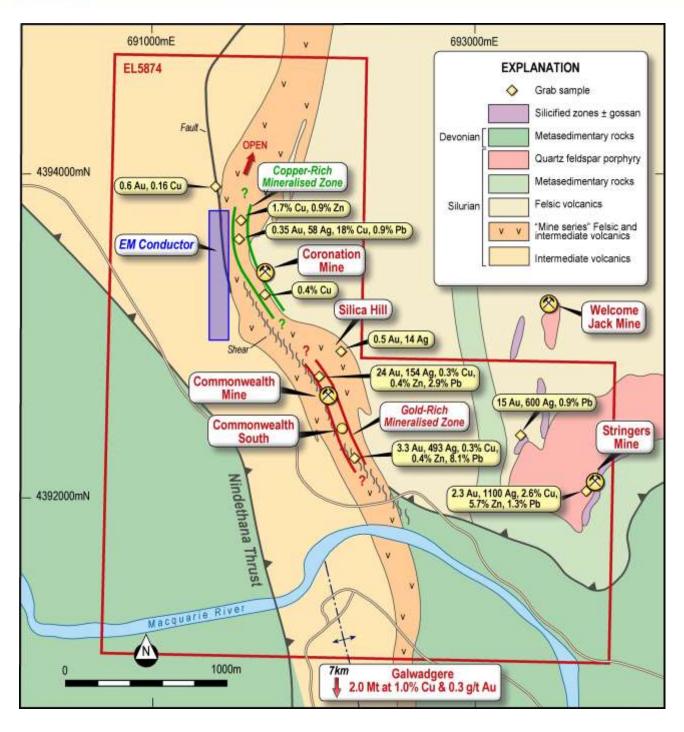
Samples of the weathered and mineralised sedimentary and porphyritic rocks from the workings returned assays of up to:

18.2% copper, 58 g/t silver 0.2% zinc, 0.9% lead and 0.35 g/t gold (see Table 1).



ABN 52 119 062 261





**Figure 1.** Commonwealth Project: Geology, Prospects and Significant Rock Chip Assays. Previous exploration focused solely only on 300 m of strike between the Commonwealth Mine and Commonwealth South Prospect.



These results, together with other work by Impact (see announcement dated <u>12<sup>th</sup> February 2014</u>) have now extended the 300 m long mineralised horizon between the Commonwealth Mine and Commonwealth South to at least 2,500 m of strike and which is still open and undrilled in both directions.



**Figure 2. Examples of mineralised rocks from the Coronation area.** Malachite (green colour) stained weathered breccia (left) and silica altered pyrite-chalcopyrite-bearing rock (right).

#### EM Survey identifies Conductors close to the Coronation Copper Mine

A ground EM survey completed over part of the Commonwealth project area has identified several weak to moderate conductors in an area of poor outcrop immediately west of the Coronation Mine (Figure 1). The conductors trend north-south and dip steeply to the east and are modelled to be at a shallow depth of between 20 m and 230 m below surface. This area has not been drilled.

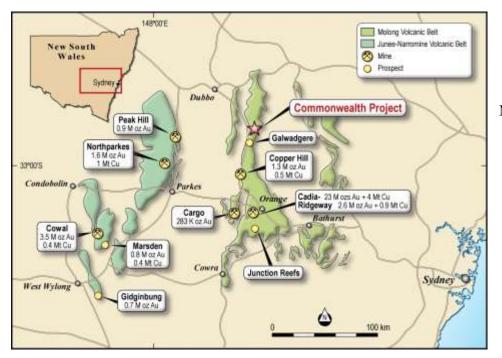
A small outcrop of silicified porphyry rhyolite with trace pyrite and quartz veins occurs over the conductors and one grab sample returned weakly elevated gold (0.04 g/t), silver (0.2 g/t) and copper (0.02%) results.

#### Next Steps

Impact has recently completed a further two weeks of field work at the Commonwealth project. A total of 450 soil and rock chip samples have been taken over the area between Commonwealth and Coronation and samples have been submitted to the laboratory for analysis. Results are expected in about four weeks. The results of an IP survey over the Commonwealth Mine have also recently been received and are being interpreted.

The results of all of this work will be integrated to define further drill targets for drilling in the next Quarter. Drilling to define an Inferred Resource between Commonwealth Mine and Commonwealth South is also planned.





