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EPM 17739 MALCOLM CREEK.

ANNUAL REPORT for Year 3 to 14 April 2013



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SUMMARY

This report details exploration for the third year of tenancy of EPM 17739. This tenement replaced EPM 14231, which was conditionally withdrawn in favour of the current tenement, and also extended the area of interest. Malcolm Creek is 40 km southwest from Forsayth and is accessed via the Forsayth - Gilberton road, which straddles the tenement. The EPM is centred on 143° 30' E / 18° 50' S in the Georgetown 1:250,000 sheet (SE 54-12) and North Head 1:100 000 Sheet 7560.

Fred Skerritt and Simon Terry in 2004 found coarse platy slickensided gold with an electronic detector at two localities one kilometre apart in shallowly dipping quartzose mylonitic rocks.

The programme on EPM 17739 is a continuation of that in EPM 14231. Work on EPM 14231 in Years 1, 2 and 3 involved;

(1) reconnaissance mapping, radiometrics, magnetics and air photo interpretation of the Malcolm Creek prospect and the regional extent of the quartz mylonite, (2) regional airborne magnetics interpretation highlighting the Bald Mountain porphyry diatreme system, 2km SE of the Malcolm Ck Dome and Tin Mine Mountain, (3) stream sediment sampling over the entire extent of the mylonite unit, (4) grid soil sampling at 100m x 50m, with follow-up to 50m x 50m and geological mapping over the 4 km² area of the Malcolm Creek dome, and (5) retrieval of the extensive Bald Mountain database.

Year 4 to August 2007 exploration involved;

(1) detailed mapping of the Bald Mountain porphyry breccia complex, (2) compilation and assessment of the Malcolm Creek Dome soil geochemistry, (3) initial RC drilling of 9 holes for 258 metres to test outcrop of siliceous mylonite on the western edge of the Malcolm Creek Dome.

Newmont Australia initiated a JV in April 2009. Work in Years 5 and 6 to April 2010 involved;

(1) regional BCL stream sediment sampling, (2) check mapping of Bald Mountain, Kimberley Sue Maar and Malcolm Creek, (3) soil sampling of Bald Mountain, Kimberley Sue Maar, Tin Mine Mtn and Malcolm Ck, and (4) IP surveys of Bald Mountain, Kimberley Sue Maar and Malcolm Creek,

Exploration in Year 1 of EPM 17739 involved a 4 hole for 1257 metres of Reverse Circulation Percussion drilling of Bald Mountain, Kimberley Sue Maar. 4m composite Fire Assay results (Au) were generally negative. Multi-element ICP showed that Zn, Pb and Ag were elevated in all holes.

Exploration in Year 2 following Newmont withdrawal involved assessment of drill hole placement relative to quartz vein targets, checking on disputed geological interpretation of mylonites and reconnaissance of a very strong multi-sample BCL anomaly at the Malcolm Creek prospect and a reconnaissance examination of the newly defined breccia system near Tin Mine Mountain.

Exploration in Year 3 involved documentation of the many geological facies of the Bald Mountain Volcanic Complex, further assessment of drill hole targeting of quartz vein targets, geochemical and IP anomalies, reconnaissance of the very strong multi-sample BCL anomaly at the Malcolm Creek prospect and reconnaissance of the breccia system and surroundings near Tin Mine Mountain.

The 3 vein swarm zones at Bald Mountain, one of which is 800m long, were inadequately tested by 2010 - 11 RC drilling. The strong gold soil anomaly at Malcolm Creek ridge requires deeper RC drilling. The very strong multi-sample BCL anomaly at Malcolm Creek South needs work to establish the gold source. The entire 3km² Tin Mine Mountain, including the recently discovered breccia zone needs adequate mapping and sampling and follow-up in the extension to the large associated magnetic response area.

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1. INTRODUCTION

EPM 17739 replaced EPM 14231 held since 2004, by Conditional Withdrawal, and extended the area to cover Tin Mine Mtn. EPM 17739 Malcolm Ck 2 application was lodged on 25 July 2008 and granted on 14 April 2010, and held by Simon Terry, the pastoral leaseholder and Fred Skeritt, an experienced prospector who discovered coarse platy deformed gold mineralisation in rocks now recognised as a siliceous mylonite. An agreement was signed after lodging application for EPM 14321 between Terry and Skeritt and Queensland Gold & Minerals Ltd (now Orion Metals Ltd). Newmont entered the project as a JV partner in 2008 and withdrew early in 2011. The work program of 2011 to 2013 involved check mapping of aspects of the 2010 Newmont exploration program.

2 STATEMENT OF COMPLIANCE

The proposed programme as outlined in the 2008 application has been followed substantially. Exploration expenditure averaged over the 3 years period has exceeded the commitment.

3. LOCATION & ACCESS

Malcolm Creek is 40 km southwest from Forsayth and is accessed via the Forsayth - Gilberton road. The EPM is centred on 143° 30' E / 18° 50' S in the Georgetown 1:250,000 sheet (SE 54-12) and North Head 1:100 000 Sheet 7560, and straddles the North Head and Forsayth sheet 7660 boundaries. EPM 17739 covers 49 sub-blocks for 150 km².

4. TENURE

4.1 EXPLORATION TENURE

EPM 17739 was granted for 5 years on 14 April 2010 as follows:

Normanton Block Identification Map

Block 2442	Sub-blocks YZ	2 sub-blocks
Block 2443	Sub-blocks FGHJK LMNOP QRSTU VYXYZ	20 sub-blocks
Block 2444	Sub-blocks FG LM QRS V	8 sub-blocks
Block 2514	Sub-blocks DE JK OP	6 sub-blocks
Block 2515	Sub-blocks ABCDE FGHJK LM	12 sub-blocks
Block 2516	Sub-blocks F	1 sub-blocks
<u>Total</u>		<u>49 sub-blocks</u>

4.2 LAND TENURE

Land tenure of Robin Hood Station is a Pastoral Lease previously held by the late H B "Cob" and Mary Terry whose homestead is on an adjacent part of the recently sub-divided station. The station has been sub-divided into family lots, and most of EPM 17739 is on "Howlong" occupied by Simon and Gaye Terry, who also own and manage the Cobbold Gorge Tourist Resort on the property.

4.3 NATIVE TITLE CLAIMS

Queensland Gold and Minerals (now Orion Metals) negotiated an access agreement with Native Title claimants the Ewamian People over a number of Mining Leases and EPMs in the Georgetown Mining District, including EPM 14231. The Access Agreement was signed on 12 March 2004. This agreement was transferred to EPM 17739. The access agreement included a provision for employment and training of Ewamian people in the skills of exploration and prospecting techniques.

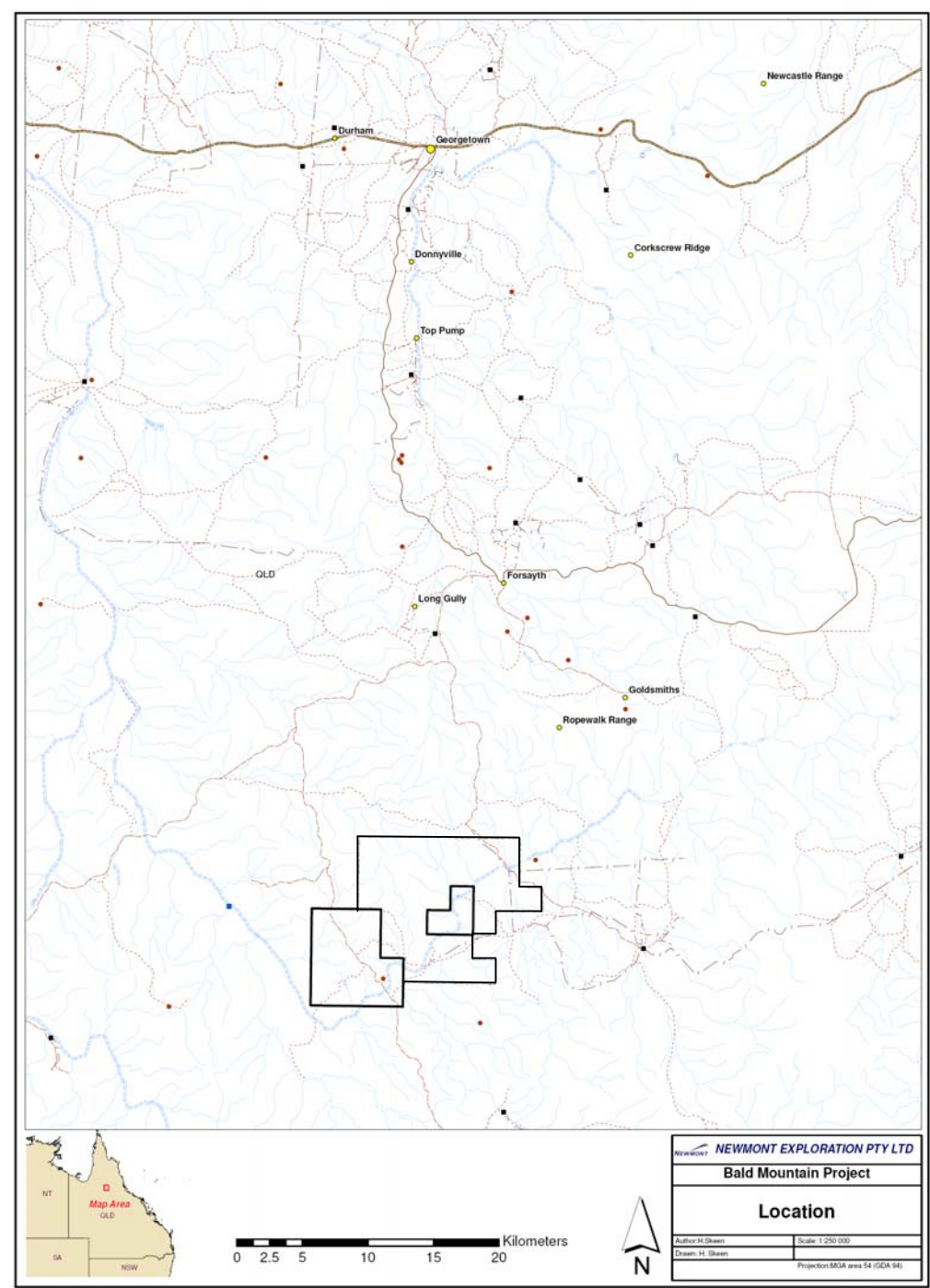


Figure 1: Location of relinquished EPM 14231 and replacement EPM 17739.

5 AREA SELECTION CONCEPTS

Previous exploration in the area was for gold and base metals using predominantly porphyry-style and quartz vein models. It was the intention to apply advancements in this geological model, with assistance from new airborne geophysical coverage and statistical discrimination of existing geochemical coverage.

The application covers a section of the Palaeoproterozoic Robertson River Metamorphics. A major shallow dipping mylonitic thrust zone was recognised by QGM and is known to contain significant visible gold in several areas. This thrust is inferred to extend throughout the EPM area and has undergone complex folding. The thrusting is of Proterozoic age, given the structural complexity.

Part of the application area was in the adjacent EPM 14231 until recently when it was required to relinquish 75% of the area of this tenement. Strongly anomalous tin, tantalum and visible gold were determined by Pan Concentrate sampling in creeks draining the mylonite in this area. Part of the tenement, which also contains large outcrops of quartz mylonite, was held by another company until recently, and is immediately adjacent to Tin Mine Gully, one of the prime targets. The occurrence of these metals in close association with a very large concentration of quartz mylonite remains unexplained and will be a focus for further exploration.

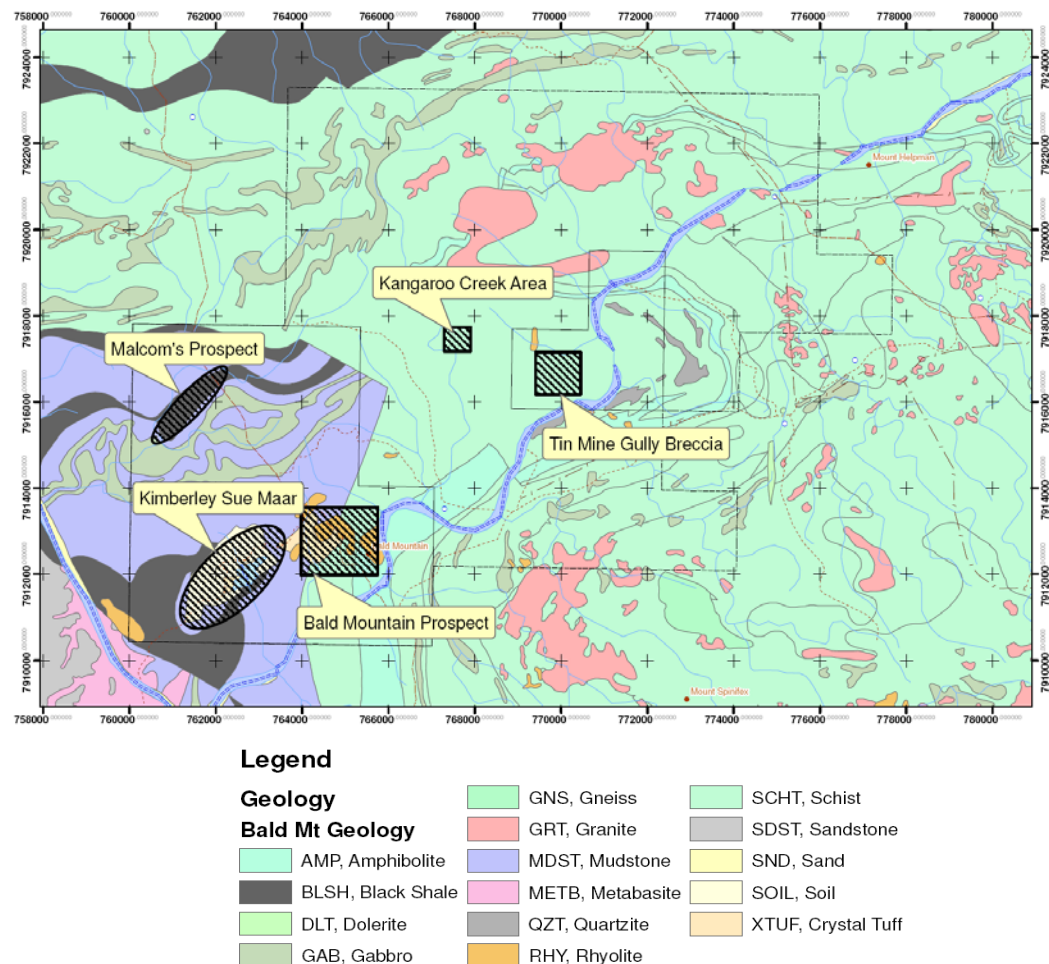


Figure 2: Location of Prospects and regional geology.

6. PREVIOUS EXPLORATION

Most previous gold exploration in the tenement area focused on the Bald Mountain Volcanic Complex, which is located in the south western section of the EPM. Minor alluvial gold was reported in the 1920's from a creek draining easterly from the Complex (Withnall, 1979), and a line of shallow prospecting pits to 0.5m, extending over a length of 50m, were excavated at that time on narrow, discontinuous, gold-bearing, gossanous, quartz veins.

Late Palaeozoic volcanic rocks were first recognized in the area during regional mapping of the Georgetown 1:250,000 sheet (White et al., 1963), and were further defined as rhyolite plugs, dykes, epiclastic and volcanoclastic rocks during mapping of the Forsayth (Bain et al, 1976), and North Head 1:100,000 sheets (Withnall et al, 1979).

Initial gold exploration in the area was by AOG Minerals Ltd from 1979 to 1984. Exploration initially focused on tin in the Tin Mine Gully area of the tenement, interpreted as stratabound and volcanogenic. The Bald Mountain area was identified as being prospective (Nethery 1981) after visible gold was detected by panning in an easterly draining creek, which was traced upstream to an area of altered volcanic breccia and gossanous metasediments.

Subsequent detailed geological mapping by K B Cook resulted in the interpretation of a series of overlapping hydrothermal eruption diatremes (Cook and Nethery, 1984). Exploration in joint venture with Billiton Australia Pty. Ltd., during 1984/1985, further refined this interpretation, especially in relation to the central and southwestern part of the system (Truelove, 1985). A soil sampling and rock chip sampling program was completed over the Bald Mountain complex as was a gradient array IP program. These programs identified an area of breccia in between Bald Mountain and the main road as anomalous. This area was subsequently tested by broad spaced percussion holes, some high results were recorded up to 2m at 19.7 g/t Au, although the general tenor of past drilling was less than 0.5 g/t Au. Recognition that the gold mineralization was associated with thin quartz veins was made at this time through selective sampling (with one assay at 60ppm Au) but no measurements or structural analysis was provided about the sampled veins.

Further exploration of the area was carried out from 1987 to 1989 by CRA. At Malcolm Creek, 2 km NW from Bald Mountain, CRA defined strong gold (to 3.4ppm but averaging 50ppb Au) and minor arsenic in soil anomalies on a long ridge comprising slates and shales. 16 shallow RC holes were drilled to a maximum of 60m which intersected the slates and shales; the best intercept from this program was 2 metres @ 9.8 g/t. Rhyolite dykes and breccias were identified to the west of the anomalous ridge.

Kidston Gold Mines (KGM) was the next company to explore the area from 1996 to 2000. A gradient array IP survey was conducted over the Bald Mountain breccia complex and the Kimberley Sue Maar Complex, including 2 follow up dipole - dipole lines in the breccia complex. A soil sampling program was also conducted over these areas obtaining similar results to the survey completed by AOG. 18 percussion holes were drilled at Bald Mountain in the same area previously drilled by AOG; the results were patchy and similar to those by AOG.

The next work completed in the area was by QGM, who began by developing a "Mylonite Dome" model (see geology section) to explain the gold in quartz found by Simon Terry and Fred Skerritt at Malcolm Creek. This model was tested by further soil sampling at the base of the anomalous shale ridge (previously identified by CRA) followed by 9 RC holes designed to intersect a mineralised quartz mylonite horizon. The drilling intersected slate and shale and did not intersect mylonite or any

mineralised horizon, and there were only minor low level gold anomalies in the soil sampling. This work demonstrated that the silicification of the mylonite horizon is sporadic.

