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### **3D Induced Polarisation Survey at Moina Successful in Evaluating the Fertile and Highly Mineralised Project Area and Demonstrating:**

- **Major anomalies that could represent large Intrusive Related Gold (Disseminated Sulphide) systems.**
- **“Look alike” anomalies/situations to the Stormont and Narrawa Deposits that have never been explored beneath basalt cover and**
- **Possible extensions to the existing precious and base metal Indicated Resources at Stormont and Narrawa.**

Frontier is very pleased to announce that an extensive Three Dimensional Induced Polarisation (3D-IP) Survey was completed at the Moina Project in north central Tasmania in February 2012 and it produced chargeability and resistivity data extending from surface to approximately 500m depth.

Peter McNeil, Chairman and Managing Director of Frontier commented:

*The large amount of 3D-IP survey data has been processed and evaluated, highlighting multiple high-quality anomalies that will be further explored.*

*The survey covered about 25 square kilometres and was very successful, demonstrating that the known mineralisation at the Stormont and Narrawa Deposits occurs in higher conductivity zones. Thus by extrapolation there could also be other significant mineralisation beneath basalt cover or mineralisation that does not reach the present surface in the many other defined conductivity zones.*

*Several large chargeability anomalies were also demonstrated that could represent disseminated sulphides in the deeper sub-surface. Such disseminated sulphides may be associated with gold mineralisation, as at the historic Packetts Prospect, near Narrawa.*

*The Moina Project now has extensive 3D-IP, aeromagnetic, electromagnetic and soil geochemical coverage and the interpretation and evaluation of the data base has generated numerous drill ready targets.*

*Frontier have three diamond core drilling rigs in Tasmania plus all the required drilling support, remote area logistics equipment and personnel to test these outstanding anomalies.*

The chargeability and resistivity (conductivity is the inverse of resistivity) data is computer processed to produce horizontal “slices” below surface every 50m and cross sections at either 100, 125 or 250m intervals.

Low resistivity (i.e. high conductivity) could reflect zones of more massive sulphides, high chargeability could reflect disseminated sulphides in a host rock (and more modest values could define smaller bodies of sulphides) and high resistivity could reflect silicification associated with quartz vein type deposits. Other geological features such as carbonaceous zones, structures and saline water may also cause anomalies.

This was the largest, single 3D-IP Survey ever conducted in Tasmania to our knowledge.

The IP Survey had multiple objectives as follows:

- To explore for extensions to existing resources at Stormont and Narrawa.

- To define the chargeability, resistivity and conductivity characteristics of Stormont and Narrawa and apply such characteristics to similar anomalies defined by the survey throughout the Moina Project. Similar results could thus reflect gold deposits similar to Narrawa and Stormont, particularly if also supported by anomalous geochemistry and/or similar magnetic anomalism.
- To explore for mineralised systems beneath the extensive basalt cover in the South of the Project area (which prevents geochemistry and prospecting to be effective exploration methods).
- To explore for large disseminated Intrusive Related Gold (IRG) deposits such as Fort Knox (Alaska), Pogo (Alaska) and Timbara (Australia) gold deposits in the greisenised upper surface of the Dolcoath Granite and immediately above the granite.

The IP surveyed 167.4 line kilometres – an area of approximately 25 sq kms. Line spacing varied depending on perceived prospectivity and objectives for each specific region of the grid from 100 to 250m.

The survey defined numerous chargeability and conductivity anomalies. In addition, resistivity anomalies will assist in defining structures that could represent significant mineralising fluid conduits.

The survey provided a very large amount of data, interpretation is continuing and will be ongoing – assisted and vetted by drill results as they become available. For the purpose of this ASX Release a number of examples have been selected that will provide drill targets for the initial testing of chargeability and/or conductivity anomalies. Further ASX Releases will be made as additional drill targets are fully identified and documented.

The chargeability results defined a broad NW trending anomalous zone extending from the Round Mt area in the SE, beneath Lake Cethana, through the Narrawa deposit to the Bell Mt area (Figures 1 and 2). Figure 1 shows the chargeability of the rocks at 50m below surface.