**Figure 3.** Location of the Commonwealth Project and Location of Major Mines and Deposits in the Lachlan fold Belt of New South Wales.

#### ABOUT THE COMMONWEALTH PROJECT

The Commonwealth Mine, a high grade volcanogenic massive sulphide deposit (VMS), was discovered in 1900 and mined intermittently until the 1930's. Early production amounted to 470 oz of gold from 480 tons of oxide ore. A blast furnace was installed in 1905 and **6,476 t was mined at a grade of 6 g/t gold, 150 g/t silver, 2% copper, 15% zinc and 7% lead**. Operations were suspended in 1908 following flooding and there are no records of significant mining activity since.

The project has received little exploration attention in the past 25 years. Previous drilling was focused on 300 m of strike between the Commonwealth Mine and the Commonwealth South Prospect and only 66 drill holes for 3,695 m at an average depth of only 56 metres were completed (Figure 1).

Recent work by Impact (and Invictus) has included detailed re-logging of available diamond core that for the first time has applied a consistent geological framework to the rock types and alteration in the area. This work has been used to produce new maps and cross sections for the area. These are shown in Figures 4, 5, 6 and 7.

Impact's work has identified significant potential for both further high grade VMS deposits at depth and along strike from the Commonwealth Mine and importantly bulk tonnage lower grade disseminated gold and silver mineralisation that either was not recognised or was ignored by the early miners and previous explorers. In addition it is interpreted that there are at least two mineralised horizons in the rock sequence.



Exploratory underground drill holes completed in the 1980's discovered high grade mineralisation (remnant ore) which is still present at the Commonwealth Mine. Drill intercepts included:

## 7 m at 5.3 g/t gold, 346 g/t silver, 9.2% zinc and 3.2% lead in CM85-1; and 3 m at 8 g/t gold, 158 g/t silver, 2.9% zinc and 0.8% lead in CM85-2.

A long section with previous drill results for gold and silver shows that mineralisation between the Commonwealth Mine and the Commonwealth South Prospect is continuous and that two high grade shoots are present with values of more than 50 gram\*metres gold equivalent (Figure 8).

In particular the long section and cross sections show high grade drill intercepts over robust widths that are open at depth and along strike and which confirm the potential for bulk tonnage mining at Commonwealth. These intercepts include:

At the Commonwealth Mine (Figures 4, 5 and 8):

**9.8 m at 8.4 g/t gold and 357 g/t silver** from 54.2 m in CW29;

4.7 m at 5.5 g/t gold and 253 g/t silver from 54.3 m in CW30; and

17 m at 3.5 g/t gold and 206 g/t silver from 41 m in EMC06.

At Commonwealth South (Figures 4, 6 and 7):

30 m at 6 g/t gold and 17 g/t silver from 24 m including 2 m at 77.3 g/t gold in PHC4;

26 m at 2.5 g/t gold and 20 g/t silver from 32 m in PHC9; and

6.9 m at 3.4 g/t gold, 72 g/t silver, 2.2% zinc and 1% lead from 30 m and

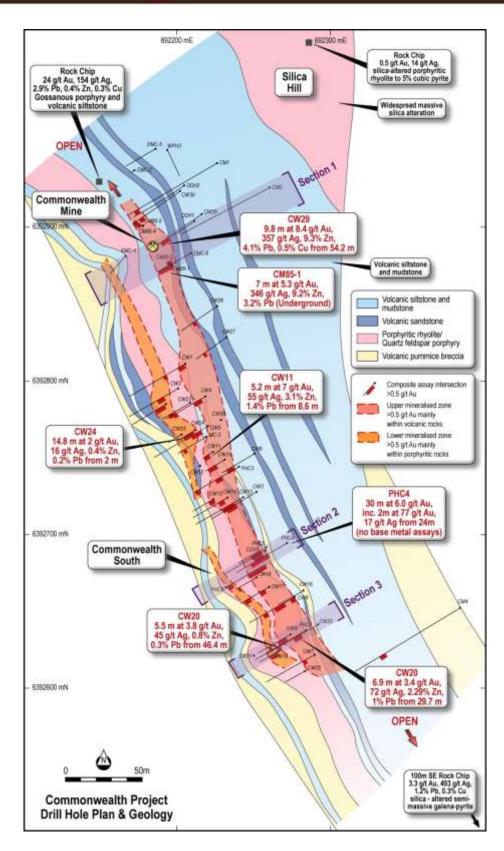
5.5 m at 3.8 g/t gold, 45 g/t silver, 0.8% zinc and 0.3% lead from 44 m in CW20.