Newmont entered a Joint Venture in 2009 and focused largely on the Bald Mountain and Kimberley Sue Diatreme complex, carrying out extensive soil sampling. Before fieldwork was conducted a thorough review of historic exploration in the tenement area was completed. Data from this review was added to Newmont's GIS database including re-processing of historic geophysical data. The historic geophysical data included 200m spaced aeromagnetic data, dipole-dipole IP and gradient array IP. Several new images have been processed from the magnetics data including analytical signal, RTP, 1VD, 2VD, phase and "reduced to Permian". The reduced to Permian image is similar to normal Reduced to Pole datasets except that the image has been reduced to the reversed Permian pole, identifying areas that have been reversely magnetised. It has been identified that the Permian rhyolites at the Bald Mountain breccia complex and those at Mt Spinifex and Tin Mine Gully are reversely magnetised.

The gradient array IP data, completed over the Bald Mountain Breccia complex and the Kimberley Sue Maar complex, was also reprocessed (Figure 4). The data shows several anomalies in both datasets that are partially co-incident. These areas are directly over the Bald Mountain breccia complex. There are further gradient array anomalies identified over the Kimberley Sue Maar. There were also two historic dipole-dipole IP lines (surveyed by KGM), these were also reprocessed, identifying several chargeability anomalies (Figure 7). The first line was surveyed south of the breccia complex over the Kimberley Sue caldera and shows a deep (150m depth) anomaly in the centre of the line. The second line traverses the western side of the Bald Mountain breccia complex and shows a large zone of patchy chargeability anomalies throughout the central portion of the line, coincident with a gold in soil anomaly.

7. GEOLOGICAL SETTING

The geology of the tenement comprises rocks of two ages, the Proterozoic Robertson River Metamorphics (comprising psammitic and pelitic metasediments, metabasalts and metadolerites) and the sub-volcanics of the Bald Mountain area (rhyolites and rhyodacites) which have intruded into the Robertson River Metamorphics. Age dating using U – Pb Laser Ablation ICP – MS confirmed that the oldest intrusive phase was Permian at $286 \pm 2\text{Ma}$ and the youngest was $283 \pm 2\text{Ma}$ (Nethery 2009).

The Robertson River Metamorphics cover the majority of the tenement and are part of the Early to Middle Proterozoic Etheridge Group, locally the basal unit exposed is the Corbett Formation comprising metapelites, and this is overlain by the Lane Creek Formation, comprising carbonaceous mudstone grading to phyllite and schist. The structure of the metamorphics is complex, locally involving four major and two minor deformational events (Fitzgerald, 1974). In general terms, the metamorphics young towards the west, and locally form a broad west-plunging antiformal structure, which is superimposed on an earlier phase of sub-horizontal regional recumbent folding. Antiformal and synformal axes trend westerly.

The Permian volcanics have intruded into the metamorphic sequence along major structural trends present in the Proterozoic basement rocks, resulting in a large nested diatreme and maar complex. The Permian volcanics of the Bald Mountain complex also appear to be related to rhyolite intrusives mapped at Mt Spinifex and rhyolites and rhyolitic breccias west of Tin Mine Gully. The RTP image (Figure 3) shows Bald Mountain, Mount Spinifex and Tin Mine Gully are all reversely magnetized areas within a regional broadly circular magnetic high, defined by concentric and radial faults, which is interpreted as a large blind batholith, also thought to be the source of the Permian volcanism in the area. Further detail on the geology will be outlined in the individual prospects section.

8. REGIONAL PROGRAMME

Before fieldwork was conducted a thorough review of historic exploration in the tenement area was completed. All data from the review was added to the database including re-processing any historic geophysics data. The historic geophysics data included 200m spaced aeromagnetic data, dipole-dipole IP and gradient array IP. Several new images have been processed from the magnetics data including analytical signal, RTP, 1VD, 2VD, phase and “reduced to Permian”. The reduced to Permian image is similar to normal reduced to pole datasets except that the image has been reduced to the Permian pole, identifying areas that have been reversely magnetised. The Permian rhyolites at the Bald Mountain breccia complex and those at Mt Spinifex and Tin Mine Gully are reversely magnetised confirming intrusion / extrusion during the Kiaman Magnetic Reversal (Figure 3).

The gradient array IP data, completed over the Bald Mountain Breccia complex and the Kimberley Sue Maar complex, was also reprocessed (Figure 4). The data shows several patchy anomalies in both datasets that are partially coincident. These areas are directly over the Bald Mountain breccia complex. There are further gradient array anomalies identified over the Kimberley Sue Maar.

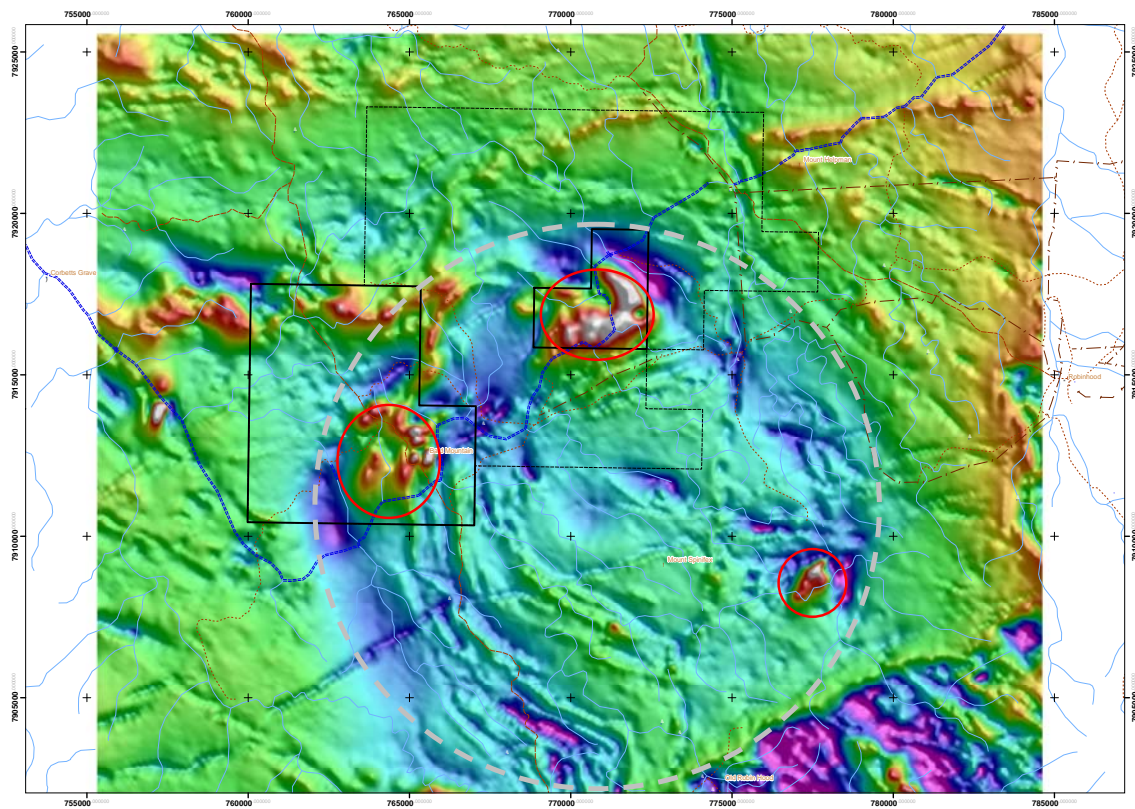
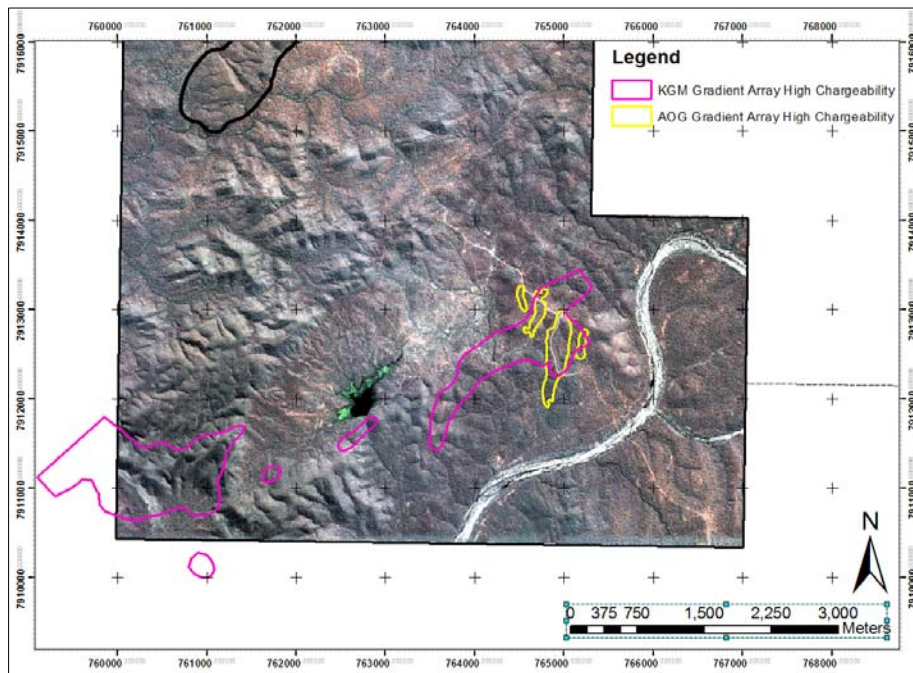


Figure 3: Reduced to Permian Magnetics, showing large circular feature (grey dashed line), red areas interpreted as reversely magnetised intrusives and extrusives of Permian age.

There were also two previous dipole-dipole IP lines (surveyed by KGM) and these were also reprocessed, identifying several chargeability anomalies (Figure 7). The first line was surveyed south of the breccia complex over the Kimberley Sue caldera and shows a deep (150m depth) anomaly in the centre of the line. The second line traversing the western side of the Bald Mountain breccia



complex shows a zone of patchy chargeability anomalies throughout the central portion of the line. This anomaly is coincident with a gold in soil anomaly.

Figure 4: Bald Mtn & Kimberley Sue Maar Complex. IP chargeability highs from AOG Minerals and KGM previous gradient-array data.

Initial fieldwork over the tenement by Newmont comprised a regional survey of systematic BCL sampling targeting catchment areas across the entire tenement. A total of 27 samples were collected and processed by Newmont's internal lab. Background levels were identified as 2-3ppb highlighting 2 samples above 5ppb as anomalous. The two 5ppb samples were located at Malcolm Creek and Bald Mountain (Figure 5), which have been targeted prospects in previous exploration. It should be noted that part of the Tin Mine Gully area (where the unmapped Rhyolitic Breccias are located) was not tested during this program, but had shown anomalous gold in pan – concentrate sampling by Orion.

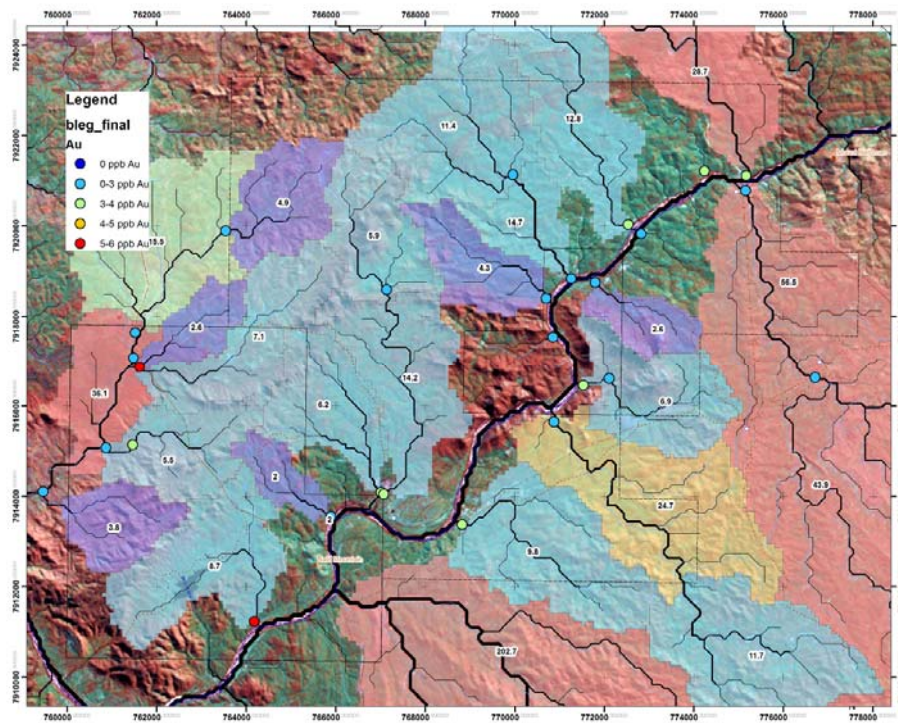


Figure 5: Regional BCL results (Red dots are results over 5ppb Au).

9. BALD MOUNTAIN

9.1. PROSPECT LOCATION

The Bald Mountain prospect is located in the southern part of EPM17739 and covers the area between the Robertson River to the East and Pig Hole Creek to the west. This area covers the Bald Mountain rhyolite dome and breccias west of the dome which are bound by the Pig Hole Creek fault.

9.2. PROSPECT SCALE GEOLOGY

The Bald Mountain Prospect is located within the Bald Mountain Volcanic Complex, which is a northeast trending elongate structure, covering 10 square kilometres, and also includes the Kimberley Sue Maar Complex. Basement to the structure comprises the Robertson River Metamorphics. Several generations of rhyolite to rhyodacitic plugs, dykes and domes make up the complex and are brecciated in several places.

Detailed mapping was completed by K B Cook for AOG Minerals Ltd during 1982, this mapping was field checked and found to be an accurate interpretation of the geology in the complex (Figure 6). Further detail to this mapping was compiled during field checking including structural analysis of flow bands and veins (the results of which will be discussed below in the work completed section).

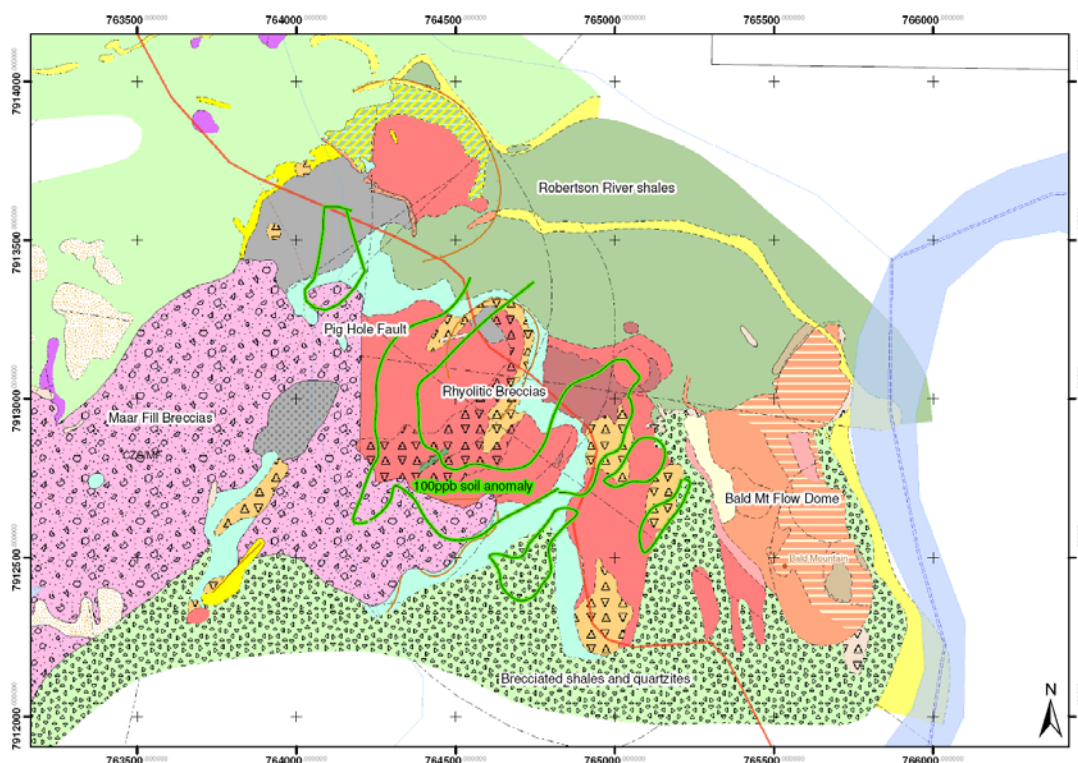


Figure 6: Bald Mt Geology. (Modified from Cook (1982). Green outline - 100ppb Au in soil anomaly).

A variety of breccia types, indicative of extrusive to hypabyssal breccia pipe development, occur in the Intrusive Breccia Complex, within both the intrusive plugs and surrounding metamorphics (Cook and Nethery 1984). Alteration of this segment occurred, late in the brecciation phase, as a quartz-hematite vein-related outward grading sequential assemblage of muscovite + quartz to mixed layer clay + kaolinite to epidote + chlorite + calcite (Camuti 1986). Several areas also show intense sericite alteration, these areas are focused around the most intense veining.

Quartz-hematite veins in the area are generally very thin (2cm to sub-millimetre) and are composed of quartz with hematite in the centre and selvages of the veins. Commonly only hematite veins are noticed in outcrop. In some of the larger veins cubic pyrite is still recognizable in the centre of the veins indicating that the hematite is most likely a result of weathering sulphides. The quartz-hematite veins have been defined within the rhyolitic breccias and also within the dyke that bounds the rhyolite dome on the Eastern side.

