



## ASX ANNOUNCEMENT

Date: 29 November 2013

ASX: IPT

Number: 325/291113

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### CONDUCTOR 1 EXPLORATION UPDATE: MULGA TANK PROJECT

**Nickel-copper sulphides intersected over 150 m of strike**

**Mineralisation thickening to the east into a channel of thicker ultramafic rocks**

**Mineralised channel is below a black shale unit that may have masked EM responses  
from underlying massive sulphides**

**Drilling still in progress to test mineralised Lower Unit**

Impact Minerals (ASX:IPT) is pleased to announce that its fourth drill hole at Mulga Tank, MTD007 which is still in progress at the Conductor 1 target, has discovered a 7 metre wide zone of disseminated nickel-copper sulphides in a komatiite. This is a distinctive ultramafic rock that commonly hosts deposits of nickel and copper at Kambalda in W.A. and other places.

The newly discovered mineralisation is much thicker than, and likely to be continuous with, the high tenor (grade) disseminated nickel-copper mineralisation discovered in the Upper Ultramafic Unit in Hole MTD004 (see announcement dated [14 November 2013](#)).

This confirms the presence of a nickel-copper mineralised unit that extends for at least 150 m along strike between the two drill holes. The mineralisation thickens from 80 cm to 7 metres from west to east.

In addition the ultramafic and mafic units identified in MTD004 also thicken from west to east and define the western edge of a "flow channel". Such channels are also an important control on mineralisation at Kambalda.

Drilling is still in progress to test the along strike continuation of the Lower Ultramafic Unit identified in Hole MTD004 which contains about 6 metres of disseminated mineralisation and lies immediately above a narrow vein of high-grade nickel and copper sulphides (see announcement dated [14 November 2013](#)).

The two mineralised units dip at about 65 degrees to the northwest. The up-dip projection of the mineralised channel is coincident with the strongly elevated nickel-in-soil geochemistry responses and this suggests there is both significant up-dip and down dip potential for further mineralisation.

Importantly the mineralised channel occurs 15 metres **below** a 10 m thick unit of iron sulphide-rich black shale. This shale is likely to have been the source of one of the two EM anomalies identified by the down hole survey in MTD004. However the shale may have masked the response of any underlying massive sulphide mineralisation.



## Mineralisation in the Upper Unit in MTD007

The mineralisation in MTD007 occurs at 321 metres below surface, towards the top of the komatiite unit and has a number of distinctive textures that are common in the hanging walls of other mineralised komatiites in Western Australia, in particular Kambalda.

These textures include so called “spinifex ore”, where the distinctive bladed textures of a komatiite are in-filled and replaced by sulphides, as well as irregular blebs and segregations (Figure 1). Late veinlets of pentlandite and chalcopyrite also occur in places (Figure 1). Spot readings with a hand held XRF machine indicate the mineralisation is high tenor in places with readings up to 3% nickel and 0.5% copper.

Investors should note that these readings are not indicative of the grade over the mineralised zone.

### About Conductor 1

Conductor 1 was first identified as a strong anomaly in a ground EM survey (Figure 2). A subsequent down-hole EM survey in MTD004 resolved the anomaly into two separate anomalies at about 290 m and 340 m depth and now called Conductor 1a and Conductor 1b respectively. Hole MTD007 was targeted at Conductor 1a (Table 1).

The mineralised ultramafic channel discovered by Impact lies immediately beneath a 10 m thick unit of iron sulphide rich black shale at 292 metres below surface. This shale is likely to be the source of Conductor 1a. The shale was not present in Hole MTD004 but is laterally equivalent to a sedimentary unit with sandstone and mudstones.

Importantly this shale unit may have masked any EM responses from underlying mineralisation.

Impact is drill testing a number of ground electromagnetic (EM) and soil geochemical anomalies in an area of about 15 sq km centred on the Mulga Tank Dunite within E39/988 (Impact 20% and earning 70% from Golden Cross Resources Limited). To date Impact has drilled three of the priority EM targets and work to date is summarised in Table 1. The results of the current drill programme have upgraded the prospectivity of at least several other EM anomalies identified in the ground EM survey. A review of these is on-going to identify further 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 3).



