



ASX ANNOUNCEMENT

Date: 19 December 2013

ASX: IPT Number: 328/191213

EXPLORATION UPDATE: MULGA TANK PROJECT

Further extensive nickel and copper mineralisation discovered in last 3 drill holes

Six targets tested, with significant nickel and copper found at three targets and lesser mineralisation at the other three

Significant follow-up work required throughout the project area

The final three drill holes of Impact Minerals Limited maiden drill programme at the Mulga Tank Project have continued to demonstrate the presence of widespread nickel and copper mineralisation close to and within the Mulga Tank Dunite and covering an area of about 15 sq km within E39/988 (Impact 20% and earning a further 50% from Golden Cross Resources Limited).

Impact has now completed 8 drill holes (MTD004-MTD011) to test six targets which comprise five ground electromagnetic (EM) anomalies with coincident soil geochemical anomalies (Conductors 1 to 5) and one further soil geochemical anomaly (Figure 1 and Tables 1 and 2 at the back of this report).

Significant nickel and/or copper mineralisation has been found at three of the targets and lesser mineralisation has been found at the other three. Follow up work including drilling is required at all six targets.

All relevant samples have been sent for assay with results expected throughout January. A summary of the key technical findings of the entire drill programme will be provided in the next Quarterly Report.

Hole MTD011

Hole MTD011 was drilled to test the eastern edge of a combined nickel and copper-in-soil anomaly in the south east part of the Mulga Tank Dunite (Figure 1). This was done to further test the efficacy of the ionic leach soil geochemistry technique away from any EM conductors.

The drill hole intersected four zones of nickel sulphide in the Mulga Tank Dunite:

- 1. In the RC pre-collar two samples contained visible sulphides and returned between 1% and 2% nickel in a 10 m zone of anomalous nickel from 101 m down hole as measured with a portable XRF analyser (see Appendix 1);
- 2. A one metre thick zone zone of "spinifex ore" containing sulphide replacement of olivine crystals occurs at 155 m down hole (Figure 2);



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- 3. Two 20 m thick zones containing up to 5% disseminated nickel sulphides occur at 100 m and 150 m down hole (Figure 2).
- 4. A 50 cm thick zone of breccia containing clasts of nickel sulphide at 220 m down hole (Figure 2). The clasts may have come from a nearby larger body of massive sulphide.





Figure 2a. "Spinifex Ore" in komatiite unit at the top of the Mulga Tank Dunite.

Figure 2b. Disseminated nickel sulphides in adcumulate dunite interpreted to be of magmatic origin.

Figure 2c. Clasts of massive nickel sulphide (with copper sulphide) in breccia zone in dunite. The clast may be remobilised from a nearby body of massive sulphide.

Figure 2. MTD011. Several different types of sulphide occur within the Mulga Tank Dunite in this hole and demonstrate the widespread nature of nickel sulphides throughout the 12 sq km intrusion. All core is 5 cm wide.



MTD011 was stopped at 220 m depth because of the Christmas break and further drilling will be required.

The discovery of disseminated nickel sulphide in Hole MTD011 is significant.

It is the first discovery of such sulphides in the south east part of the Mulga Tank Dunite and further demonstrates that the dunite contains nickel sulphides over a very large area of many square kilometres.

The dunite is therefore very prospective for the discovery of massive nickel sulphides along a very significant strike length of over 10 km of the basal contact and adds to a similar conclusion from the work done at Conductors 1 and 2 (see announcements dated <u>3 December 2013</u> and <u>10 December 2013</u>.

In addition the discovery of the nickel sulphides has further established that the ionic leach technique has successfully identified mineralisation at some depth below transported overburden.

Hole MTD010 at Conductor 1b

Two zones of mineralisation have been found in Hole MTD010, the third hole to be completed at Conductor 1. There are rapid changes in thickness of all the units between the three drill holes, in part related to faulting.

- A 10 m thick komatiite unit that contains up to 3% disseminated nickel sulphides occurs at 265 m down hole. This unit can be correlated with, but is thinner than, the more extensive sulphide-mineralised unit discovered in Hole MTD007 (the "spinifex-ore" unit: see announcement dated <u>3 December 2013</u>). This suggests that Hole MTD010 could be at the edge of a major mineralised channel and that further work along strike to the east and up dip to the south is required (see announcement dated <u>3 December 2013</u>). In the footwall of the komatiite a narrow pyrrhotite-chalcopyrite vein with high tenor nickel and copper sulphides occurs at the fault contact with a conglomerate unit (Figure 3). This is similar to the vein discovered in Hole MTD004 (see announcement dated <u>19 November 2013</u>).
- 2. An 8 m thick zone of extensive pyrrhotite-chalcopyrite breccias developed in sandstone, mudstone and lesser black shale from 400 m down hole (Figure 3). These are the most extensive and copper-rich sulphide zones found so far at Mulga Tank. The percentage of chalcopyrite is difficult to estimate and samples have been sent for assay. The sulphides do not contain significant nickel.