Field observations of the porphyritic dyke that bounds the eastern side of the dome show that it intruded into another more aphanitic rhyolite. It was noticed during field mapping that on the edges of the dyke there were sharp boundaries between large grained porphyritic rhyolite (quartz and feldspar phenocrysts 2-3mm in size) and flow banded rhyolite containing no phenocrysts. This suggests two generations of dykes intruding into the one structure. The porphyritic rhyolite has patchy clay and sericite alteration including a stock work of the quartz hematite veins, while the aphanitic rhyolite contains intense silica alteration and chalcedony veining. U-Pb zircon age dating by Laser Ablation ICP – MS produced ages of $286\text{Ma} \pm 2\text{Ma}$ for the Phase 1 porphyry and $283 \pm 2\text{Ma}$ for the Phase 3 ring dyke, thus confirming a multiphase Early Permian system (Nethery 2009).

The Bald Mountain rhyolites are bound to the west by Pig Hole Fault which is a N-S trending fault exposed in Pig Hole Creek. The fault is well exposed in the creek with flow banded and auto-brecciated rhyolites following the trend on the eastern side and maar fill breccias from the Kimberley Sue Maar complex on the western side. In previous exploration reports it has been interpreted that the Bald Mountain rhyolites have been uplifted along this fault compared to the Maar (AOG report December 1982 – CR11650) or the Kimberley Sue Complex has been preserved as a downfaulted block.

9.3. REVIEW OF PREVIOUS EXPLORATION

Initial work at the Bald Mountain prospect included field checking the AOG (Cook and Nethery 1982) mapping, follow up soil sampling over historic anomalies, reprocessing and reinterpreting historic geophysics and geochemical data, rock chip sampling, structural measurements and analysis and a 3D pole dipole IP survey.

The aeromagnetics data was reprocessed (as described in regional work completed) showing that the Bald Mt area is dominated by a ring of strong reversely magnetised areas surrounding an area with a low magnetic response (Figure 7). The strongly reversely magnetised areas have been interpreted as a series of rhyolitic intrusives and extrusives that cooled and crystallised during the early Permian. The low magnetic response in the centre of the intrusives was interpreted as either a magnetite destructive zone due to alteration or a preserved section of Proterozoic basement.

A large geochemical database comprising soil and rock chip data was put together from historic sources and reviewed. Initially it was noticed that there were two 100ppb soil anomalies, one centred between Bald Mtn and the Forsayth-Gilberton Road and another smaller anomaly on the Western side of the road adjacent to the Pig Hole Creek Fault. The soil anomaly adjacent to Bald Mountain had been extensively drilled in the past however the anomaly adjacent to the fault had not been drilled.

Seven reconnaissance soil lines at 150m spacings (500g of material sieved to 2mm, then 50g fire assay with ICPMS multi-elements) were surveyed across the Western anomaly. The results of this survey showed a distinct arcuate 100ppb soil anomaly. When these results were combined with the historic data it was noticed that the Western and Eastern Bald Mountain anomalies were part of the same horseshoe shaped 100ppb Au in soil anomaly (Figure 7).

The horseshoe shaped anomaly was found to be located in the centre of the magnetic-low feature. This was then compared to two historic dipole- dipole IP lines (from KGM) which had been reprocessed. Coincident zones of chargeability highs, from the historic IP, were found to match the 100ppb soil anomaly (Figure 7). In light of these results and a visit to the project by senior Newmont geologists Steve Turner and John Hammond, a 3D pole dipole IP survey and a rock chipping and structural mapping program were undertaken.

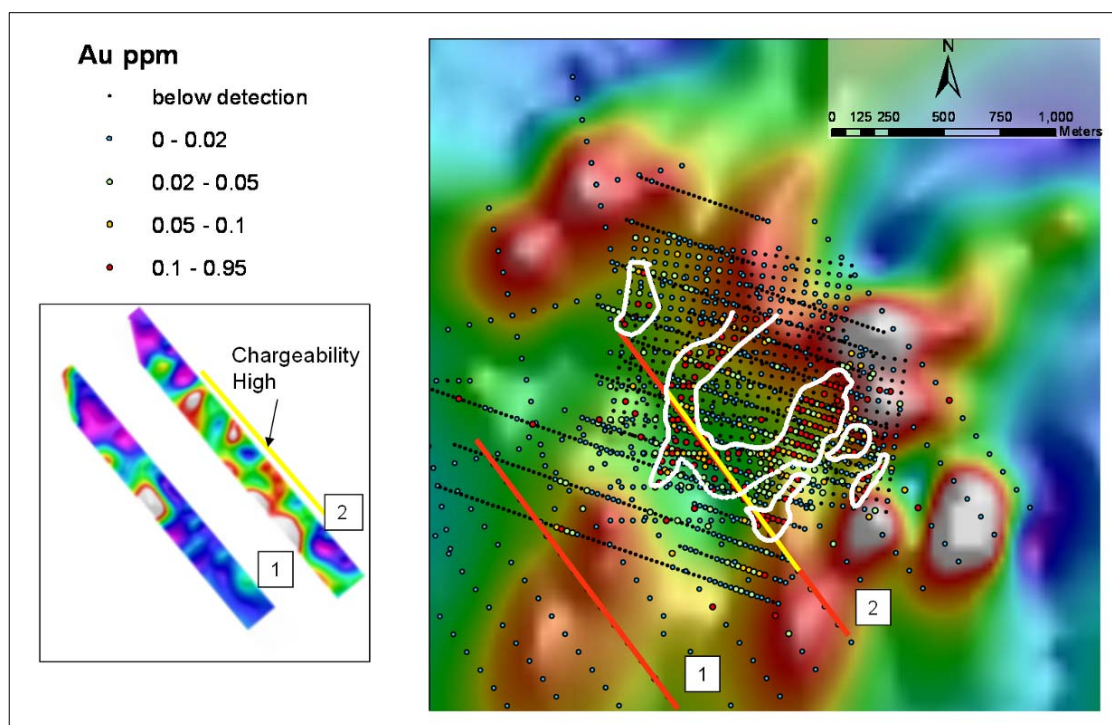


Figure 7: Soil Results. Shows the ring shaped feature in 100ppb (red dots above 100ppb) soil contour. Note the Location of the anomaly in regards to the “ring shaped” arrangement of the reversely magnetised anomalies in the RTP image and the chargeable zone in the IP.

During the field checking of the AOG mapping it was identified that the areas with highest Au in soil values had float or outcrop nearby with intense sericite alteration. The sericite alteration is in both breccias and competent rhyolite. Thin veins of hematite and limonite cross-cutting the brecciated areas were also noticed in the 100ppb anomalous zone. Rock chip samples targeting the most phyllic-altered zones and the hematite veins were taken in order to ascertain whether the Au is hosted in the pervasive alteration, veins or both. The samples targeting zones of intense sericite alteration returned disappointing results with an average of 10ppb Au. Samples targeting the hematite altered vein sets returned up to 1.03ppm Au, with most results between 0.5 and 1ppm Au. This indicates that the veining rather than the pervasive alteration host the Au mineralisation in the Bald Mt prospect.

Detailed structural measurements taken of the veining and flow banding mapped in the area were plotted and analysed showing distinctive trends in the data. The flow banding measurements taken at Bald Mountain plot as a large zone, which on average are steeply dipping (70° - 90°) in a NW to SE trend (Figure 8B). This trend aligns with the structural trend of the major long-active faults in the region (for example the Robertson River Fault to the West of the project area), indicating that the Bald Mountain volcanics intruded into existing structures. The quartz hematite vein sets were also plotted and show more scatter in the data set, however, two sets of veining dipping in opposite directions (averaging $40^{\circ}/135^{\circ}$ and $50^{\circ}/310^{\circ}$) can be clearly identified in the data (Figure 8A). It is clear from the stereoplot that the quartz hematite vein sets cut across the flow banding perpendicularly. It is also interesting to note that the vein sets strike in the same general direction as the long axis of the Kimberley Sue Maar complex.

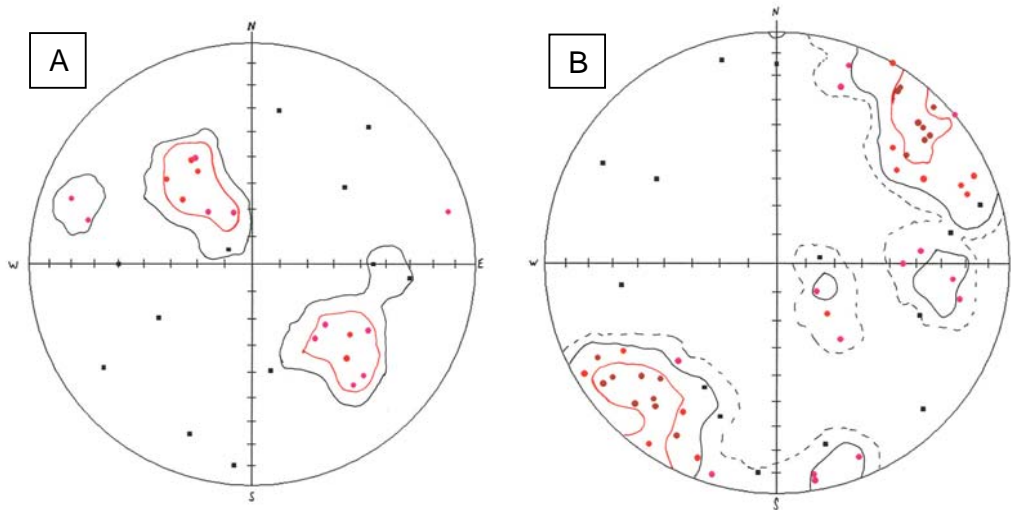


Figure 8: Bald Mountain Stereoplots of structural poles: (A) Hematite veins showing 2 sets of veining dipping in opposite directions. (B) Rhyolite flow banding perpendicular to the veins measured in A.

A 3D pole-dipole IP and resistivity survey was conducted over the 100ppb Au in soil anomaly. The survey consisted of 8 lines 200m apart with a total of 20.3 line km of data collected. The resistivity results show high values on the East of the prospect which are interpreted to be rhyolite intrusives as the zone follows the same trend as what was measured in the flow banding, NW to SE, indicating that this represents the same rhyolite intrusives as those outcropping on the surface. In the southern centre of the survey on lines E, F, G and H another high resistivity anomaly, interpreted to be rhyolitic intrusives similar to the Bald Mountain rhyolite, coincides with the trend of Pig Hole Creek Fault.

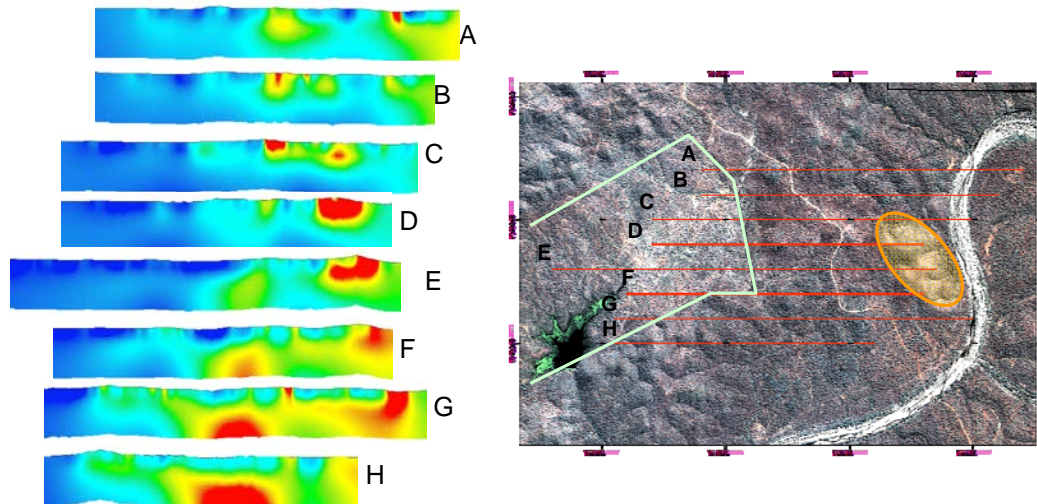


Figure 9: Resistivity Sections. The orange circle is extrusive rhyolite seen as high resistivity (red) in the east side of lines D, E, F and G. The green outlines the maar fill shown as low resistivity in the west (blue).

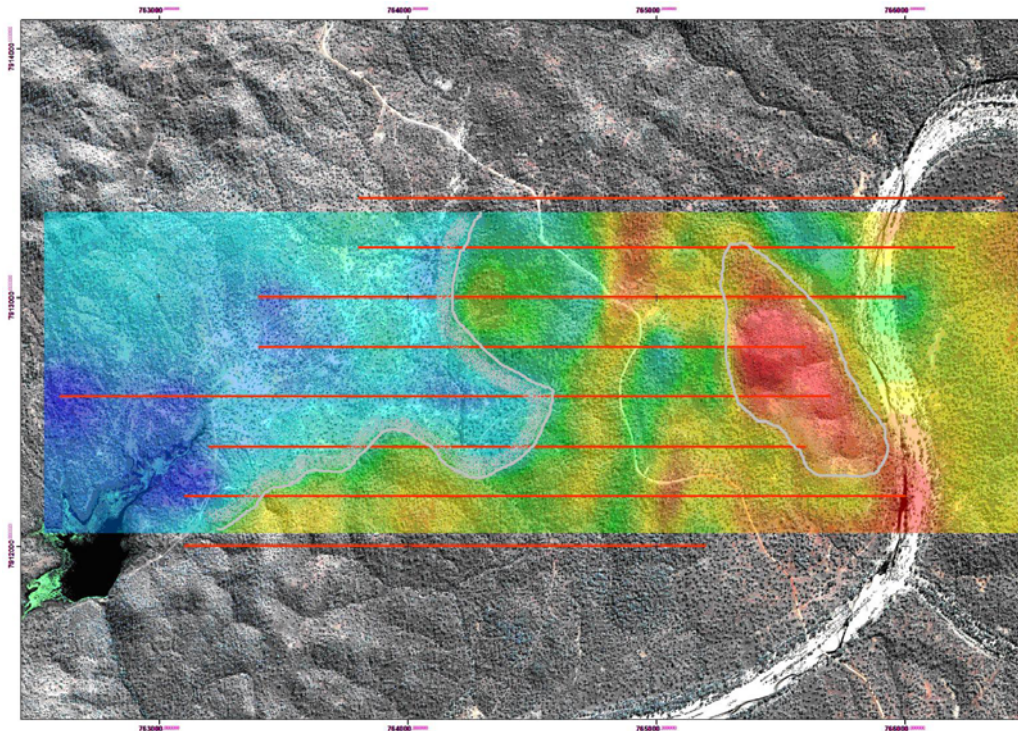


Figure 10: Resistivity 100m depth slice plan. The resistivity low (blue) area to the West is interpreted as maar fill, while the high resistivity area (red) in the East is the rhyolite intrusives.

On the western side of the survey, highly conductive zones are interpreted to coincide with the maar fill and tuff ring within the Kimberley Sue Complex. Conductive areas match mapped areas of the maar fill, and show that the maar fill is cone shaped and reaches a considerable depth below the floor of the complex (over 300m deep). Extending out from the cone shape of the maar is a flatter undulating area of high conductivity interpreted to be the tuff ring of the system. The shape of the conductive zone indicates that the complex is preserved at a high level. This also indicates that significant mineralization would be at depth if the complex is similar to others of its type such as Penasquito in Mexico (Figure 11).

The IP results show two main zones of anomalously high chargeability, one which sits underneath the Eastern side of the horseshoe shaped Au in soil anomaly and another following the South Eastern margin of the Kimberley Sue Maar complex. Another smaller anomaly is apparent overlapping the road in the centre of the 4 northern IP lines. The Eastern anomaly is directly adjacent to the NW-SE trending resistivity anomaly, indicating that the high chargeability zone could represent either (a) strongly chargeable lithology such as graphitic pelites from the Robertson River Metamorphics, preserved as a block within the volcanics or (b) a large zone of disseminated sulphides within a fault or other structure. The deepest holes drilled along this trend are 150m deep with half the holes intersecting Robertson River Metamorphics (undifferentiated) and half terminating in rhyolites. Logged sulphides average 1% along the trend and do not explain the large anomaly at this stage.

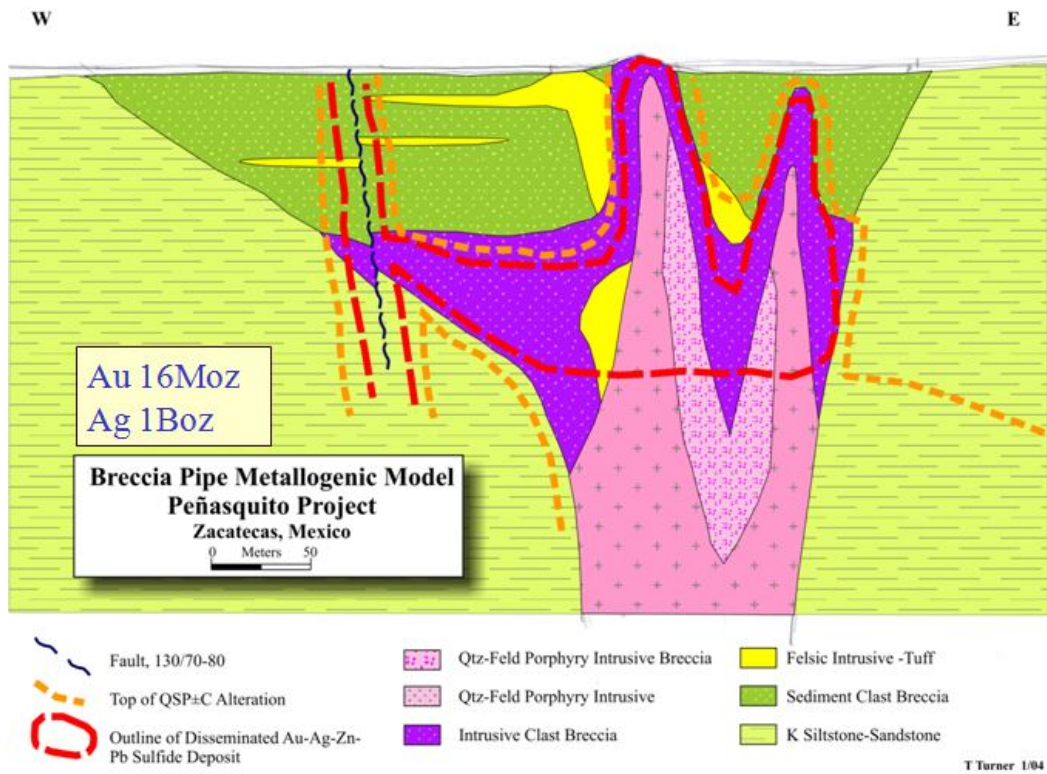


Figure 11: PenasquitoMexico. An analogous geological model

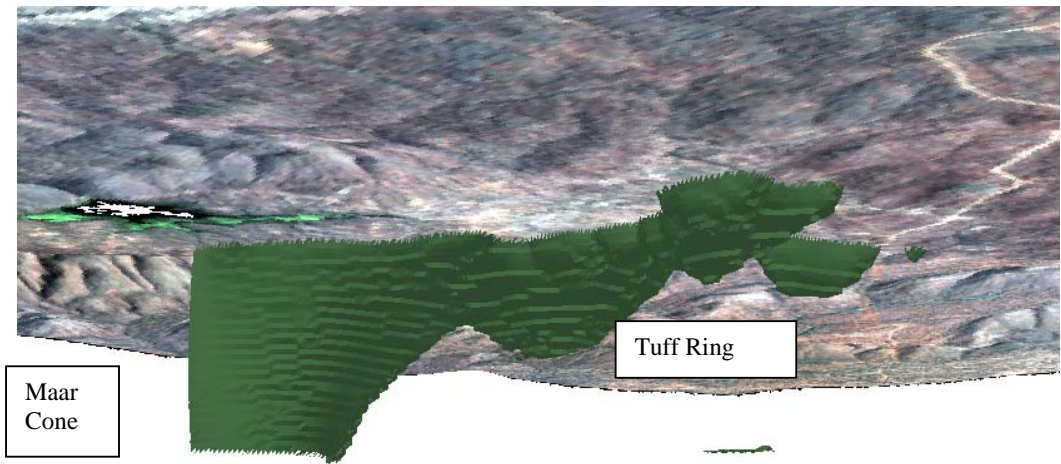


Figure 12: Kimberley Sue Maar. 3D 30m Resistivity isosurface. (Looking from underneath towards the NW, which shows the cone of the Maar and the Tuff ring).