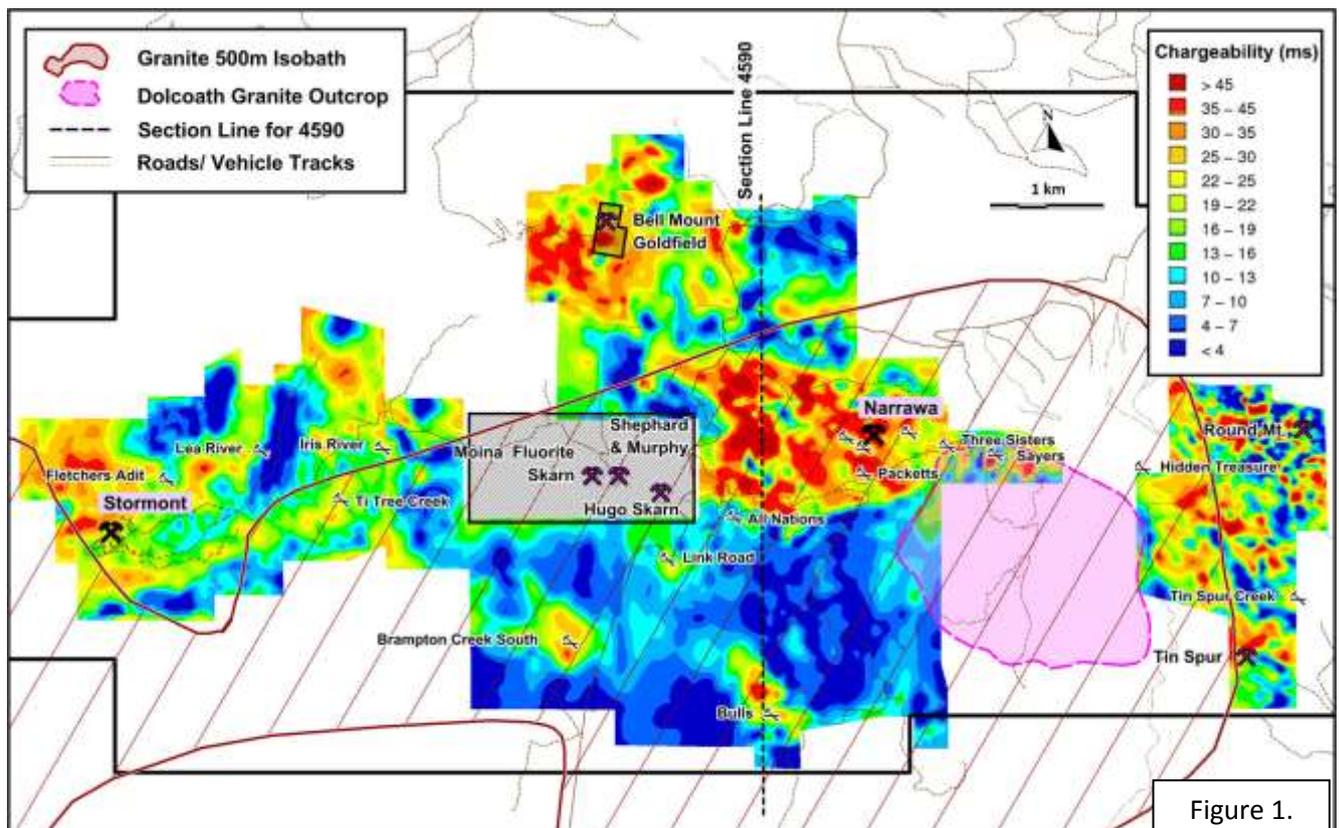


Figure 1.

The numerous anomalies could be defining sulphides within Moina Sandstone that in turn could also host gold and/or tin mineralisation. Initially some of these shallower anomalies will be targeted for drill testing to determine the cause of the chargeability anomaly.

Figure 2 shows the chargeability at 150m below surface and the SE anomalies here may reflect sulphide mineralisation within or above the granite surface. Some of these anomalies will also be targeted for deeper drill testing.