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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.



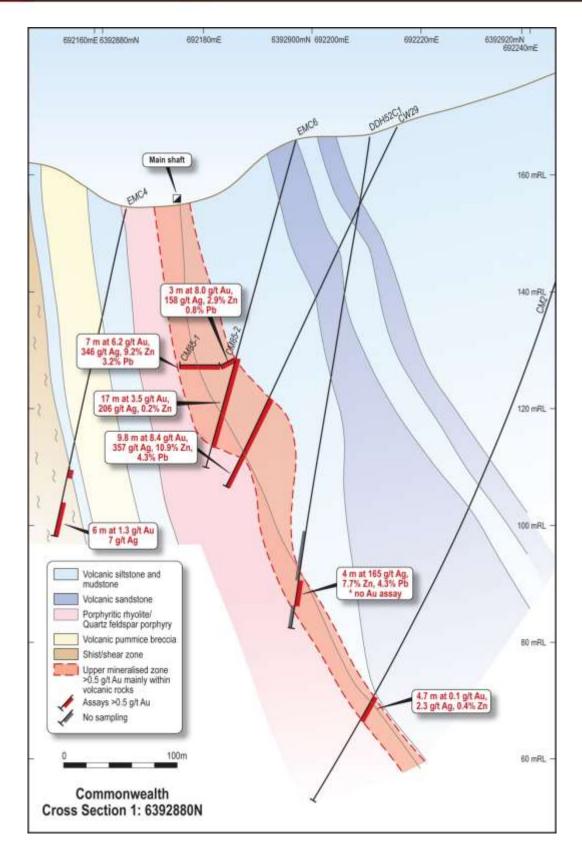


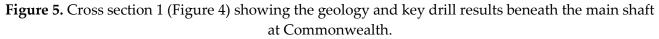
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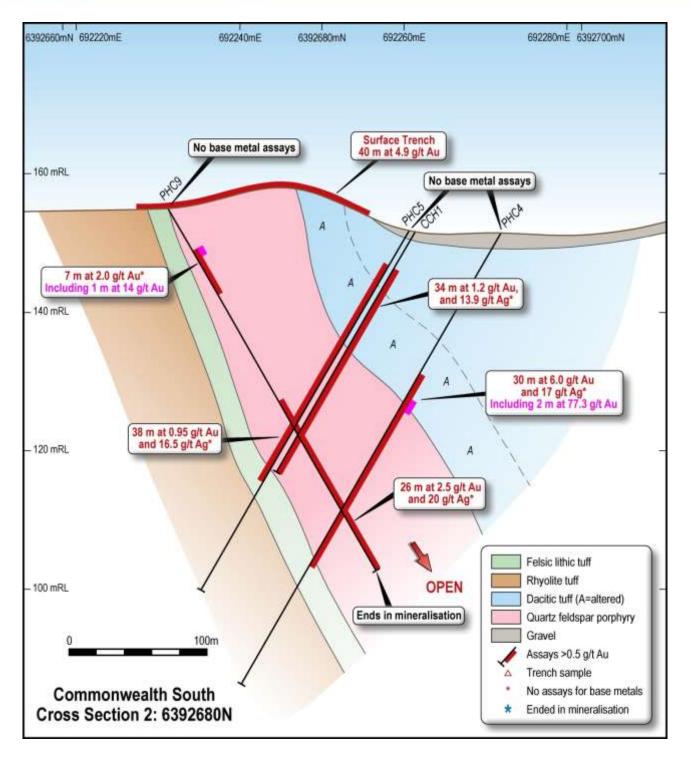
Figure 4. Geology and Mineralisation of the Commonwealth Mine to Commonwealth South area.