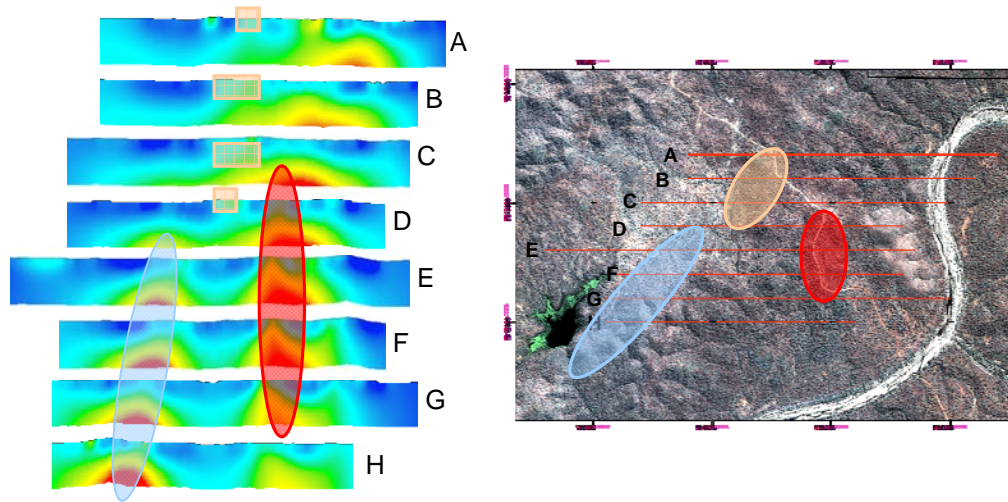


Figure 12: Pole Dipole IP sections and plan locations. The Tan circle shows the central diatreme anomaly, the red area the Eastern anomaly and the Blue area shows the Kimberley Sue anomaly.

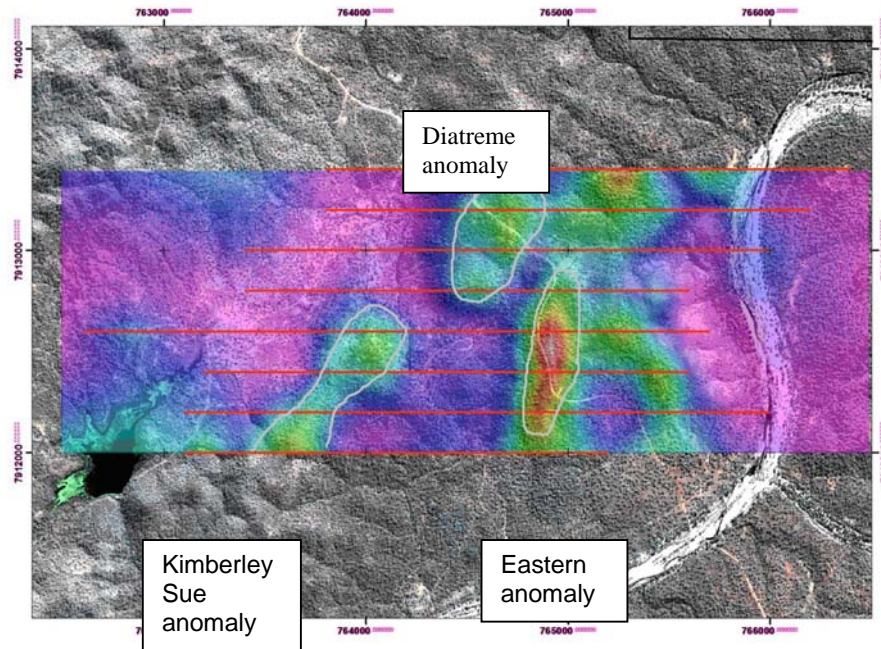


Figure 13: IP 100m depth slice (showing main anomalies of interest).

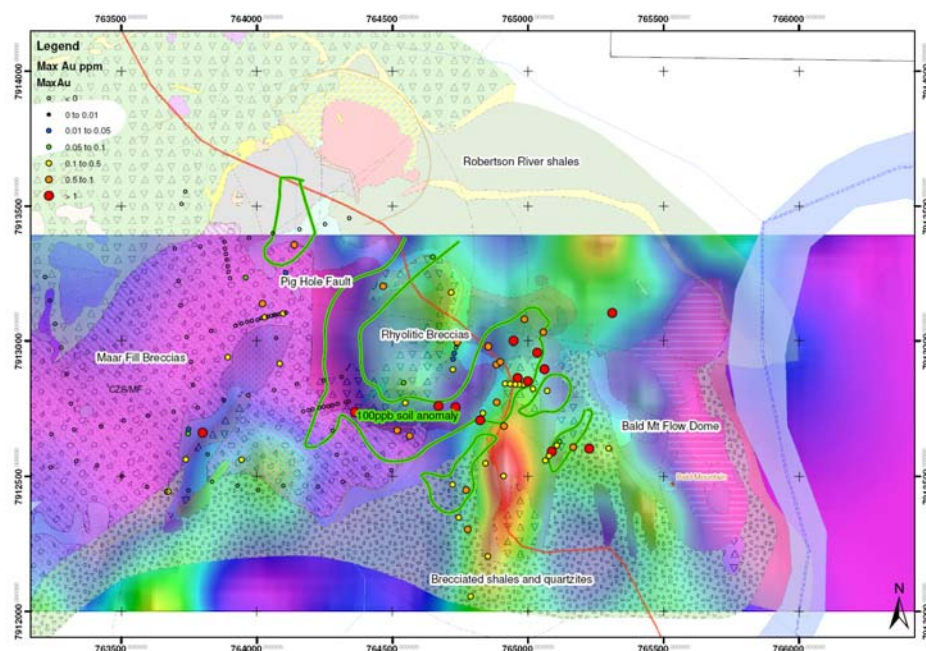


Figure 14: IP 100m depth slice with geology, 100ppb Au in soil outline and previous rock chip samples. (Note that the 100ppb Au anomaly loops around the diatreme in the central north of the IP grid).

The anomaly underneath the margin of the Kimberley Sue Maar follows the rim of the Maar complex in an area which is dominated by brecciated shales at the surface. There is no historic drilling in this area.

The smaller more discrete anomaly in the Central North of the survey is an elliptical shape trending roughly N-S. This anomaly closely follows the mapped rings of breccia in the area identified as having the strongest sericite alteration in the mapping. The 100ppb Au in soil anomaly directly loops around the chargeability anomaly and it is located in the low magnetic zone of the magnetics. This anomaly is the most likely anomaly to be caused by disseminated sulphides and in combination with the other results (geochemistry, magnetics and mapping) is a possible mineralized diatreme.

Previously 10 holes were drilled into the diatreme, including a line of 4 x 30m percussion holes and 6 deeper (between 70 and 150m) holes. The logs for these holes report patchy zones of on average 1-2% disseminated pyrite (with some zones logged up to 7-8%) associated with rhyolitic breccias or thin veins. The assay results are generally disappointing for these holes with the highest assay result of 2m at 760ppb at 54m depth. Most assay results from these holes were below detection limit with patchy areas of 30-40ppb Au. This anomaly has been drilled to a depth of 130m through the strongest chargeability anomalies, however in these systems mineralization is often focused on the edge of diatremes at depth.

The resistivity results indicate that the system is preserved at a high level, which in turn indicates that if there is significant high grade mineralization at Bald Mt it will be at depth compared to where has historically been drill tested. Other systems of this type around the world show significant mineralization can occur underneath systems which only show weak mineralization at the surface, therefore it was considered to be beneficial to drill at least one deep hole, perhaps 350m through the edge of the diatreme to test for high grade mineralization at depth.

The above results indicate a weakly mineralized diatreme close to surface at Bald Mt, however, due to patterns encountered in other systems of this type around the world the system will be worth testing at depth. The Eastern chargeability anomaly also required testing at depth in order to ascertain whether the anomaly is due to shales or sulphides. The anomaly on the edge of the Kimberley Sue does not warrant testing until the Eastern anomaly and diatremes are tested.

Four deep RC holes (NEWBMRC001 – 4) were completed in the 2010 RC drilling program (Table 1, Figure 1). Initial 4m composite Fire Assay results (Au) returned for NEWBMRC001 – 4 had nothing of significance to report. Multi-element assay results showed that Zn was elevated in all holes with associated Pb and Ag. Drill collar and drill pad rehabilitation was carried out on BMRC001 – 4 on the 25th November, 2010.

BMRC001 intersected Proterozoic metasediments (amphibolite facies with staurolite & garnet porphyroblasts) and Permian rhyodacitic porphyry. Localised sulphides (pyrite, chalcopyrite +/- molybdenite) and brecciation observed.

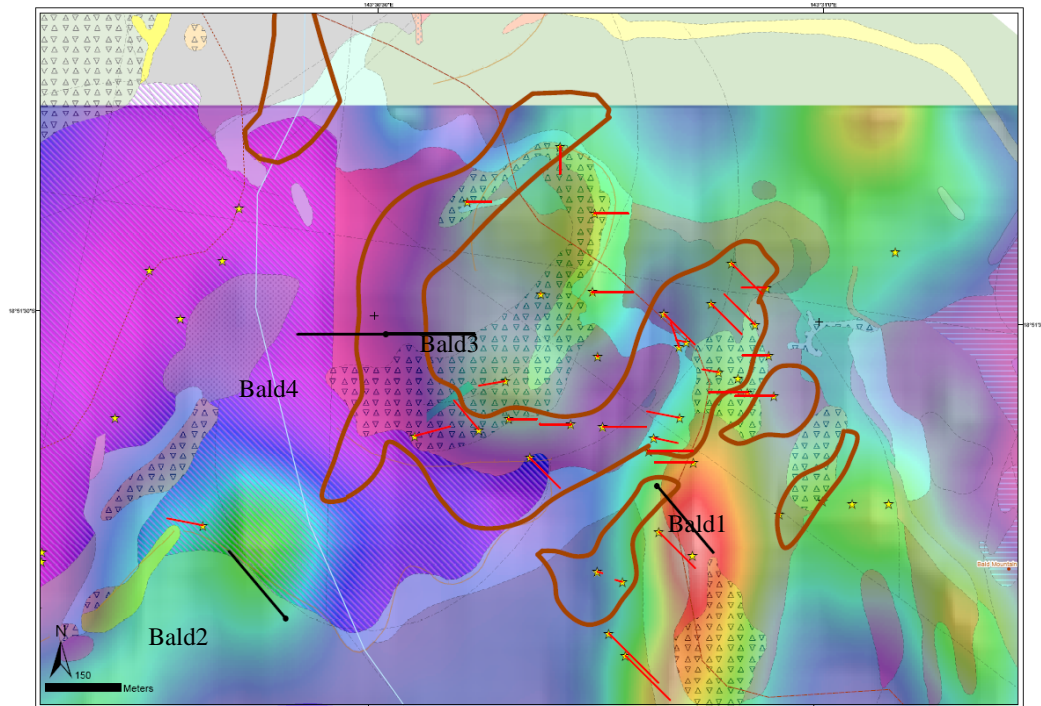
BMRC002 was all upper greenschist Proterozoic metasediments – Shales / siltstones / sandstones / cherts with areas of metabasalt.

BMRC003 was drilled under the Au soil anomaly and intersected polymictic breccia with clasts of volcanics and metasediments. This hole had the most sulphide (pyrite, chalcopyrite +/- molybdenite).

BMRC004 targeted the Pig Hole fault and intersected the fault at ~190m. The fault appears to occupy the position of the contact between a rhyolite / rhyodacite and the breccia, which continued to EOH at 337m being less altered beyond the fault zone.

Table1: Drillhole details for October 2010 RC program.

Hole_No	Planned ID	Easting	Northing	Azimuth	Dip	Actual Depth	Planned depth
NEWMRC1	Bald1	764840	7912640	140	60	312	350
NEWMRC2	Bald2	764107	7912377	320	60	295	350
NEWMRC3	Bald3	764305	7912940	90	60	313	350
NEWMRC4	Bald4	764305	7912940	270	60	337	350

**Figure 15:** Bald Mountain 2010 Drill holes (black) previous (red) in relation to the 100m chargeability depth slice, the 100ppb Au in soil anomaly (brown outline) and the mapped breccia areas.

The FA results were returned in late October for the 4 holes drilled, with multi-element assays following in early November, as these had to be sent to Perth for analysis.

Bald 1 (BMRC001) B001 – B080. STD at B035 (0.314ppm) was G305-2 = 0.32ppm. B034 was a Dup of B018 which both came in at 4ppb.

Bald 2 (BMRC002) B247 – B322. STD at B322 (0.319ppm) was G305-2 = 0.32ppm. B321 (0.013ppm) was a Dup of B315 (0.009ppm).

Bald 3 (BMRC003) B167 – B246. STD at B246 (**0.029ppm**) was G305-2 = 0.32ppb. It was assumed that a decimal place is out as the Dup checks out well - B244 (0.004ppm) was a Dup of B225 (0.002ppm).

Bald 4 (BMRC004) B081 – B166. STD at B166 (0.316ppm) was G305-2 = 0.32ppm. B165 (0.013ppm) was a Dup of B164 (0.009ppm).

Therefore, on the whole, the QAQC is very good with the one discrepancy.

Four samples (B171, 173, 176 & 185) above 0.1ppm in BMRC003 (the hole with the most sulphide) did not come from the areas that had the most / interesting looking (veinlets) of sulphide.

Two samples (B275 and 317) that returned the highest grades of 0.447ppm & 0.205ppm, respectively were from uniform Proterozoic metasediments with nothing of particular note logged at the corresponding intervals. This hole did not intersect any Permian volcanics.

Multi-element analysis was carried out on the 4m composite samples and included Au, Ag, As, Cu, Hg, Zn, Mo, Sb, Pb, Bi & Te. Nothing of significance was returned, other than elevated Zn (500 – 2,500ppm) with associated weakly elevated Ag and Pb.

9.4. REHABILITATION

Drill collar and drill pad rehabilitation was completed on BMRC001 to 4 on the 25th November, using the staff and earthmoving equipment from Robin Hood Station / Cobbold Gorge. Post rehabilitation photographs were taken and have been incorporated into a report.

9.5. ASSESSMENT OF NEWMONT DRILLING PROGRAM

Newmont's 4 hole RC drilling program did not test the 3 quartz vein swarms recommended previously (Nethery et al 2009). Drill hole Bald 001 was drilled at an azimuth of approximately 50° across the trend of a gossanous quartz vein swarm with an associated strong IP Chargeability anomaly (Figure 15). Recent mapping (Nethery et al 2009) showed that many of these veins contained gossanous fracture and vugh fill. A line of shallow prospecting pits confirmed that these veins were auriferous (Figure 16). The latter interpretation was reinforced by examination of past pan concentrate stream sediment sampling results, which showed that most of the gullies draining the vein swarm areas were strongly gold anomalous (Nethery et al 2009). Plotting of Bald 001 trajectory shows that the hole was terminated short of the main vein system. It is apparent therefore that this 800m long quartz vein swarm was not adequately tested by this hole, nor by the 2 previous AOG holes (Figure 17). The 3 defined quartz vein zones have been tested by only 3 drill holes AOG 06 and 07 and Newmont Bald 001. Of these AOG 06 contained an intersection of 2 metres of 19.7g/t gold and 122g/t silver. These targets remain inadequately tested and closer spaced RC drilling is recommended.