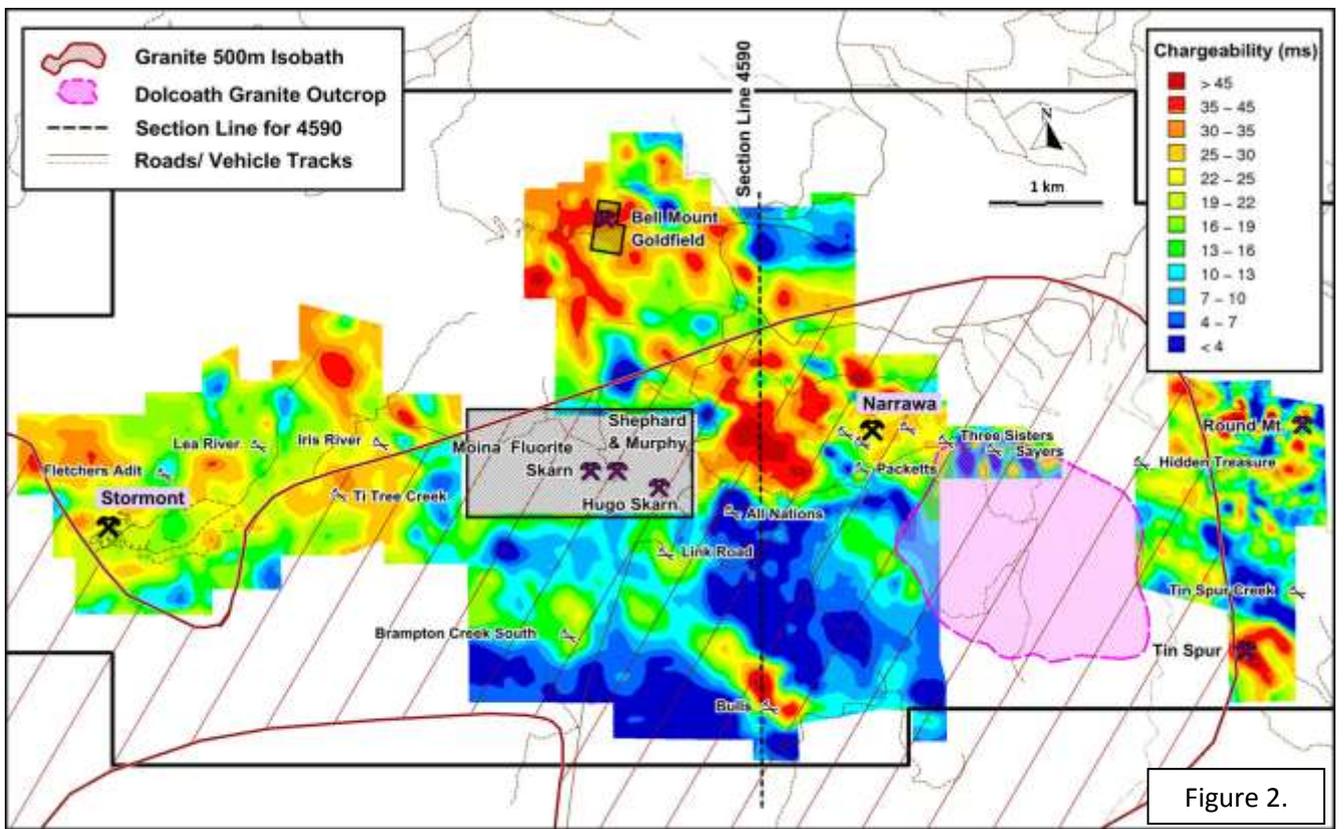


Figure 2.

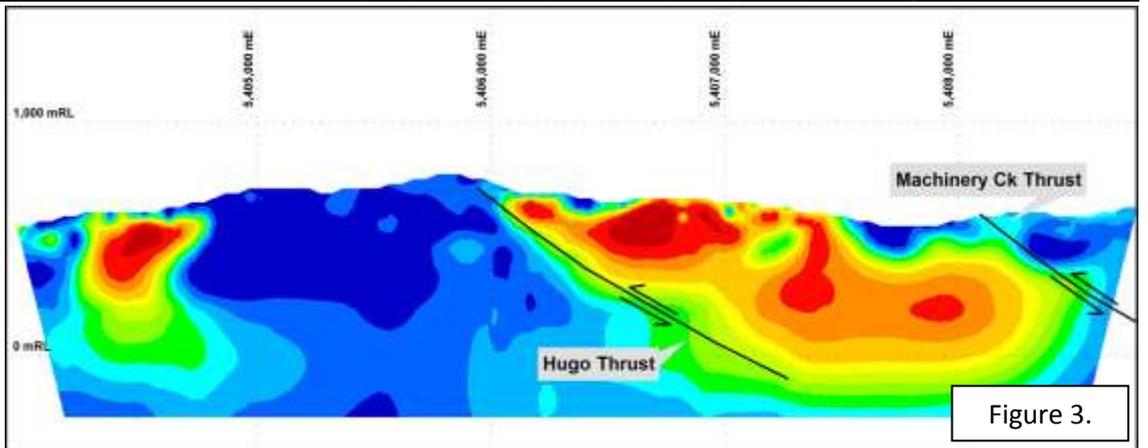


Figure 3.