**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 December 2004 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.*

**Table 1. Summary of Impact drill holes**

Conductor No	Conductor strength	Drill Hole ID	Key Results	Source of conductor
1	Strong	MTD004	Two zones of disseminated nickel-copper sulphides; remobilised massive sulphide vein	Single ground EM anomaly resolved into two off-hole conductors by down-hole EM
1a	Strong	MTD007	One zone of disseminated nickel +/- copper sulphide	20 m thick sulphide-rich black shale. Overlies and masks nickel sulphide bearing units
1b	Strong		Not yet drilled	
2	Weak to medium	MTD005	50 m thick zone of disseminated and fracture controlled chalcopyrite	15 m thick unit of sulphide rich sandstone, minor black shale and basalt
3	Strong	MTD006	Anomaly unexplained	Anomaly off-hole at 300 m depth in metasedimentary rocks with chalcopyrite and some sulphide-rich black shale

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

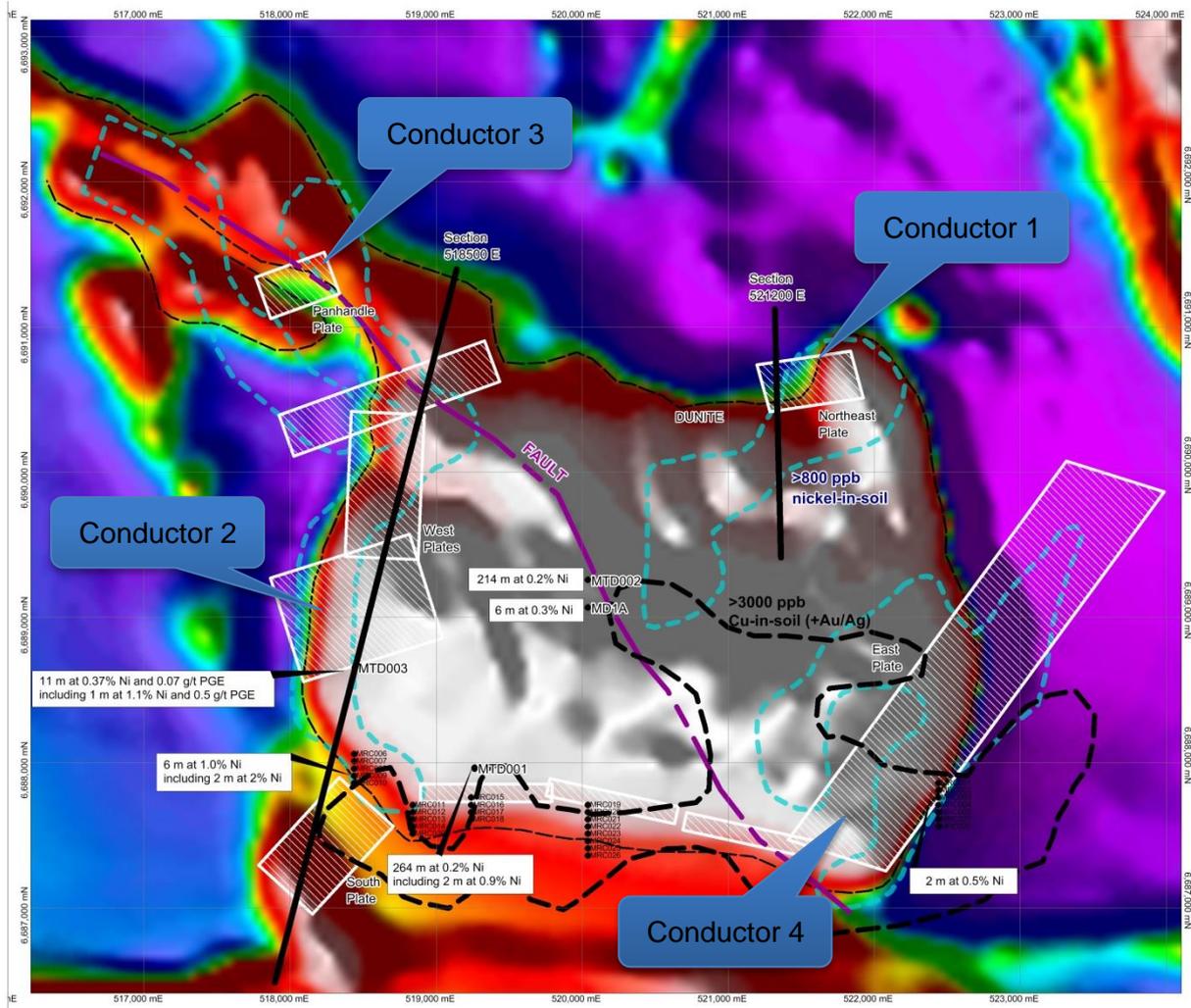


**Figure 1.** Typical sulphide textures from the spinifex zone of the komatiite unit in Hole MTD007.

Upper left: "Spinifex ore": delicate replacement of olivine blades by sulphide.