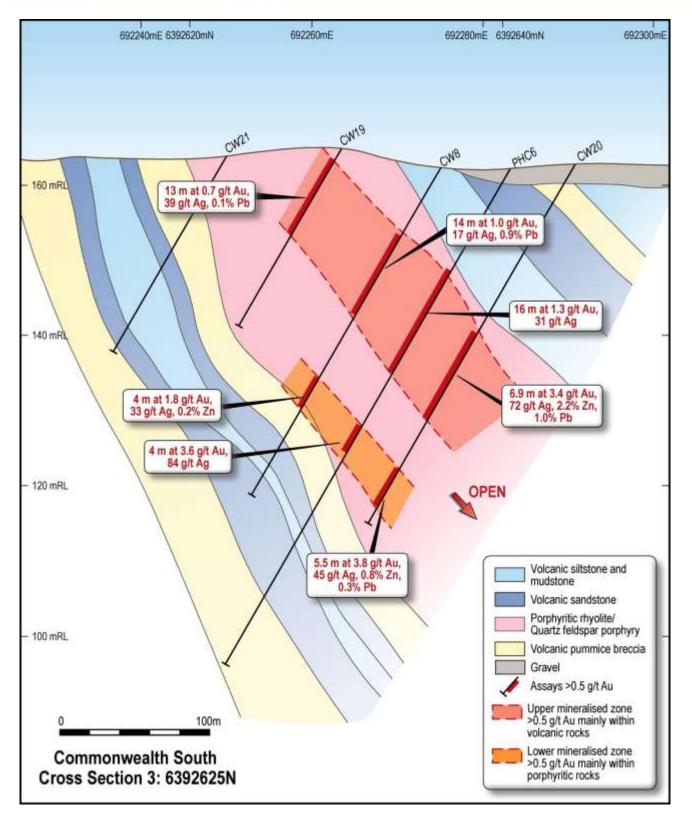






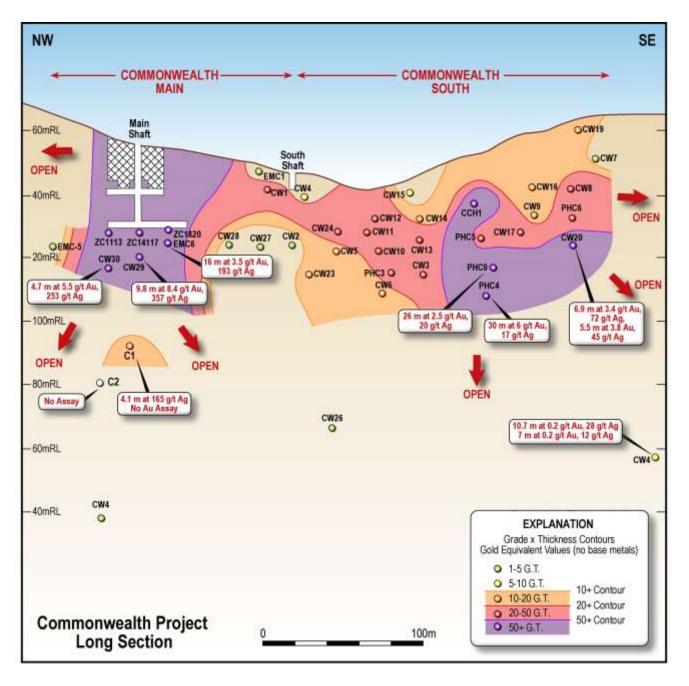
**Figure 6.** Cross Section 2 (Figure 4) showing the geology and key drill results in the centre of the Commonwealth South Prospect.





**Figure 7.** Cross Section 3 (Figure 4) showing the geology and key drill results at the southern end of the Commonwealth South Prospect.





**Figure 8.** Long section between Commonwealth Mine and Commonwealth South showing goldequivalent grade times thickness contours (in gram\*metres) and key drill results.

# **Company Information**

#### **Impact Minerals Limited**

Peter Unsworth Non-Executive Chairman

Markus Elsasser Non-Executive Director

Managing Director

Non-Executive Director

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ACN 119 062 261 ABN 51 119 062 261

Directors

Michael Jones

Paul Ingram

#### Share Registry

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#### Australian Stock Exchange Listing

Shares IPT

#### **Company Secretary**

James Cooper-Jones

#### Major shareholders as at 1.3.14

## **Registered & Administrative** Office

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Email: info@impactminerals.com.au

Website: www.impactminerals.com.au

Bunnenberg Family	31%
Directors	11%
Тор 20	58%
Top 50	69%

#### Capital Structure as at 1.3.14

Ordinary Shares on Issue	487,063,471
Total Listed Options	8,000,000
Total Unlisted Options	34,3000,000