Figure 16: Eastern Anomaly – Shallow historic workings

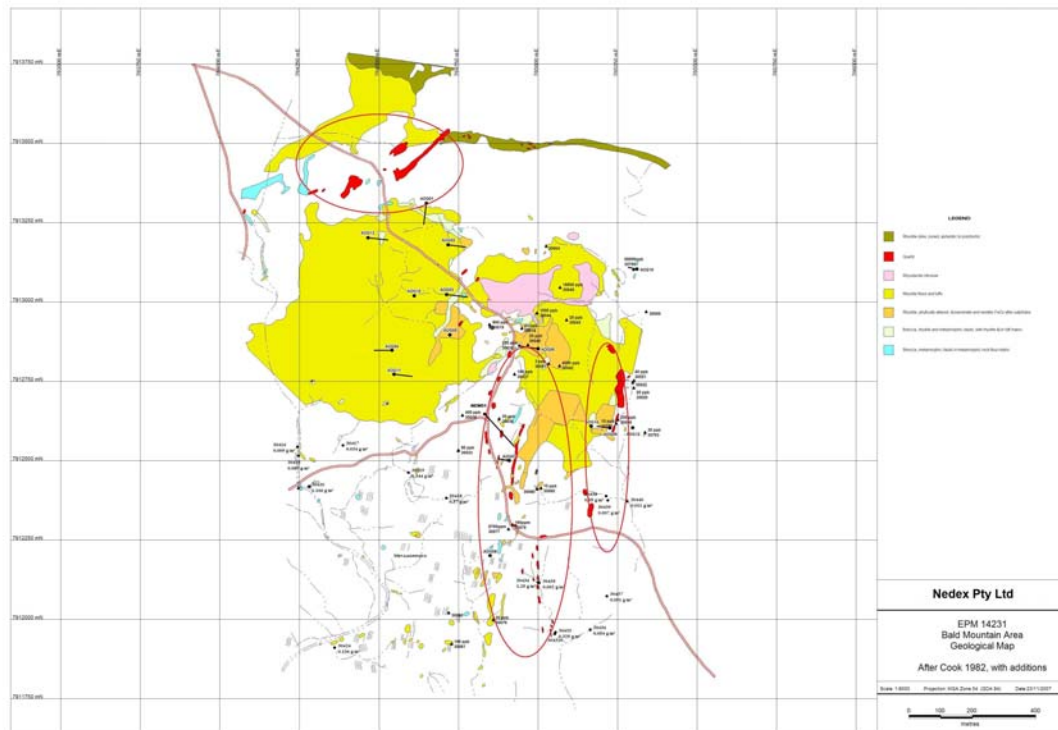


Figure 17: Bald Mountain Eastern Anomaly geology of vein swarms and drillholes

10. KIMBERLEY SUE MAAR COMPLEX

10.1. PROSPECT LOCATION

The Kimberley Sue area is located in the southwestern part of EPM14231 and covers the area between the Robertson River to the West and South and Pig Hole Creek to the East. This area covers both the Kimberley Sue and Southern Maar Complex.

10.2. 2011 – 2012 PROGRAM

No work was done on this area in the current year program, but it should be noted that targets established by Newmont remain to be tested.

Gradient Array IP data originally surveyed by KGM in 1997 was reprocessed and reinterpreted identifying the northern rim of the Southern Maar and several areas of the SE rim of the Kimberley Sue Maar as having anomalously high chargeability. The areas on the SE side of the Kimberley Sue Maar were found to be within the brecciated quartzites with hematite infill. Rock chipping along these areas did not find any anomaly, however a small pole dipole IP line (50m spaced stations at n=8) was surveyed across this anomaly (location in Figure 18). The results of the pole-dipole line show a small high chargeability anomaly centred directly underneath the southern rim of the maar. This anomaly may represent either sulphides or graphitic shales. The resistivity results, similar to the resistivity results at Bald Mountain, show low resistivity where there is maar fill on the NW side of the line.

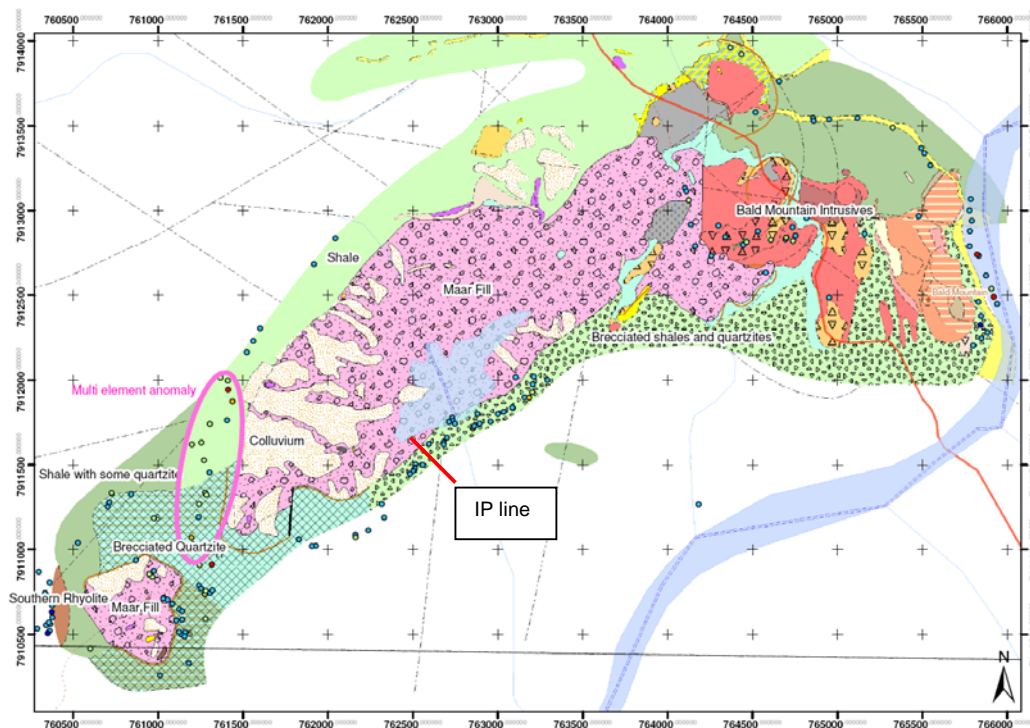


Figure 18: Kimberley Sue Maar Complex Geology (Modified from Cook (1982)).

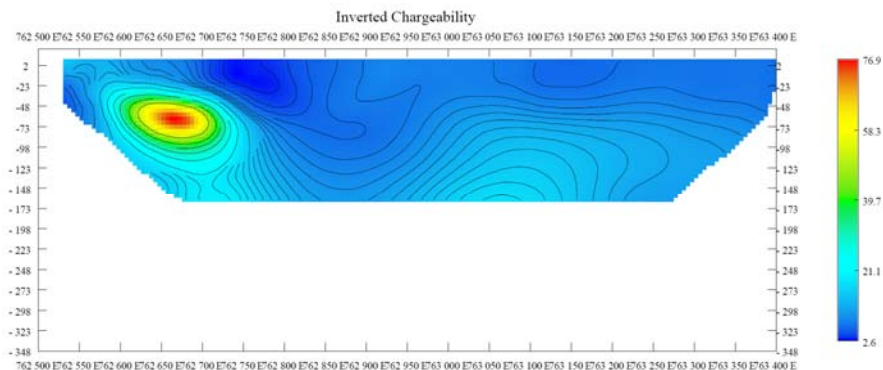


Figure 19: Pole-Dipole IP line across the Kimberley Sue Maar Rim showing high chargeability anomaly.

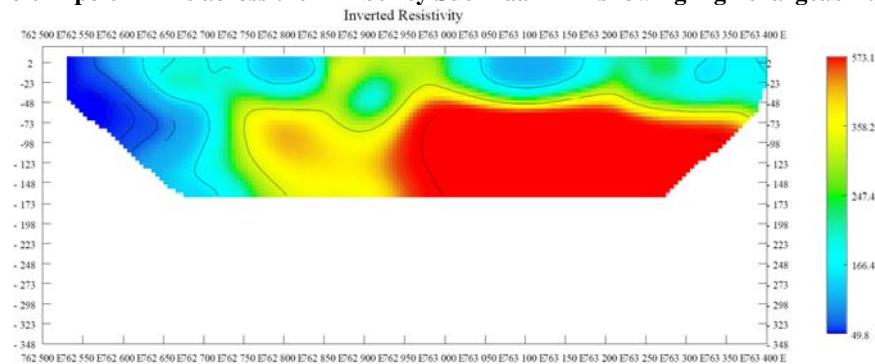


Figure 20: Resistivity profile across the Kimberley Sue Maar Rim. (High resistivity quartzites or rhyolites are interpreted to be on the SE side of the line while Maar fill is interpreted on the NW side).

11. MALCOLM CREEK

11.1. PROSPECT LOCATION

The Malcolm Creek prospect is located in the Northwestern corner of EPM17739 and covers a NE trending ridge immediately west of the Forsyth - Gilberton Road.

11.2. PROSPECT SCALE GEOLOGY

The prospect is centred on a ridge comprising pelites of the Lane Creek and Corbett formations. The ridge was identified as being anomalous in Au by CRA (Figure 21). On the Western side of the ridge a NW-trending structure contains intrusive rhyolites with associated breccias. This structure appears to be one of several NW-trending faults visible in the airborne magnetics. To the south and north of the main Malcolm Creek Ridge Proterozoic dolerite may be a flow, dyke or sill.

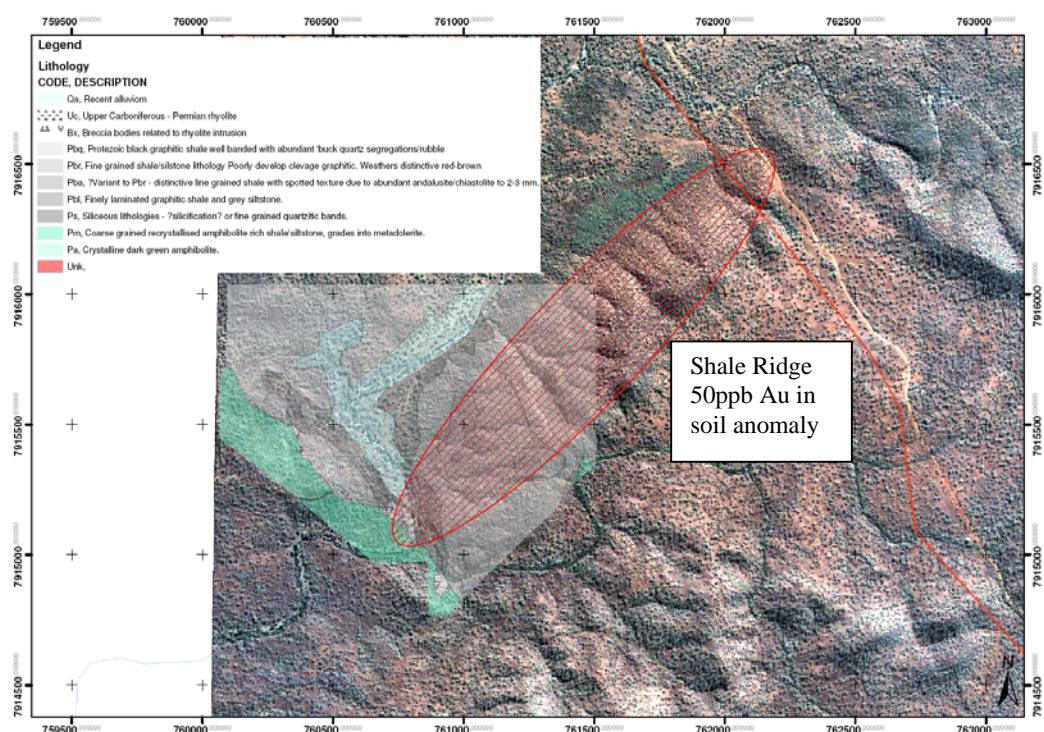


Figure 21: Malcolm Creek Prospect (showing the previous CRA mapping and the location of the anomalous ridge).

Within the shales and slates of Malcolm Creek Ridge a siliceous unit is present which has had several interpretations since it was first identified as clastic quartzites by Withnall et al (1980) during government mapping. The extreme areal distribution in relation to thickness, the tourmaline content and the laminated texture prompted reinterpretation as cherty exhalites (Nethery 1980). Recently textural evidence suggested a silicified mylonite (Nethery and Day 2004) and this was reinforced by an earlier petrological and chemical assessment at James Cook University (Parsons 2002). Nethery and Day (2004) interpreted that the mylonite unit was a continuous folded sheet across the tenement, locally forming a dome-like structure, one limb of which dips shallowly beneath the Malcolm Creek Ridge (Figure 22).

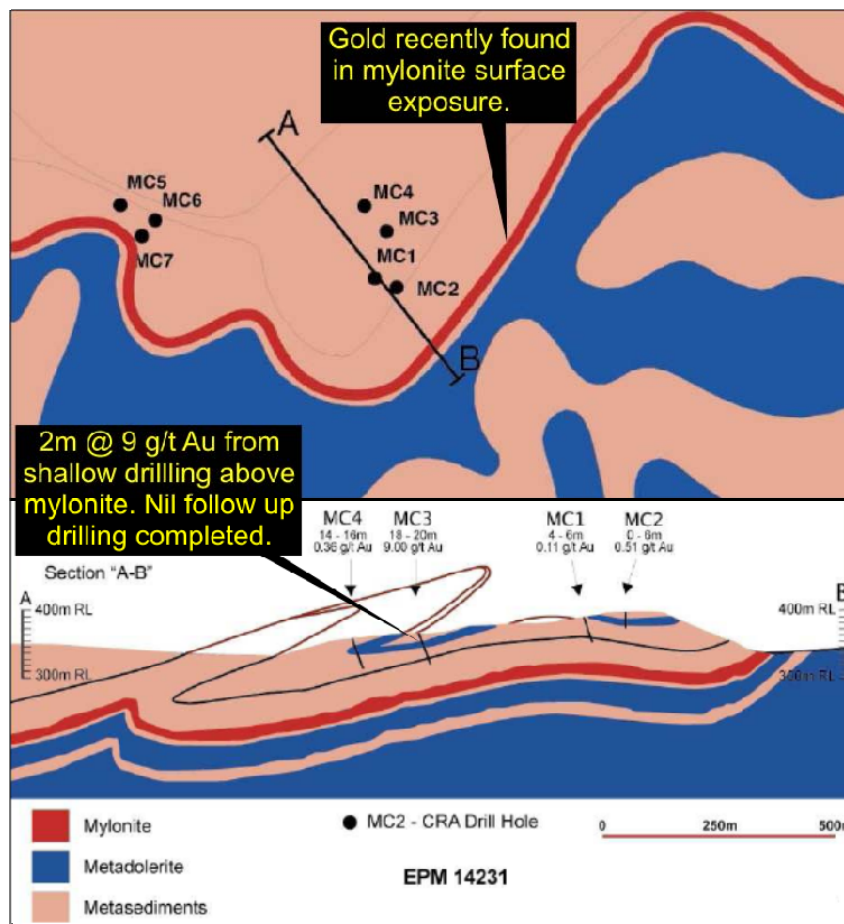


Figure 22: Malcolm Creek. QGM's interpretation of the geology.

11.3. NEWMONT REVIEW & MAPPING

Platy gold fragments were found in floats of the siliceous unit at the base of the Malcolm Creek Ridge (Figure 23), therefore in 2009 this unit was mapped and re-interpreted once again. The floats containing the platy gold did appear mylonitised, however there was no evidence found on the ground that this unit was continuous.

In most areas, outcrops of the siliceous unit are interpreted as intensely deformed quartzite units. The outcropping deformed quartzites show boudinaging and tight isoclinal folds, because of the variability between outcrops an accurate dip of the general trend of units has been difficult to obtain, however, current observations suggest highly variable dips and in most places an indication of steep dips. There is also a large variability in the units that were previously interpreted as consistent mylonite horizons across the tenement. This variability includes clast size, mineral content (variability of tourmaline, feldspar and mica within the unit) and amount of deformation, and indicated that the unit is in fact several layers of sandstone within the psammities and pelites, which were then deformed to quartzites.

The platy gold found in the deformed quartzites is currently thought to be deposition of gold in brittle fractures within the deformed quartzites at this location. The gold was found in floats of interpreted

mylonite material in an area of colluvium at the base of a ridge which consists of weakly mineralized shales. The shale ridge contains small outcrops of the interpreted mylonite, which pinch out suggesting that they are lenses of quartzite or faulted and folded out segments.

Newmont's interpretation of the siliceous unit was that it is a deformed quartzite comprising a series of lenses and discontinuous units. The degree of deformation is variable and ranges from mylonitised sections through to undeformed quartzites. This conclusion is debatable.



Figure 23: Malcolm Creek. Platy gold in mylonite.

11.4. GEOLOGICAL MAPPING

Work completed at Malcolm Creek involved several mapping traverses across the anomalous ridge, interpretation of aeromagnetism data, rock chip sampling along the ridge and of the deformed quartzites (mylonites) in the area, soil sampling of the ridgeline to the East of the Malcolm Creek ridge and a pole-dipole IP line across the Malcolm Creek Ridge.

The results of the mapping transects across the Malcolm Creek ridge resulted in the confirmation of the mapping completed by CRA in 1989 and the nature of the deformed quartzites in the area (as described in the prospect geology section). A NW to SE trending rhyolite dyke confirmed in the mapping was found to have a clear trace in the aeromagnetism image. Further interpretation of the magnetism data shows a series of NW to SE trending structures running underneath the weakly mineralised shales on Malcolm Creek ridge. Interpretation of these structures is that they are Proterozoic faults which may have been intruded by Permian rhyolites. It is possible that these structures may be the source of the mineralisation found in the area.

Rock chip sampling of the rhyolite dyke, shale ridge and deformed quartzites were all disappointing adding no new information to the anomaly that was already defined by CRA. The platy gold mineralisation found within the deformed quartzites is thought to be deposition of gold in brittle fractures within the deformed quartzite. This was only seen in rare floats from one area with the rest of the mineralization associated with the shale ridge averaging 50ppb Au.