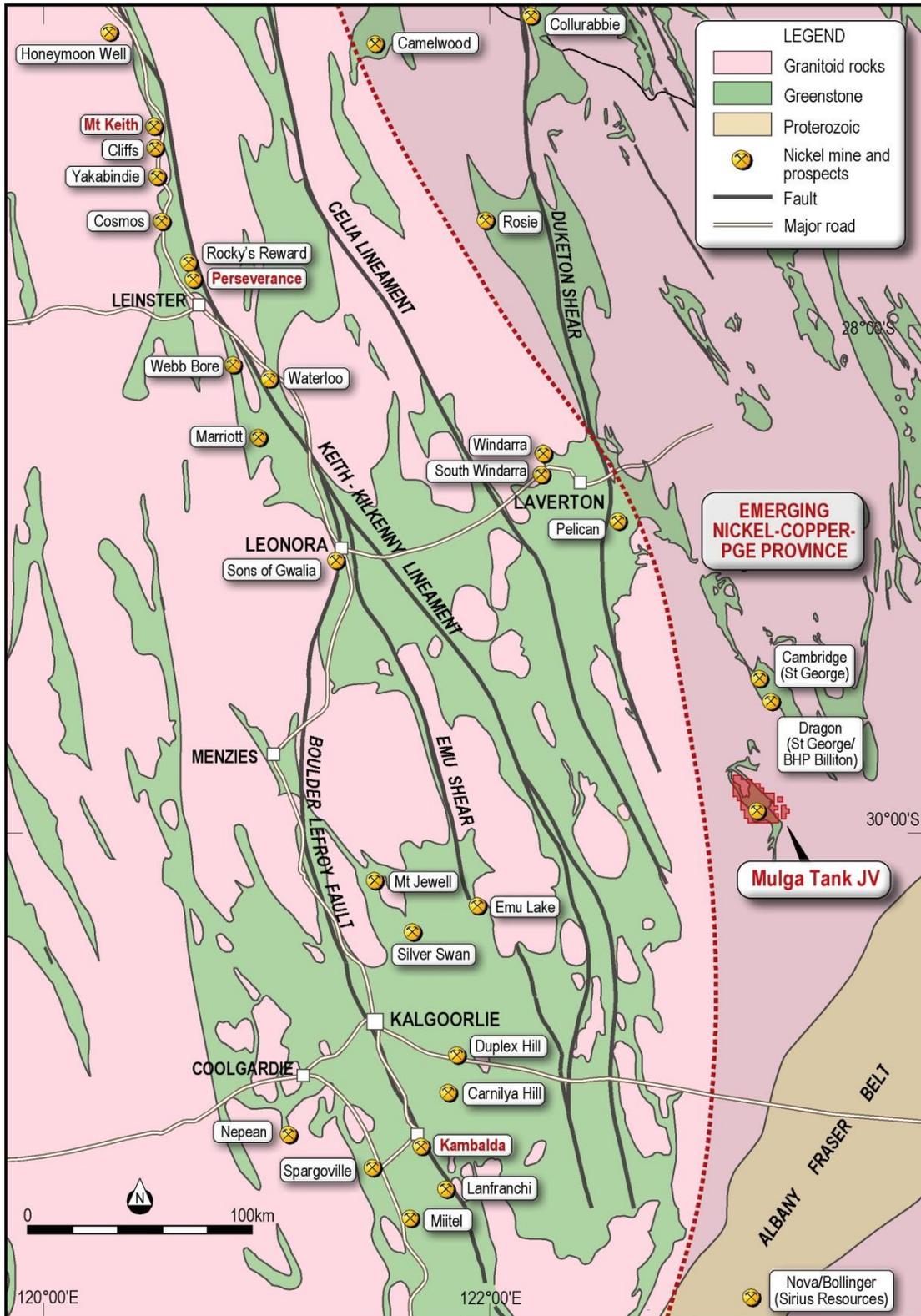
Lower left: "Spinifex ore": Extensive sulphide mineralisation replacing olivine crystals and also as infillings between crystals.

Upper right: Blebby and disseminated sulphide with cross-cutting veinlets and fractures of nickel and copper sulphide (pale colour).



**Figure 2.** 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 all seven of the priority EM targets;
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.



**Figure 3:** 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.