Other zones of less extensive brecciation and lesser chalcopyrite occur throughout the sedimentary units including units of black shale. The black shale may be the source of Conductor 1b, however a down hole EM survey is required to check for any off-hole anomalies that may represent massive sulphides.





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Figure 3a. Pyrrhotite-pentlanditechalcopyrite vein with high tenor nickel sulphide up to 5%.



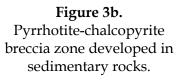


Figure 3. Hole MTD010.



Figure 3c. Close up of sulphide breccias with extensive chalcopyrite.



Hole MTD009 at Conductor 4

Three zones of sulphide mineralisation have been discovered beneath the Mulga Tank Dunite:

- 1. A zone of strong to weak silica-pyrite-chlorite alteration within an 80 m thick sequence of sedimentary rocks. The alteration in the sedimentary rocks is best developed over 30 m immediately below the contact with the dunite (from 132 m down hole) and comprises intense silica replacement of the sedimentary rocks that is cross-cut by veins and stringers of pyrite-chlorite and lesser copper sulphide (chalcopyrite) (Figure 4).
- 2. A 20 m wide zone of variably developed veins, breccia veins and stringers of pyrrhotite (iron sulphide) and chalcopyrite (from 240 m downhole) within a thick sequence of mafic rocks that underlie the sedimentary rocks (Figure 4). The pyrrhotite contains low tenor nickel (up to 0.2%) and cobalt (up to 0.2%) as measured with a portable XRF analyser.
- 3. A 5 m thick zone with veins, breccias and stringers similar to those in the 20 m wide zone above (from 290 m down-hole) also hosted by mafic rocks.

A down-hole EM survey of Hole MTD009 has resolved the single anomaly identified by the ground EM survey into five separate conductors, of which only one has been explained.

Two conductors occur close to the two zones of low tenor nickel-copper sulphides in the mafic rocks. The amount of sulphide present is insufficient to explain the conductor strength and the nearby off-hole EM anomaly positions are targets for zones of more extensive and possibly massive sulphide.

A third conductor also lies below the hole and is unexplained.

A fourth conductor occurs close to the contact between the sedimentary rocks and the underlying basalts. This contact is marked by a 10 m thick feldspar-biotite porphyry intrusion associated with the silica alteration. However a possible source for the conductor has not been identified.

The fifth conductor is caused by two black shale units that occur in the sedimentary rocks.

Further modelling is in progress for all the conductors to more accurately determine their location and also which one may be the source of the 3 km long anomaly identified by the ground EM Survey (Figure 1).





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Figure 4a. Silica-pyrite-chlorite alteration in sedimentary rocks. This type of alteration is prospective for gold mineralisation



Figure 4b.

Two examples of veins and breccia veins of pyrrhotite and chalcopyrite in mafic rocks. These are close to down hole EM anomalies but do not contain sufficient sulphide to explain the conductor.



Figure 4. Hole MTD009



NEXT STEPS

A significant amount of new information has been obtained from the six targets tested in this maiden drill programme at Mulga Tank. Significant nickel and/or copper mineralisation has been found at three of the targets and lesser mineralisation has been found at the other three.

This information will now be reviewed and interpreted together with the assay results when available. One significant breakthrough has been the discovery that many of the ground EM anomalies that were originally interpreted as one single conductor have been resolved into as many as 5 separate conductors in places.

In addition it is apparent that the ionic leach technique potentially offers a method to help discriminate barren EM conductors such as black shale from massive sulphides. An orientation soil geochemistry survey has been completed over the mineralisation at Conductor 1 in order to compare different soil geochemistry techniques and the optimal sample spacing. The results of this work are expected in January and will be used to determine the best approach to further soil geochemistry programmes.

Both the soil samples and the ground EM survey were completed on wide spaced grids of 400 m between samples and a 400 m moving loop survey respectively. These surveys are very broad spaced compared to those used in exploration for major nickel deposits and indicate that further detailed work including drilling are warranted.

Together with the results from the drilling this indicates that there is potential for the discovery of a significant nickel-copper deposit in the area.

Further details on these results can be found in Appendix 1 (JORC2012).