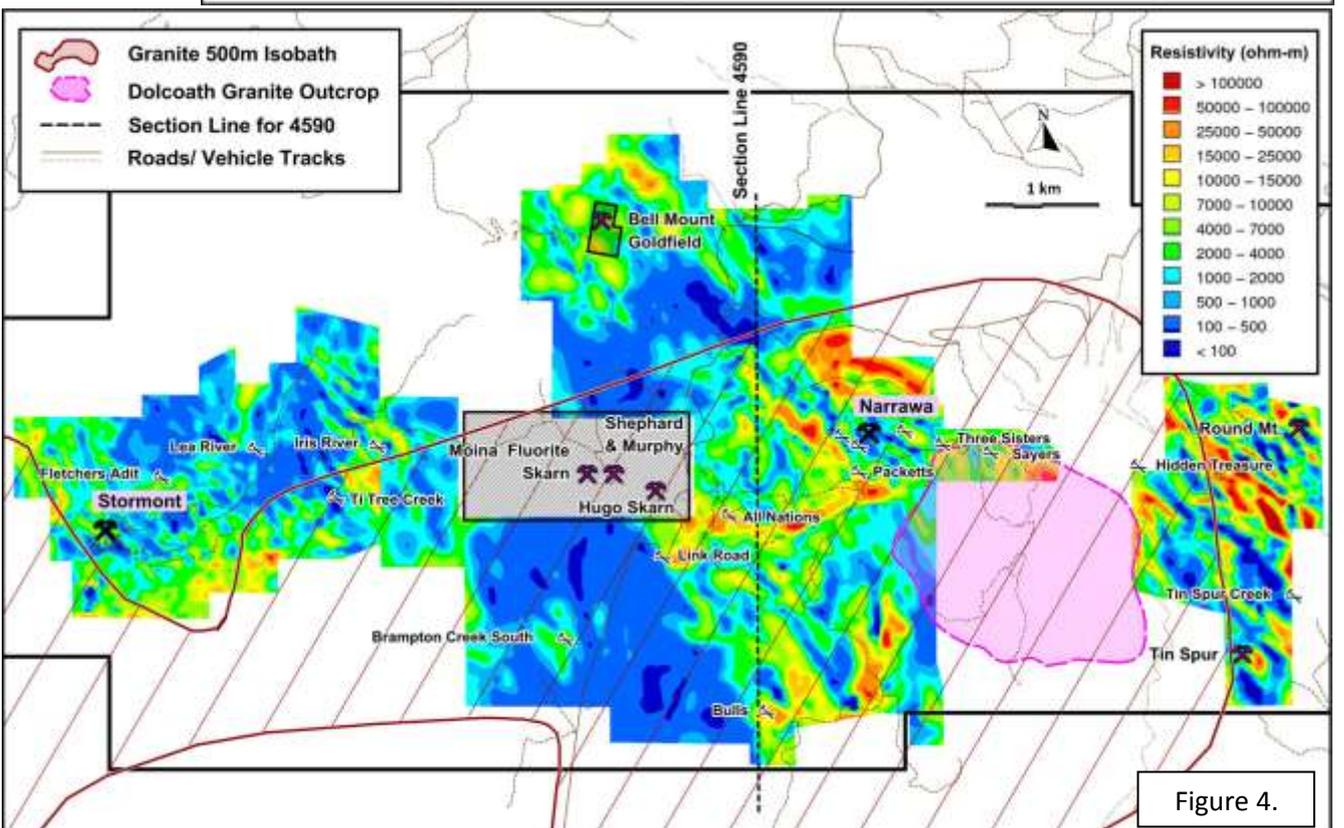


Figure 4.

Figure 3 is a section along grid 4590E. Note the chargeability anomaly trends or dips to the north and possibly reflects the zone at or near the top of the granite. This is the zone that greisenisation of the granite would occur or large disseminated gold mineralisation could be expected to be located.