An ASX listed Australian company focused on nickel- copper-PGE and uranium exploration





#### **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.	Random rock samples were taken at surface which represented favourable geology and alteration to known mineralisation in the region. Samples are variably weathered.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	Representative samples at each sample site weigh between 0.8 and 1.2 kg. Sample site area was chosen due to historic rock and soil assay results and the EM survey conducted on the Commonwealth Project. Historic rock sample methods are unknown but are considered immaterial.
	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 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. 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.
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).	Historical diamond drilling accounts for 76 % of the drilling and comprises NQ sized core. Historical RC drilling accounts for 24% of the drilling and comprises 6.75 inch/17.1 cm sized core. Historic core is not oriented downhole but this is not material for the results reported here.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed	Historical diamond core recoveries for selected holes are logged and recorded. Overall recoveries have not yet been calculated but are estimated to be approximately >95% for the Commonwealth Project. No significant core loss or sample recovery problems are observed in the drill core or historic reports.
nature of the samples Whether a relationship exists between sample recovery and grade	Measures taken to maximise sample recovery and ensure representative nature of the samples	Depths were 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. However there is an indication that wet RC samples may give lower gold grades due to loss of fine gold.
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.	For historical diamond core information on structure type, dip, dip direction, texture, shape and fill material has been recorded in the logs. Angles are measured to core axis since core orientation was not done. RQD data has been recorded on selected historic diamond holes.





Criteria	JORC Code explanation	Commentary
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of historic diamond core and RC samples recorded lithology, mineralogy, mineralisation, structural (DDH only), weathering, colour and other features of the samples.
	The total length and percentage of the relevant intersections logged	All historic diamond drillholes were logged in full.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	All NQ core samples were samples by half core and selected intervals of quarter core were selected for check assays.
Sampled wet of For all sample to preparation ted Quality control representivity of Measures taket material collect sampling.	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 rock chips by Impact at Commonwealth follows industry best practice in sample preparation involving oven drying, coarse crushing down to ~10 mm followed by pulverisation of the entire sample (total prep) to a grind size of 85% passing 75 micron.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Laboratory QC procedures for rock sample assays involve the use of internal certified reference material as assay standards, along with blanks, duplicates and replicates. The QC procedure for historical diamond and RC samples is unknown but considered immaterial.
	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	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 rock chips using lead collection with an Atomic Absorption Spectrometry (AAS) finish was used for gold. The quality of historical drill sample assays is unknown, however this is considered immaterial at this stage of exploration.
	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.	For the rock chips, quality control procedures for assays were followed via internal SGS protocols. Accuracy and precision are within acceptable limits. The quality control of historical drill sample assays is unknown, however this is considered immaterial at this stage of exploration.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections from historic drilling have not been verified by independent or alternative companies. This is not required at this stage of exploration.





Criteria	JORC Code explanation	Commentary
	The use of twinned holes.	Twin historical diamond versus RC hole was drilled at Commonwealth South.
	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 on Mapinfo. All historical drill data has been entered digitally by previous explorers and verified internally by Impact.
	Discuss any adjustment to assay data.	Any identified historic data entry errors have been adjusted by Impact and recorded in the comments.
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 the DGPS.
	Specification of the grid system used.	The grid system for Commonwealth is MGA_GDA94, Zone 55.
	Quality and adequacy of topographic control.	Standard government topographic maps have been used for topographic validation. The DGPS is considered sufficiently accurate for elevation data.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Drill spacing of historical 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.	Drill spacing of historical drill holes ranges between 10 and 30 m and may be considered adequate for Mineral Resource and Ore reserve estimation procedures. However estimations of grade and tonnes have not yet been made.
	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.	Historical 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 historical 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 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.	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 in due course.





#### 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 1 exploration licences covering 8 km <sup>2</sup> . The tenement is held 100% by Endeavour Minerals Pty Ltd which has been acquired by Impact Minerals Limited. 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.	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 porphyrictic rhyolite and overlying volcanic sedimentary rocks.
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>	Further details are not material for this early stage of exploration. Information on the historic drill holes is currently being compiled.
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 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.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Gold equivalent values have been used in the long section. Metal prices used for the gold equivalent were \$1,650 for gold and \$30 for silver. 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.





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').	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 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 recent and historic results which is ongoing.