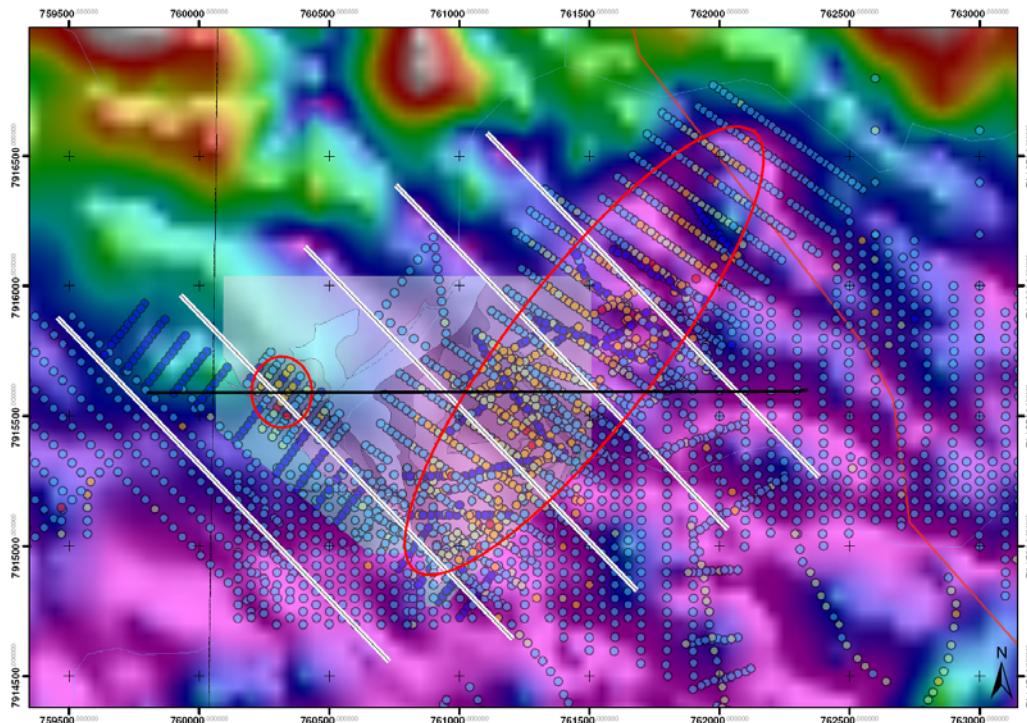


Figure 24: Malcolm Creek soil anomaly with Au results: (red above 50ppb) on the analytical signal magnetics image. Note NW-SE trending structures. The black line shows the location of the IP survey.

11.5. INDUCED POLARISATION SURVEY

A pole dipole line was surveyed over the mineralized shale ridge (100m spaced stations at n=8) with the aim of defining evidence of the NW to SE trending structures visible within the magnetics. The results of the IP line show no structures visible underneath the shale ridge however west of the ridge there are at least 2 structures, which match those visible in the magnetics image (Figure 24). The results underneath the shale ridge are fairly consistent and show no obvious anomalism. To the west there are 3 zones of high chargeability which coincide with a change to more graphitic shale noticed on the surface. The zones of high chargeability have 2 areas of lower chargeability in between, which dip at approximately 70 degrees to the East and match the location of the structures observed in the magnetics. The IP and magnetics suggest the structures generally trend 70°/040°.

There is a small 100ppb Au in soil anomaly (identified by CRA 1989) where the western most structure intersects the surface, this was drilled by 3 vertical percussion holes (CRA 1989) reaching a maximum of 40m depth all to the SW of the structure, which in light of the new information gathered would not have intersected the structures. Of the three holes the best result was 2m at 261ppb Au, with most assay results returning an average of 20ppb Au. Due to the structural information and coincident Au in soil anomaly it may be worthwhile doing a follow up drillhole designed to intersect the structure.

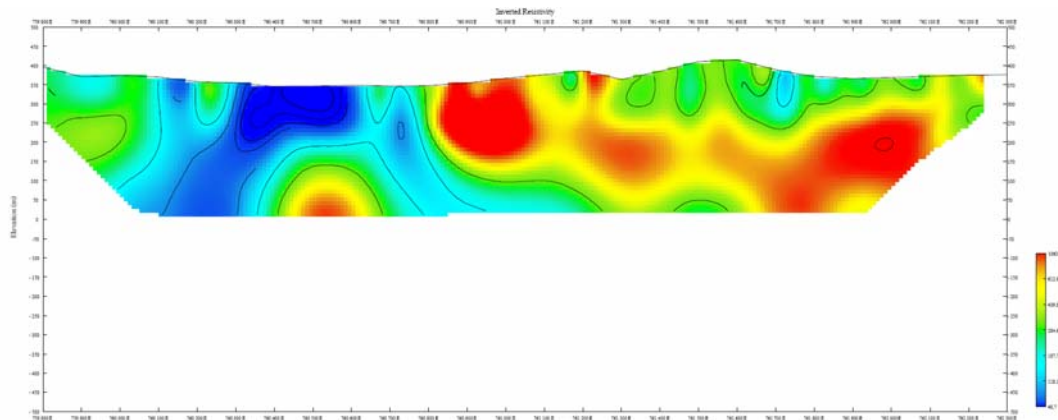


Figure 25: Malcolm Creek Resistivity profile.

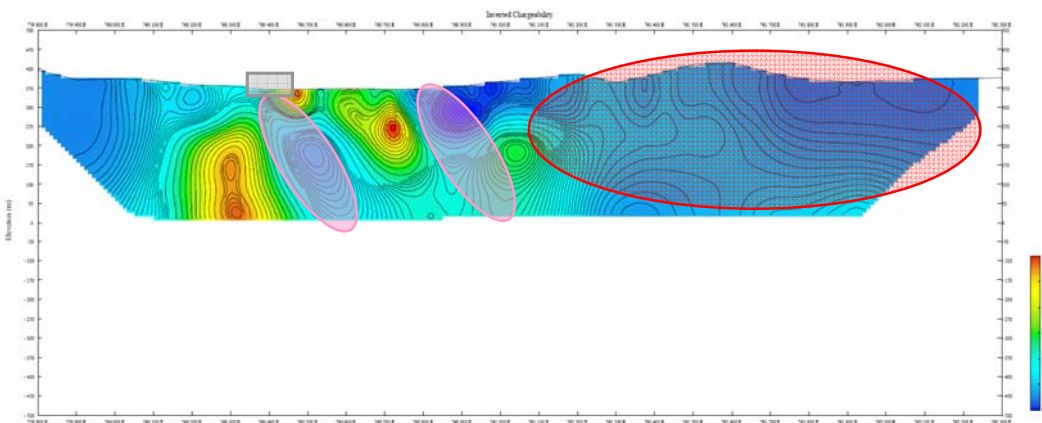


Figure 26: Malcolm Creek Pole-Dipole IP line. The pink ovals show interpreted structures, while the red oval shows the area of Malcolm Ridge shales, which have no response. The grey square shows the location of the small 100ppb Au in soil anomaly.

11.6 CURRENT MYLONITE RECONNAISSANCE

Irrespective of whether the siliceous units are quartzites or mylonites, it seems that this unit has simply acted as a brittle host to later Permian gold deposition related to rhyolite intrusives of the Bald Mountain suite. The attitude of the siliceous unit may therefore still be a factor in explaining the CRA soil anomaly. Examination of many outcrops reinforced the original observations that this unit is consistently horizontal to very shallowly dipping and therefore project beneath the ridge containing the anomaly (Figures 22 and 27). In view of this the original concept that the CRA drilling was too shallow to penetrate to that favourable horizon, still stands and has not been tested.

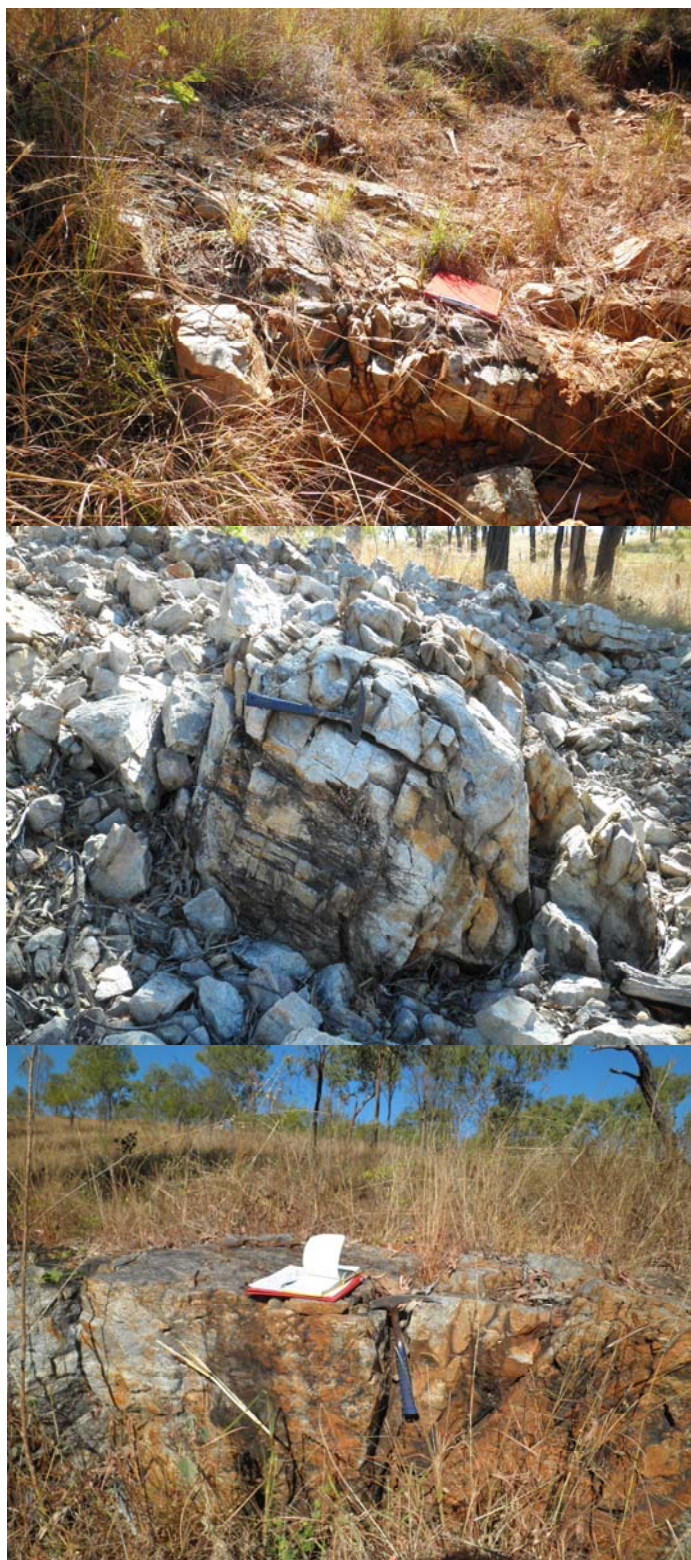


Figure 27: Sub-horizontal mylonite lenses on SE side of CRA soil anomaly

11.7 BCL STREAM SEDIMENT ANOMALIES

QGM BCL stream sediment sampling defined a grouping of 4 strongly anomalous BCL samples in 4 separate drainages on the southern edge of the Malcolm Creek grid (Figure 28). The strongest anomaly, still untested, was >10,000ppb (or >10ppm) suggesting the presence of particulate gold. It is also notable that soil sampling over the area has outlined moderate As but minimal Au (Figure 29).

Brief reconnaissance has shown that the area is largely scree covered, but gossanous mesothermal quartz vein float and sericite altered porphyry float were found in several of the drainages.

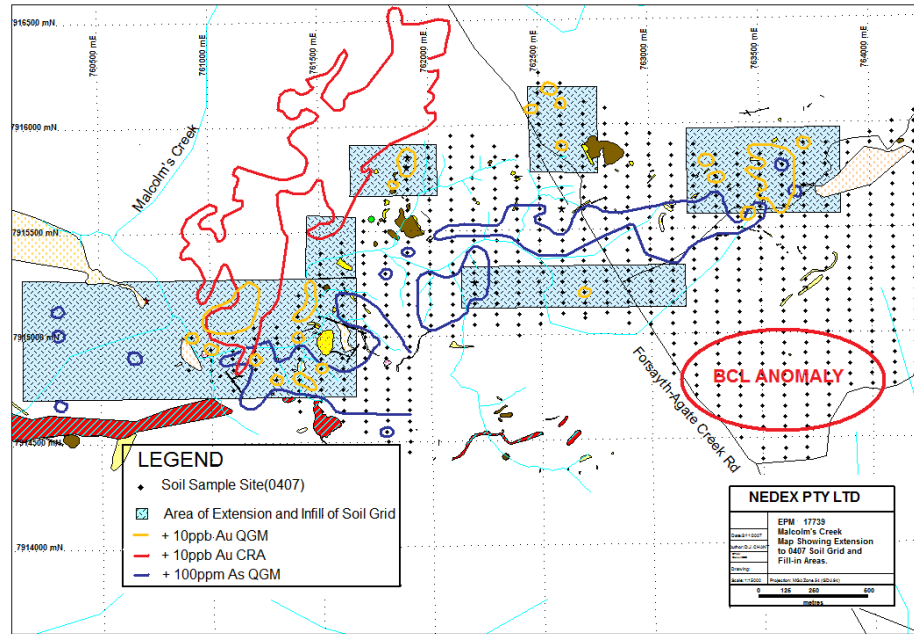


Figure 28: Location of strong BCL stream sediment Au anomaly

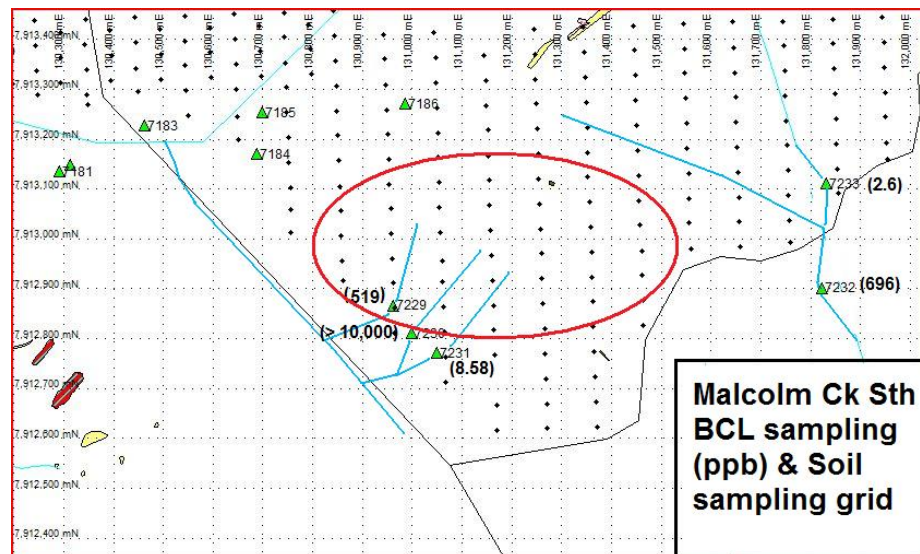


Figure 29: Malcolm Creek South. BCL Au anomalies

12. KANGAROO CREEK

12.1. PROSPECT LOCATION

The Kangaroo Creek area is in the centre of EPM17739 and covers a small area to the North of the Kangaroo Creek Dam, which has evidence of historic prospecting pits.

12.2. PROSPECT SCALE GEOLOGY

The GSQ mapping in the areas shows the prospect in the centre of a large section of Corbett Formation schists, intruded by rhyolitic dykes with associated breccias. The dykes are small and relatively thin (1-2m wide) with only small areas of associated breccia.

QGM established strong BCL responses to 28ppb and anomalous Sn and Ta in HM sampling

12.3. NEWMONT PROGRAM

Work completed at Kangaroo Creek included a single field visit which involved reconnaissance mapping and rock chip sampling. Several rhyolite dykes and rhyolitic breccias were identified and sampled, however only weakly anomalous results (highest result is 80ppb) were identified. Further work is required to determine the source of several strongly anomalous stream sediment sample results.

13. TIN MINE MOUNTAIN

13.1. PROSPECT LOCATION

The Tin Mine Mountain prospect is located in the northeastern corner of EPM 17739 and covers the area surrounding the Robertson River in this part of the tenement.

13.2. PROSPECT SCALE GEOLOGY

The prospect is located in an area, which the government mapping shows as being predominantly Robertson River Metamorphics. Historically the area has had a small alluvial operation which extracted tin from tributaries of the Robertson River. The area is dominated by Corbett Formation schists and the Tin Hill Quartzite member, there are also extensive areas of pegmatites, buck quartz veining and gabbros and dolerites.

Previous GSQ mapping defined several areas of rhyolites and rhyolitic breccias. These rhyolites appear to be associated with the strong reversely magnetised anomaly visible in the airborne magnetics, which indicates that the Tin Mine Gully rhyolites may be related to the rhyolites at Bald Mountain and Mount Spinifex (Figure 3).

13.3. NEWMONT RECONNAISSANCE PROGRAM

Two visits were made to the Tin Mine Mountain area. The aim of these visits was to investigate whether the Tin Hill Quartzite could be mineralised as part of a mylonite horizon, as proposed by Nethery and Day (2004), and also whether a source of the reversely magnetised anomaly could be identified. Several widely spaced soil samples and mapping transects were completed during these

visits. The soils produced no anomalies. The mapping transects confirmed an area of rhyolitic breccias directly over the magnetic anomaly (Figure 30). Four rock chip samples were taken within the breccia zone and these produced low (average 7-8 ppb) results.