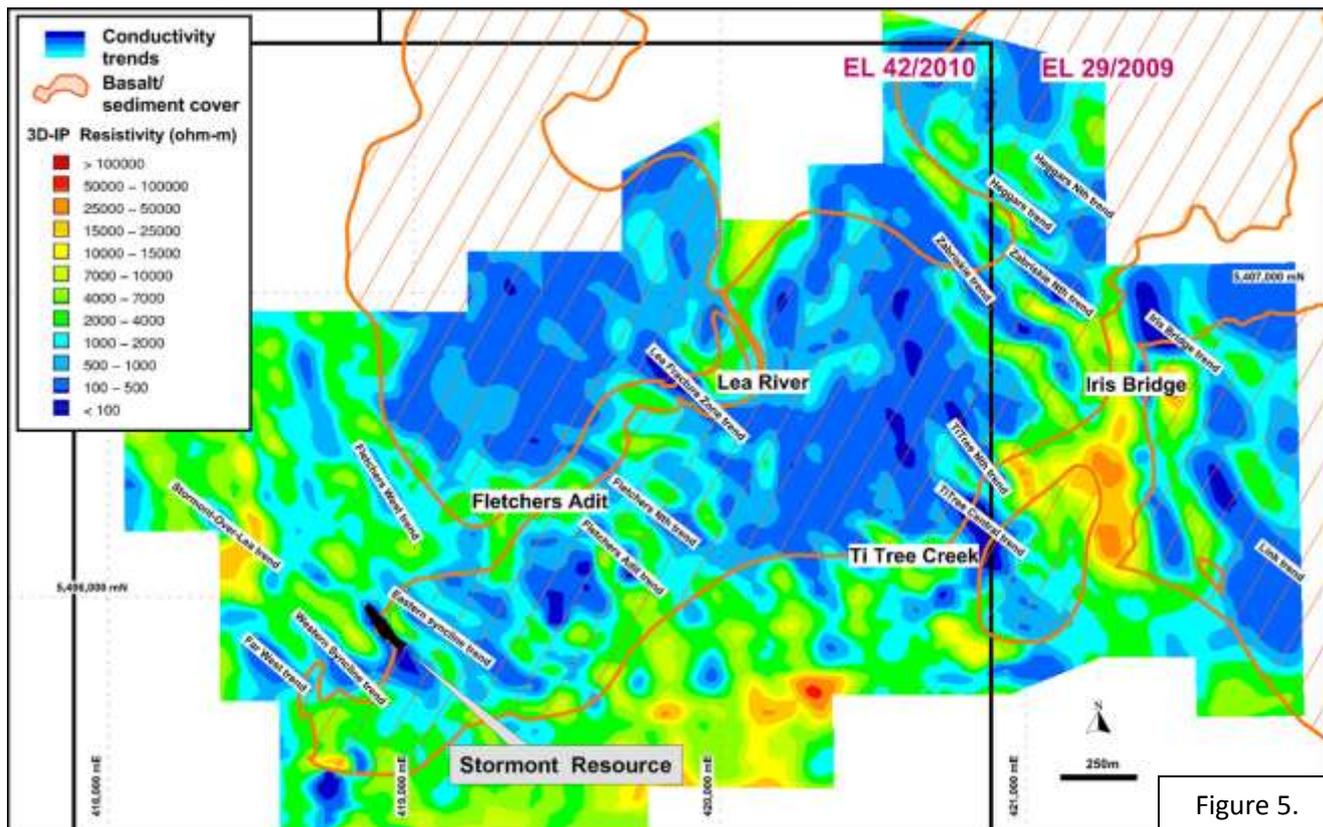


Figure 5.

Resistivity/conductivity data defines Stormont mineralisation well (see Figures 4 and 5). Figure 4 shows the regional conductivity (blue) at 50m below surface. Figure 5 shows the detailed conductivity (blue) in the Stormont area. Similar conductivity anomalies as indicated on Figures 4 and 5 in the Stormont area will be drill tested. Many of these conductivity anomalies also have co-incident magnetic anomalies, indicating skarn mineralisation that further enhances these targets.

The Narrawa Project (Higgs, West Higgs, Narrawa Reward, NC4) conductivity anomalies, in association with gold in soil anomalies, have defined extensions to the mineralisation and adjacent new targets.