The results of the current drill programme have upgraded the prospectivity of at least several other EM anomalies identified in the ground EM survey. In addition the work has demonstrated that the ionic leach soil geochemistry technique has effectively identified blind sulphide mineralisation beneath up to 70 m of transported overburden. A review of the soil data over the entire project area is also on-going to identify further priority drill targets.

This is Impact's maiden drill programme at the project and is focussed on a small part of the entire Mulga Tank Project which covers about 425 sq km of the very poorly explored Minigwal greenstone belt, 200 km northeast of Kalgoorlie (Figure 5).

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Dr Michael G Jones Managing Director





Table 1. Summary of Key Results

Conductor No	Conductor strength	Drill Hole ID	Key Results	Source of conductor	
1	Strong	MTD004	Two zones of disseminated nickel-copper sulphides extending over at least 150 m. Remobilised high tenor nickel and copper massive sulphide vein.	Single ground EM anomaly resolved into two off-hole conductors by down- hole EM.	
1a	Strong	MTD007	Two zones of disseminated nickel +/- copper sulphide. Lateral equivalent to the two zones in MTD004, thickening to the east.Open in all directions.	20 m thick sulphide-rich black shale. Overlies and masks nickel sulphide bearing units. Downhole EM survey in progress.	
1b	Strong	MTD010	One narrow komatiite with disseminated high grade? Nickel copper sulphides, one small high grade nickel- copper vein (up to 15% nickel). Zone of pyrrhotite- chalcopyrite breccia sulphides 8 m thick from 410 m depth	Multiple sulphide-rich black shale units with signficant folds and faults.	
			50 m thick zone of disseminated and fracture controlled chalcopyrite in footwall of dunite.	15 m thick unit of sulphide rich sandstone, minor black shale and basalt.	
2	2 Weak to medium	MTD005	High grade nickel copper veins in basal contact zone; 10 m thick zone of disseminated nickel sulphides in dunite. Both zones can be correlated over 300 m to the south east to similar zones in MTD003.	No EM response.	
3	Strong	MTD006	Anomaly unexplained	Anomaly off-hole at 300 m depth in metasedimentary rocks with chalcopyrite and some sulphide-rich black shale.	
			30 m thick zone of silica-pyrite-chlorite+/-chalcopyrite immediately beneath the dunite.	Single ground EM anomaly resolved into five conductors. Upper unit is sulphide rich black shale at 190 m; Two further conductors are coincident with 20 m and 5 m thick zones of low tenor nickel-copper sulphides in	
4	Strong	MTD009	Two zones of low tenor nickel-copper veins and stringers in pyroxenite and metabasalts.	pyroxenite units at 240 m and 290 m respectively. Zones are of insufficient width or sulphide content to explain EM conductor. One other conductor i off-hole.	
5	Medium	MTD008	50 m thick zone of weak chalcopyrite mineralisation as disseminations and fracture and vesicle fills beneath dunite contact. Up-dip projection of conductor below hole may be coincident with nickel-copper soil geochemistry anomalies.	Single ground EM anomaly resolved into two conductors: one at 220 m which is sulphide-rich black shale and a second likely to be below the hole.	





Drill Hole ID	Easting GDA	Northing GDA	RL	Dip	Azimuth	EOH	Rotary Depth	RC Depth
MTD004	521320	6690600	470	-80	180	455	78	0
MTD007	521488	6690658	470	-80	180	574	48	150
MTD010	521340	6690580	470	-80				150
MTD005	518208	6688816	470	-80	270	235		152
MTD006	517761	6691073	470	-80	270	451	78	117
MTD009	522225	6687710	470	-60	180	355		150
MTD008	517920	6687241	470	-80	225	300	66	150
MTD011	521400	6688200	470	-70	225		58	

Table 2. Drill Hole Information

Note: Holes MTD001 MTD002 and MTD003 were drilled by a previous explorer

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.