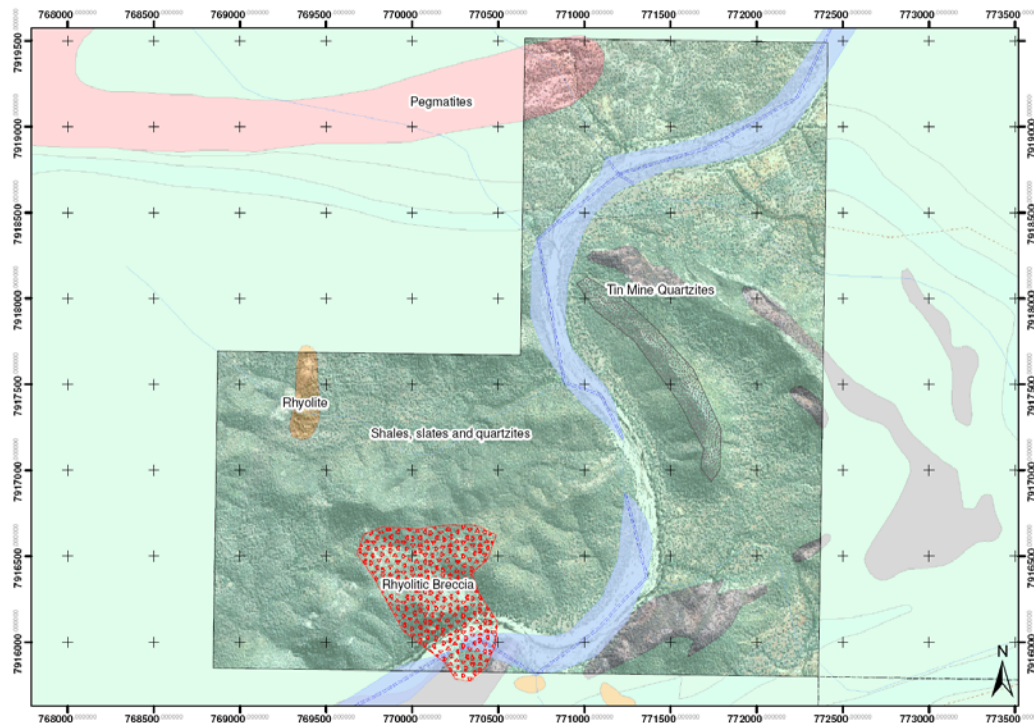


Figure 30: Tin Mine Mountain geology.

The two main points of interest, noted by Newmont, in the Tin Mine Gully area are 1: the possibility of the Tin Hill Quartzite being part of the Mylonite Horizon and therefore a potential host of mineralisation and 2: the source of the large reversely magnetised aeromagnetic anomaly.

The Tin Hill quartzite was interpreted to be part of the continuous mylonite horizon by Nethery and Day (2004) due to the texture and evidence of metasomatic quartz replacement of porphyroblasts in the quartzites by hot circulating fluids (Parsons 2002). After extensive section traversing of the quartzite unit and studying Parsons (2002) thesis Newmont staff could see no evidence that these units were part of the same stratigraphy observed at Malcolm Creek. The textures are not as deformed and show no visible shearing (unlike the clearly sheared deformed quartzites at Malcolm Creek), there also does not appear to be any spatial relationship between the units when the air photographs are scrutinised. Nethery and Day also speculate that the hot circulating fluids may be related to the Permian volcanics which have intruded into the area, this does not seem probable as Parsons (2002) also states in his thesis that the quartz replacements occurred syntectonically during the Proterozoic deformation. Field observation also identified what are thought to be large andalusite crystals within the quartzite unit; this would place the unit at a pressure and temperature that would be unlikely to host Au.

The rhyolites and associated breccias (Figure 31) are found within the large reversely magnetised anomaly identified in the airborne magnetics (Figure 32) indicating that these rhyolites are probably the source of the magnetic anomaly. The similarity of the Tin Mine Gully rhyolites and magnetic

anomaly to the rhyolites and anomaly at Bald Mountain indicate that both areas are probably related and part of the same volcanic event. The Tin Mine Gully rhyolites have not been properly mapped or sampled and their extent is unknown. The area in which the rhyolitic breccias were identified was not included in the BCL sampling completed in 2009, but visible gold was panned in the immediate area during the QGM reconnaissance program. It is recommended that further reconnaissance and BCL sampling be completed in the area to ascertain whether a more detailed program is warranted.



Figure 31: Tin Mine Mountain. Breccia hosted by mylonite

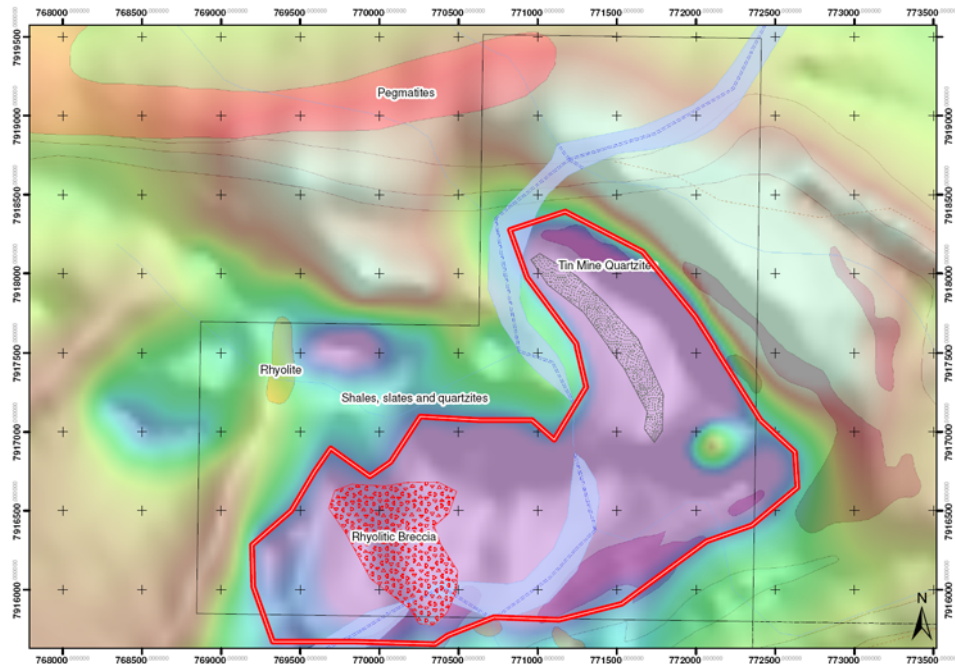


Figure 32: Tin Mine Mountain geology, on reversely magnetised TMI (edged in red).

13.4 REMOTE SENSING

Satellite imagery using various enhancement techniques and stereoscopic aerial photography were used to guide follow-up exploration for breccia and intrusive systems in the Tin Mine Mountain area (Figure 33). Circular to elliptical collapse structures were considered very relevant to highlighting potential systems. These techniques proved successful in highlighting a series of overlapping circular structures containing the newly discovered Tin Hill Breccia west of the Robertson River. These methods also highlighted another potential target within the Permian Reversed Magnetic zone within the topographic depression in the Tin Mine Mountain area, which has a “bulls-eye” magnetic target contained within a potential collapse structure (Figure 34). The latter remains to be followed up on the ground. Visible gold in panned concentrates from HM sampling of gullies draining off Tin Mine Mountain reinforce this conceptual target.

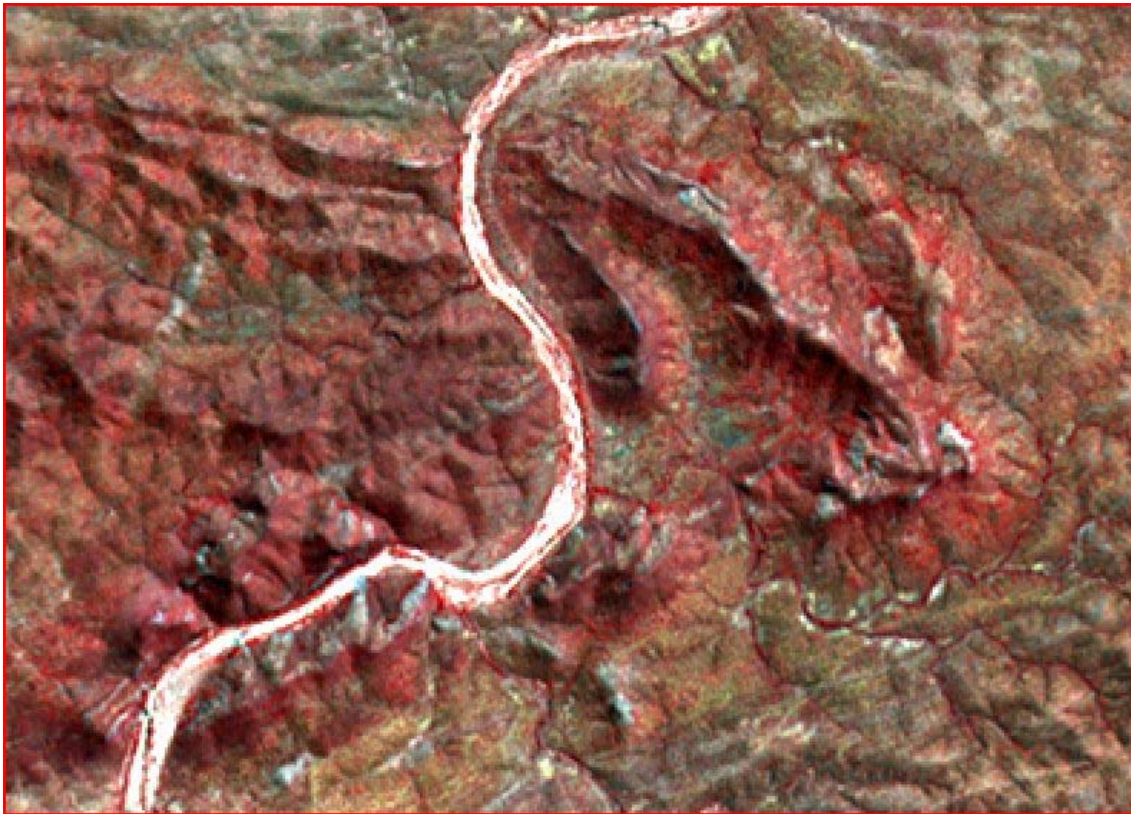


Figure 33: Tin Mine Mountain area showing complex folding of Tin Hill Quartzite Member.

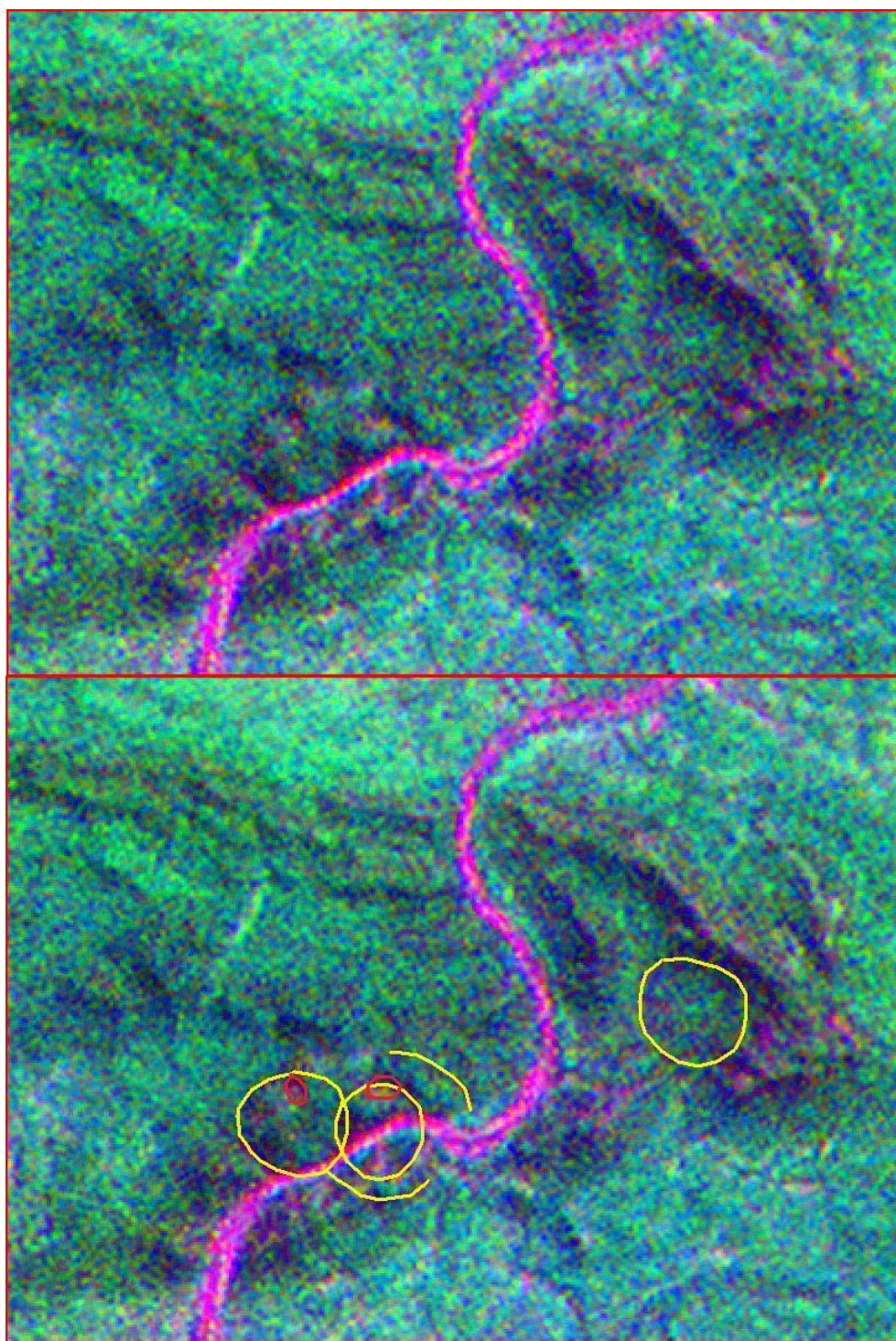


Figure 34: Satellite imagery with enhancement for alunite–kaolinite–illite highlighting circular structures.

14. BALD MOUNTAIN GEOLOGICAL FACIES DOCUMENTATION

A bullet-point summary of the Bald Mountain Breccia – Kimberley Sue Diatreme and images of various geological features follows:

Diatreme Sectors

- NE sector, Intrusive Breccia Complex, is dominated by phreatomagmatic activity
- Central and SW sectors, known as the Central Cauldron and Southern Cauldron, are dominated by phreatic activity.

Magmatic components

- Phase 1 - Subvolcanic porphyritic rhyolite intrusives
- Phase 2 - Rhyolite flow - domes
- Phase 3 - Elongate porphyry dykes associated with incipient cauldron collapse

Volcaniclastic components

- Matrix- to clast-supported breccia within and rimming Phase 1 rhyolite in NE
- Cauldron rims of matrix- to clast-supported breccia of metamorphic clasts & rock flour
- Volcaniclastic cauldron-fill breccias ranging from chaotic laharic to bedded lacustrine
- Multiple phreatic to phreato-magmatic events suggested by chaotic texture and breccia clasts with breccia matrix

Alteration components

- Phase 1 porphyry is pervasively altered with vein stockwork of mesothermal quartz, pyrite, sphalerite, galena, arsenopyrite, chalcopyrite and pyrrhotite in order of abundance.
- Max 4m @ 17.5g/t Au, 122g/t Ag in RC drillholes. Average tenor < 0.5g/t Au
- Veins rimmed by quartz + sericite > Mixed layer clay + kaolinite > epidote + chlorite + calcite
- Cauldron and rim breccia facies have low intensity structure controlled epidote + chlorite + calcite veins
- Impermeable rock flour matrix restricted alteration of volcaniclastics

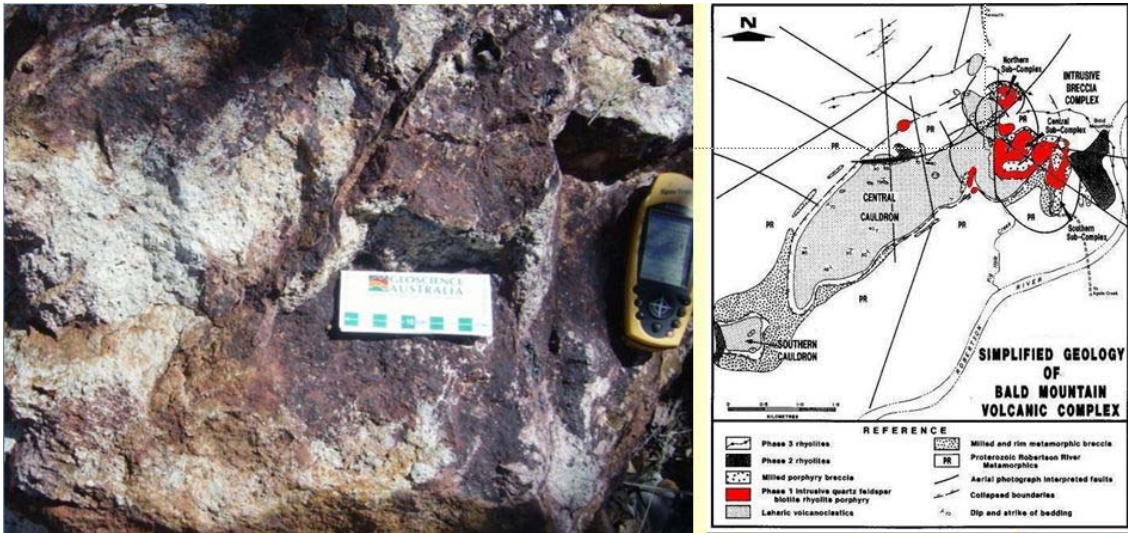


Figure 36: Phase 1 - Sub-volcanic quartz + biotite + fluorite porphyry with pervasive quartz + Sericite alteration and fracture fill quartz + gossan veinlets

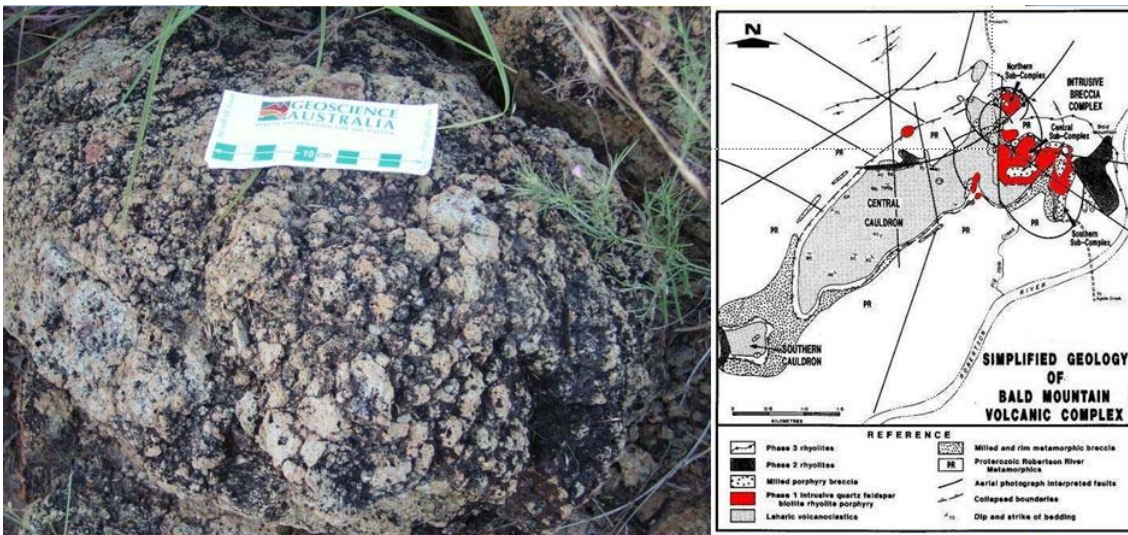


Figure 37: Phase 1 - Sub-volcanic porphyry with spherulitic sectors implying a high level hypabyssal setting