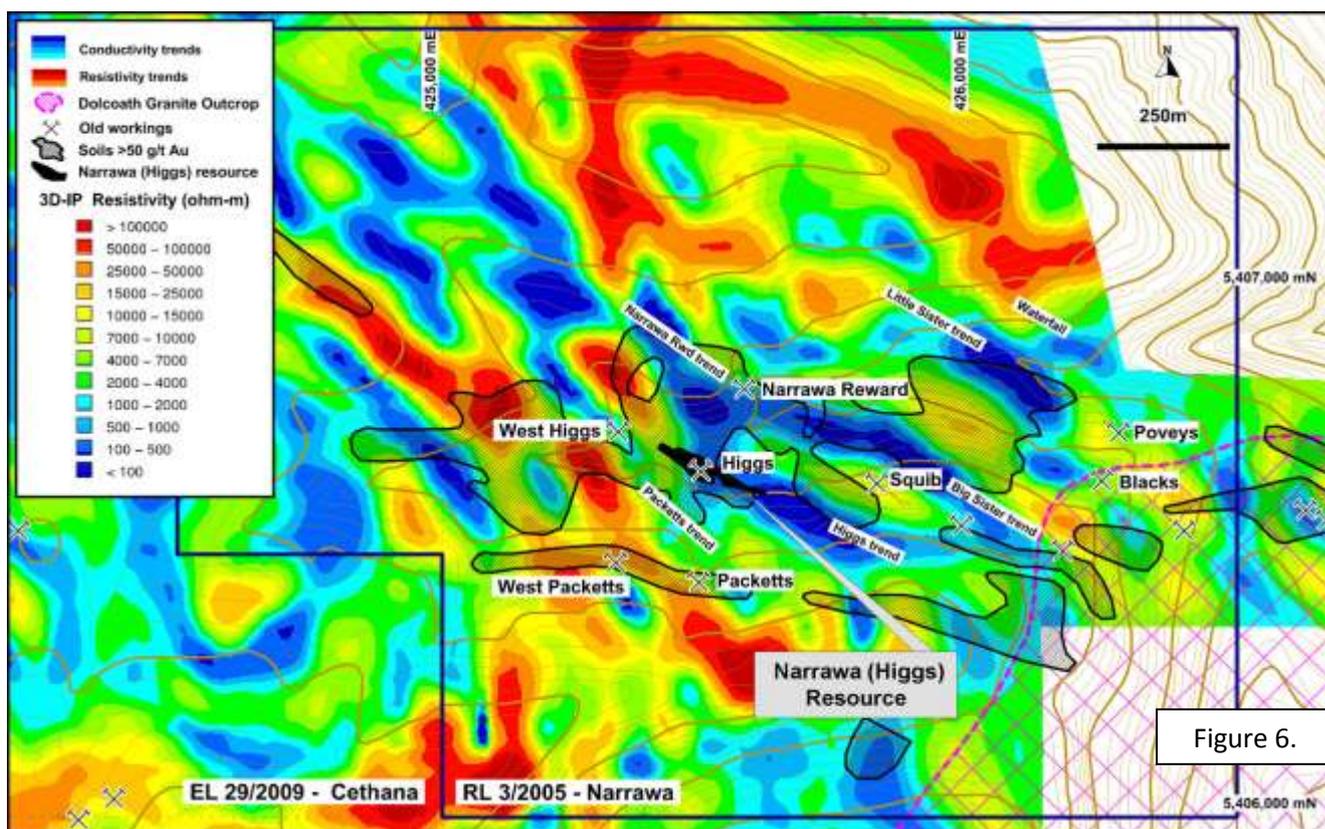
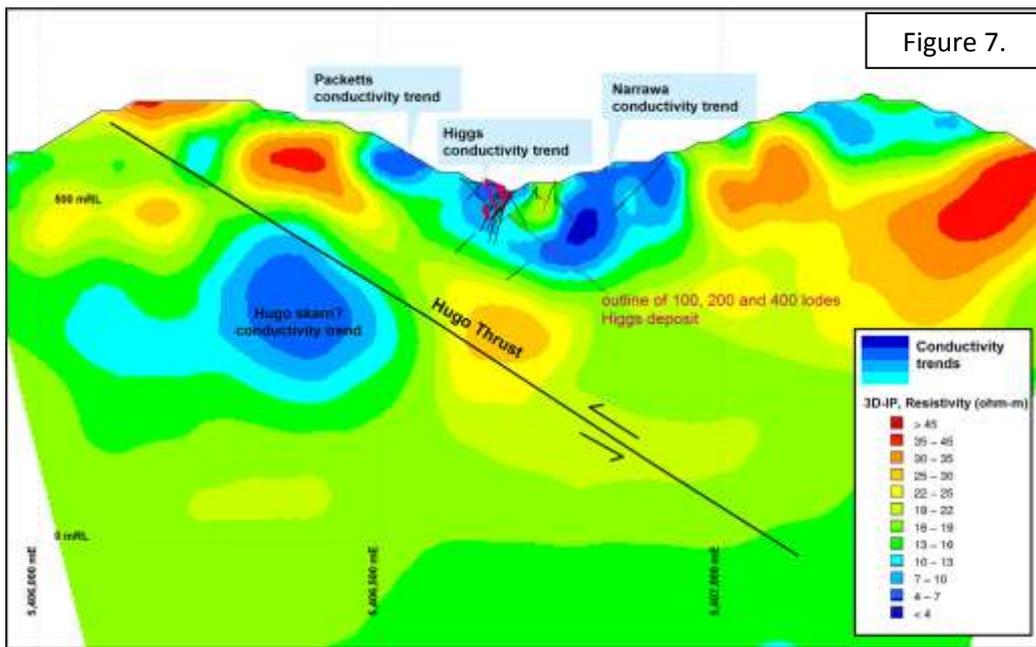