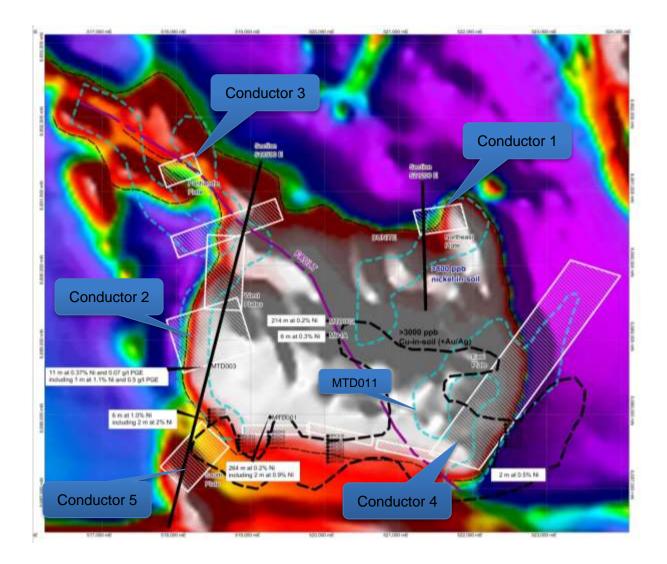
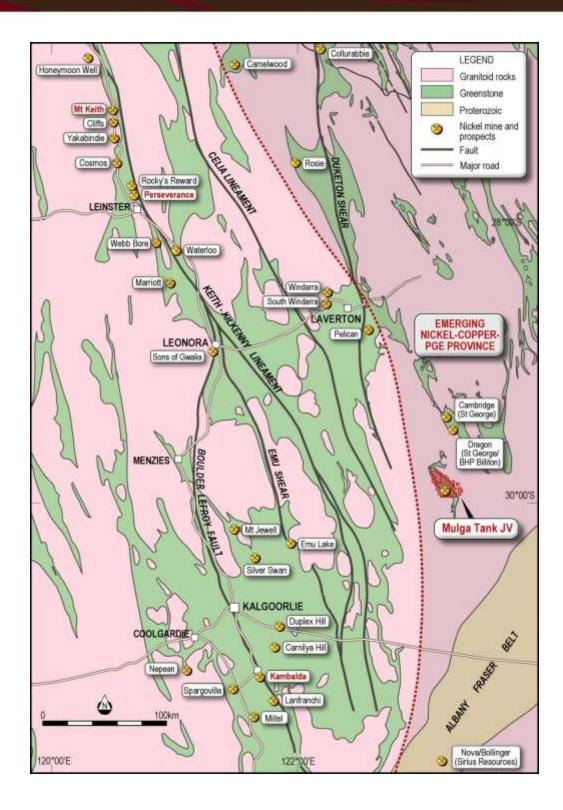


Figure 1. Image of the Total Magnetic Intensity from airborne magnetic data over the Mulga Tank Dunite (white outline) showing:

- 1. the location and modelled geometry of the five EM targets drilled;
- 2. the nickel-in-soil geochemistry contours at greater than 800 ppb; and
- 3. the copper in soil geochemistry contour at greater than 3,000 ppb to the south west coincident with Conductor 4.

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Figure 5. Location of Impact's Mulga Tank Project and significant nickel sulphide mines and prospects including Perseverance and Rocky's Reward deposits with new nickel-copper-PGE discoveries in the emerging nickel-copper province to the east.





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.	The targets at Mulga Tank have been drilled by Reverse Circulation (RC) and diamond drill holes (DD). Up to 10 holes are planned in this reconnaissance stage work. A hand held Olympus XRF machine has been 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 will be completed when the assay data is available. Drill holes have been oriented to intersect the dip of electromagnetic conductors as interpreted by Impact's consultants Newexco.
	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 cone or riffle splitter. Diamond core was used to obtain high quality samples that were logged for lithological, structural, geotechnical, density 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 (X.X m to X.X m), 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 will be crushed, dried and pulverised (total prep) to produce a sub sample for analysis. The analytical method is yet to be decided. 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 to date 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.



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Criteria	JORC Code explanation	Commentary
	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 no samples have been assayed yet.
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, roughness 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.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Half of the diamond core will be sent for assay.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples were rotary split.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sample preparation technique is still being determined. No assays are reported here.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	The quality control procedures are still being determined. No assays are reported here.
	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 25 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 style of mineralisation (massive sulphides), 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.	The assay technique is still being determined.



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Criteria	JORC Code explanation	Commentary
	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 being determined. No assays are reported here.
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.	No assays are reported in this report.
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 have been located by hand held GPS. Down-hole surveys used single shot readings have been completed during drilling at x m, intervals.
	Specification of the grid system used.	The grid system for Mulga Tank is MGA_GDA94, zone 51. Local easting and northing are in MGA.
	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.





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.	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.
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 452km ² . 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 and no known impediments exist. 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).





Criteria	JORC Code explanation	Commentary
Drill hole Information	 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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 	Refer to Table 1 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.	Assay spot readings have been taken using an Olympus hand held XRF machine. The results reported are the result of the averages of a number of spot readings. Mineralisation does not occur over mineable widths. The hand held XRF results are a guide only and are not a substitute for chemical assays from a commercial laboratory. The XRF results are used as a guide to determine samples to be sent for assay.
	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.
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 are reported.





Criteria	JORC Code explanation	Commentary
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	Drilling is continuing at E39/988 with a further 3 to 4 holes to be completed in this programme.