Figure 6.

Figure 6 shows the conductivity anomalies together with the present Narrawa resource outline (extrapolated to surface) and gold soil geochemistry. Figure 7 is a cross section at Narrawa which shows the relationship of the conductivity anomaly to the adjacent mineralisation and an adjacent untested anomaly.

The Narrawa system is considerably enhanced by these results. Both the Higgs mineralisation (present resource) and Narrawa Reward mineralisation are defined by conductivity anomalies.

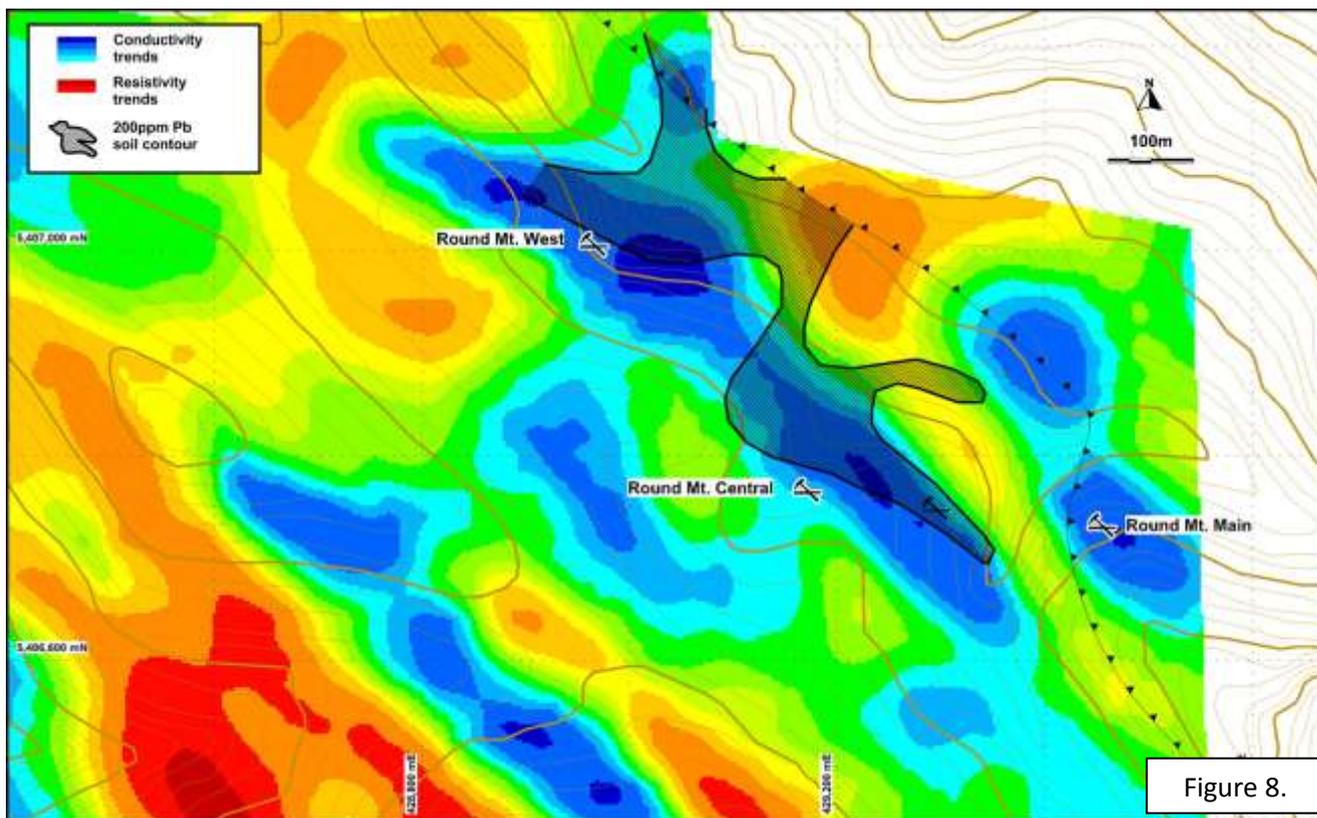
At Round Mt the known mineralisation coincides with another conductivity anomaly. Similar adjacent anomalies will be ultimately drill tested (Figure 8).



It is important to note that many 3D-IP anomalies are beneath basalt cover and if mineralisation does exist it would not have been discovered by earlier surface exploration or prospecting. Figure 5 shows the conductivity anomalies (blue) beneath the basalt cover in the vicinity of Stormont. There are numerous targets to drill test for additional resources.

The IP Survey generated a very large amount of data and maps that are still being evaluated. It is not possible in this report to include all maps and sections or to do other than present a summary of the results.

The 3D-IP method used at Moina was an enhanced version of that used at the Andewa Prospect in PNG.



SJ Geophysics (2012) summarise the 3D IP method as follows:

*The time domain IP technique energises the ground by injecting square wave current pulses via a pair of current electrodes. During current injection, the apparent (bulk) resistivity of the ground is calculated from the measured primary voltage and the input current. Following current injection, a time decaying voltage is also measured at the receiver electrodes. This IP effect measures the amount of polarisable (or "chargeable") particles in the subsurface rock.*

*Under ideal circumstances, high chargeability corresponds to disseminated metallic sulfides. Unfortunately, IP responses are rarely uniquely interpretable as other rock materials are also chargeable, such as some graphitic rocks, clays and some metamorphic rocks (e.g. serpentine). Therefore, it is prudent from a geological perspective to incorporate other data sets to assist in interpretation.*

*IP and resistivity measurements are generally considered repeatable to within about five percent. However, changing field conditions, such as variable water content or electrode contact, reduce the overall repeatability. These measurements are influenced to a large degree by the rock materials near the surface or, more precisely, near the measurement electrodes. In the past, interpretation of a traditional IP pseudosection was often uncertain because strong responses located near the surface could mask a weaker one at depth. We attempt to overcome this uncertainty by employing geophysical inversion to better interpret the data.*

*Three-dimensional IP surveys have been designed to take advantage of recent advances in 3D inversion techniques. Unlike conventional 2DIP, the electrode arrays are not restricted to an inline geometry. Ideally, a 3DIP survey would consist of a random assortment of current injections and receiver dipoles, also of randomised azimuths. Unfortunately, logistical considerations usually prohibit a completely randomised approach.*

*In the standard 3DIP configuration, a receiver array was established along one survey line while current lines are located on two adjacent lines lying on either side of the receiver line. Current injections are performed sequentially at fixed increments (25, 50, 100 or 200m) along the current lines. By injecting current at multiple locations along current lines adjacent to receiver arrays, data acquisition rates are significantly improved over conventional surveys. Meanwhile, geophysical data are collected along a receiver array which consists of dipoles usually laid out along even intervals dictated partly by the receiver cable.*

*The Volterra system provides much more flexibility because each DABStix receiver records a single dipole, thus eliminating the need for specialised receiver cables and a centralised receiver control station. Dipoles can be oriented in any direction, can be of varying lengths, and completely avoid inaccessible areas if necessary.*

*Although more randomised than conventional 3DIP, most Volterra surveys still follow some form of cut lines, alternating receiver dipoles and current injections and deviating where necessary for geophysical or logistical purposes. In addition, cross-line receiver dipoles are often used to increase near-surface resolution and allow for larger spacing between lines. The specifics of each survey are customised before the survey starts and sometimes during the survey by the field geophysicist.*

For additional information relating to Frontier Resources, please visit the Company's website at [www.frontierresources.com.au](http://www.frontierresources.com.au) or feel free to contact me.

**FRONTIER RESOURCES LTD**



P.A. McNeil, M.Sc.

CHAIRMAN / MANAGING DIRECTOR

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by, or compiled under the supervision of Peter A. McNeil - Member of the Aust. Inst. of Geoscientists. Peter McNeil is the Managing Director of Frontier Resources, who consults to the Company. Peter McNeil has sufficient experience which is relevant to the type of mineralisation and type of deposit under consideration to qualify as Competent Person as defined in the 2004 Edition of the Australasian Code of Reporting Exploration Results, Mineral Resources and Ore Resources. Peter McNeil consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.