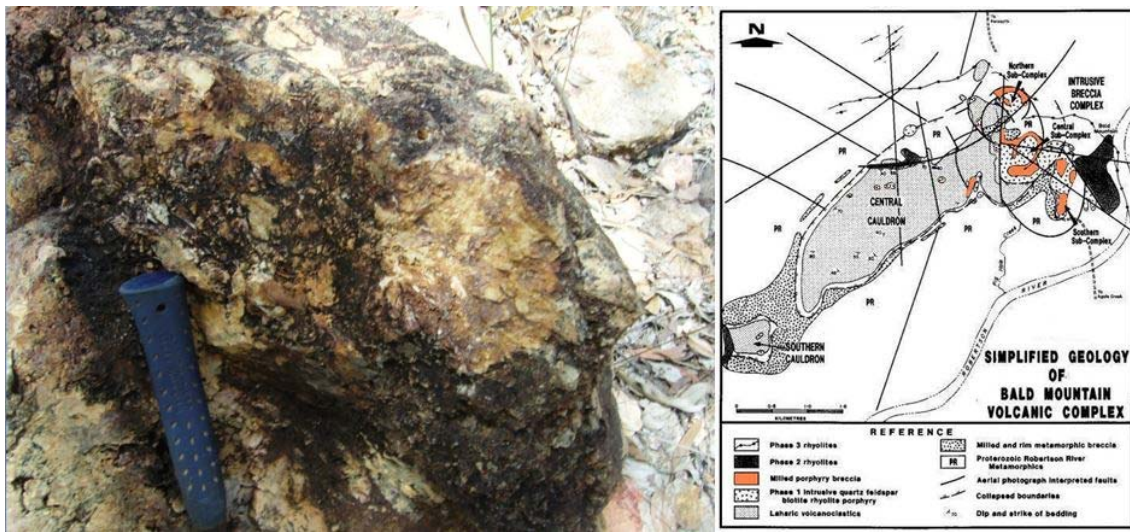


Figure 38: Phase 1 - Milled porphyry breccia as rims & cores to sub-volcanic porphyry with clasts rounded to angular, matrix-supported to clast-supported and tuff matrix quartz + sericite + FeOx altered.

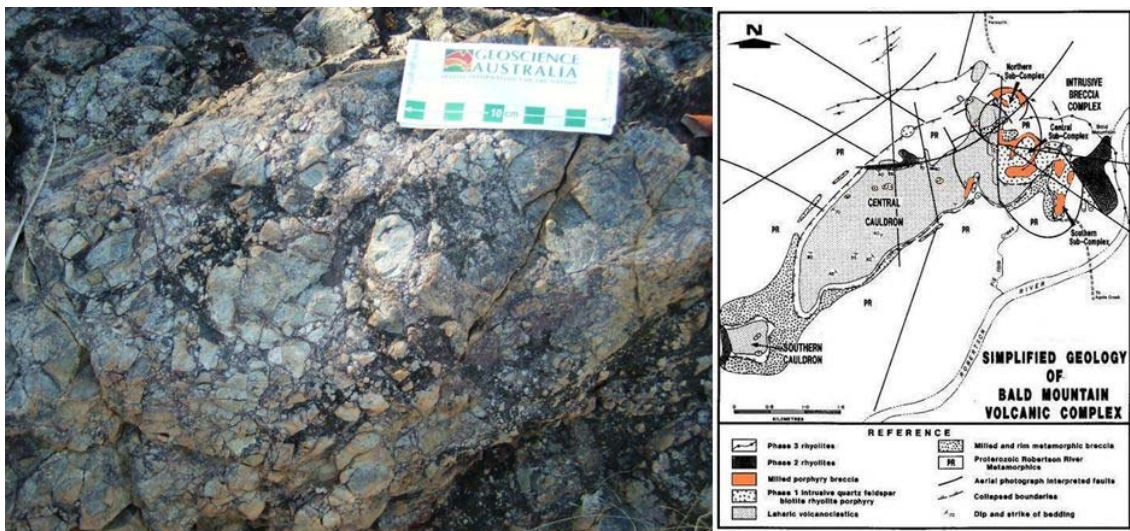


Figure 39: Phase 1 - Milled porphyry breccia as rims & cores to sub-volcanic porphyry with clasts rounded to angular, matrix-supported to clast-supported and tuff matrix quartz + sericite + FeOx altered.

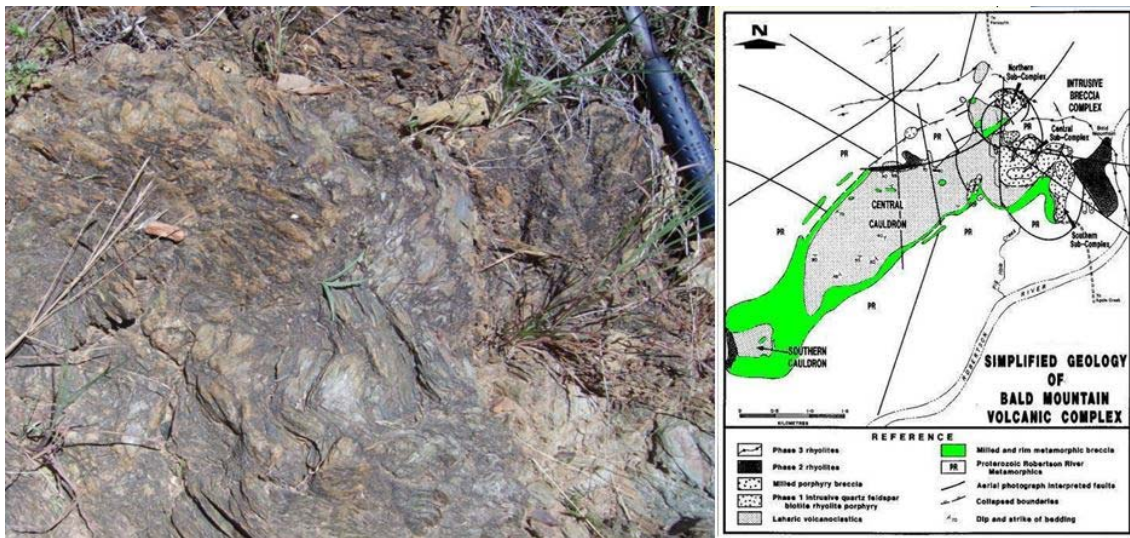


Figure 40: Phase 1 - Metamorphic rim breccia - clast-supported breccia developed in slate.

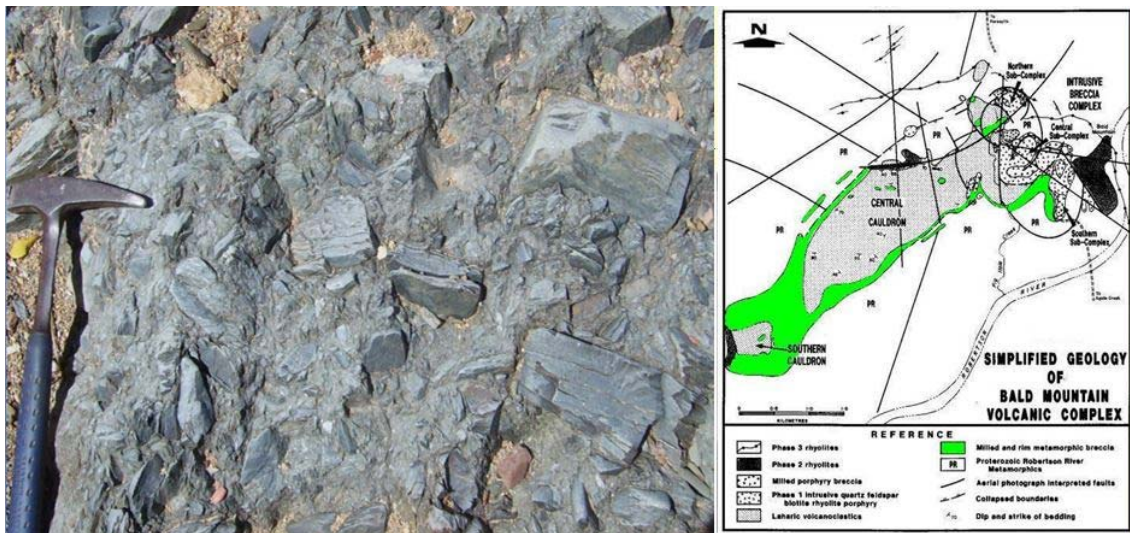


Figure 41: Phase 1 - Metamorphic rim breccia - matrix-supported breccia with angular to sub-rounded clasts in rock flour matrix.

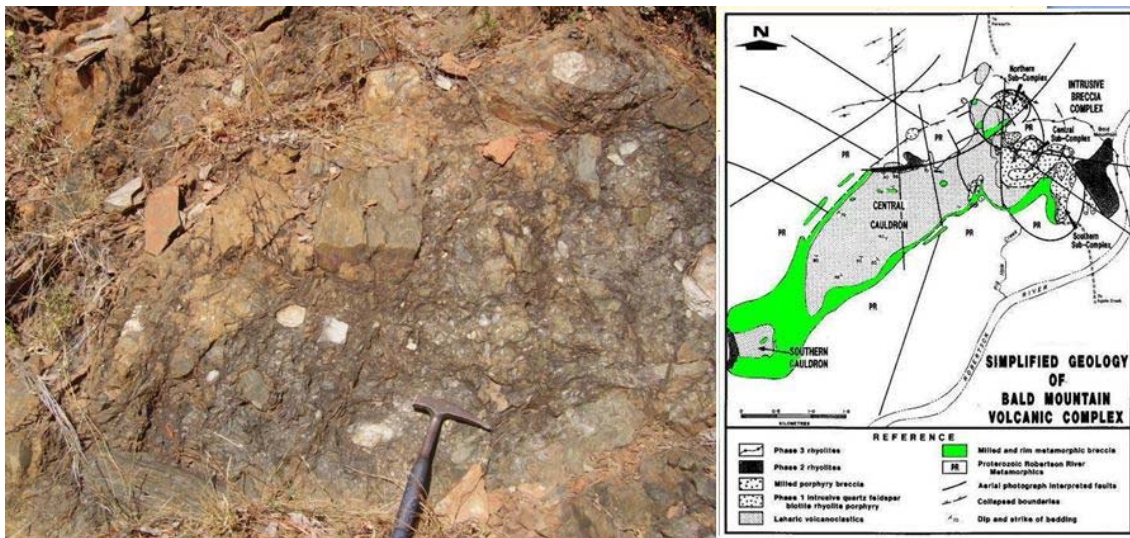


Figure 42: Phase 1 - Metamorphic rim breccia - mostly very poorly sorted with angular clasts of slate and sporadic porphyry.

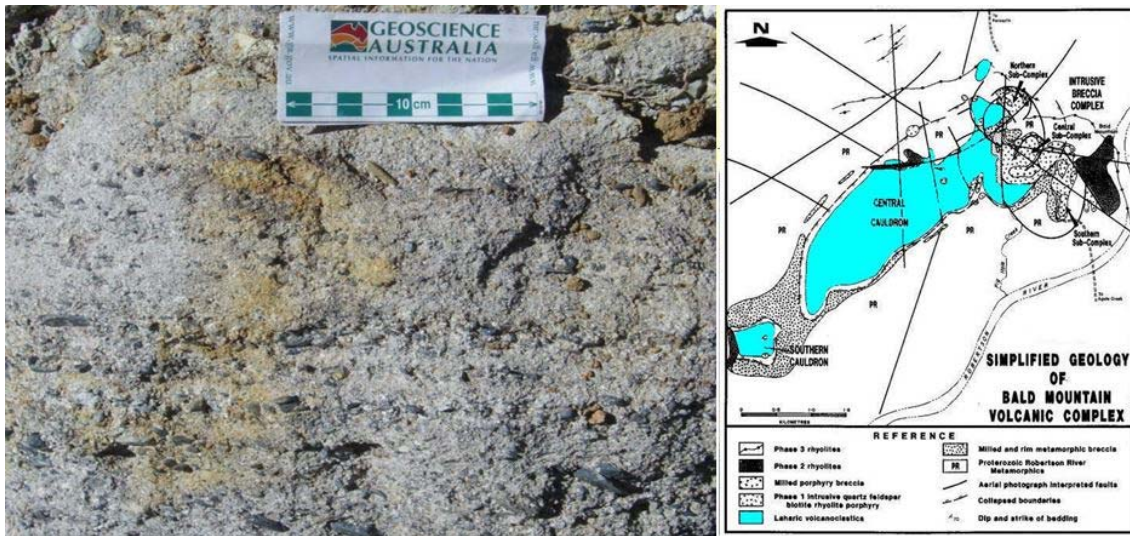


Figure 43: Phase 1 - Volcaniclastic cauldron fill - shallow-dipping, well-sorted, graded-bedded, pebbly grit with rhyolitic tuffaceous matrix.

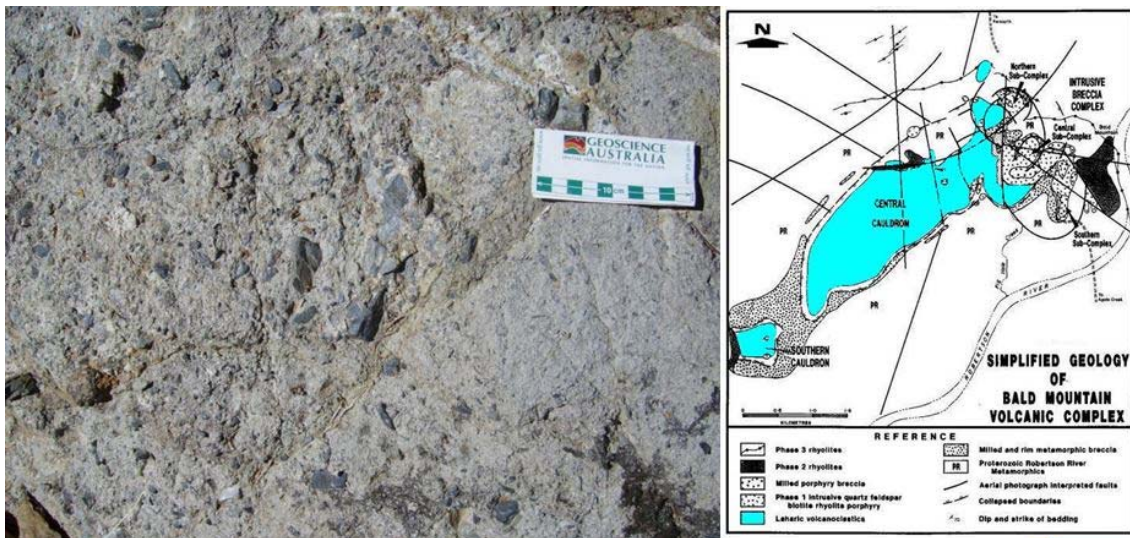


Figure 44: Phase 1 - Volcaniclastic cauldron fill - chaotic unsorted (?) lahar breccias of similar composition, to Figure 43

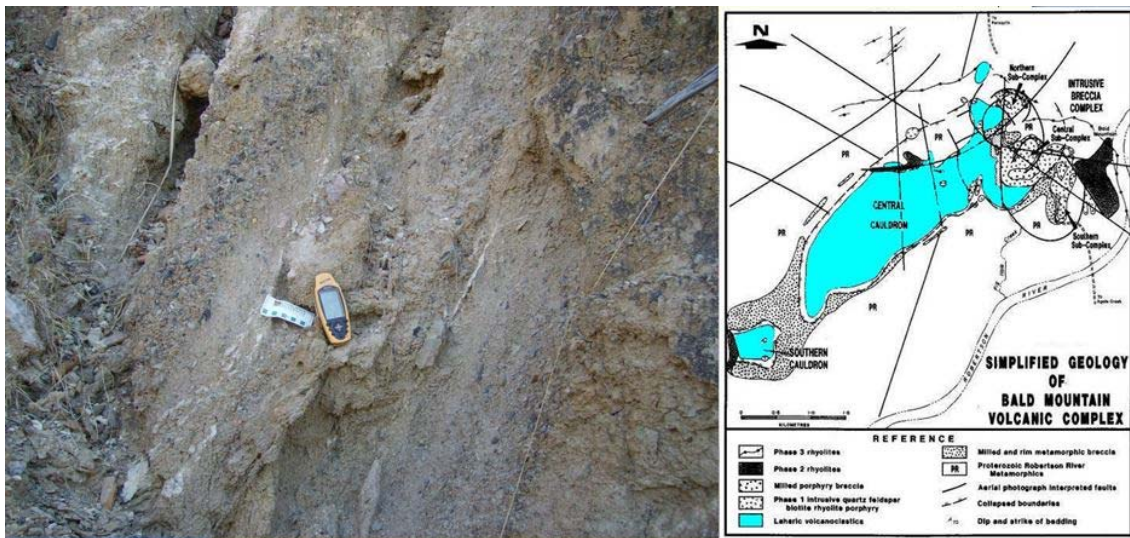


Figure 45: Phase 1 - Volcaniclastic cauldron fill - excessively oversteepened (for Permo - Carboniferous sediments) volcanoclastics of the same composition as Figure 43.

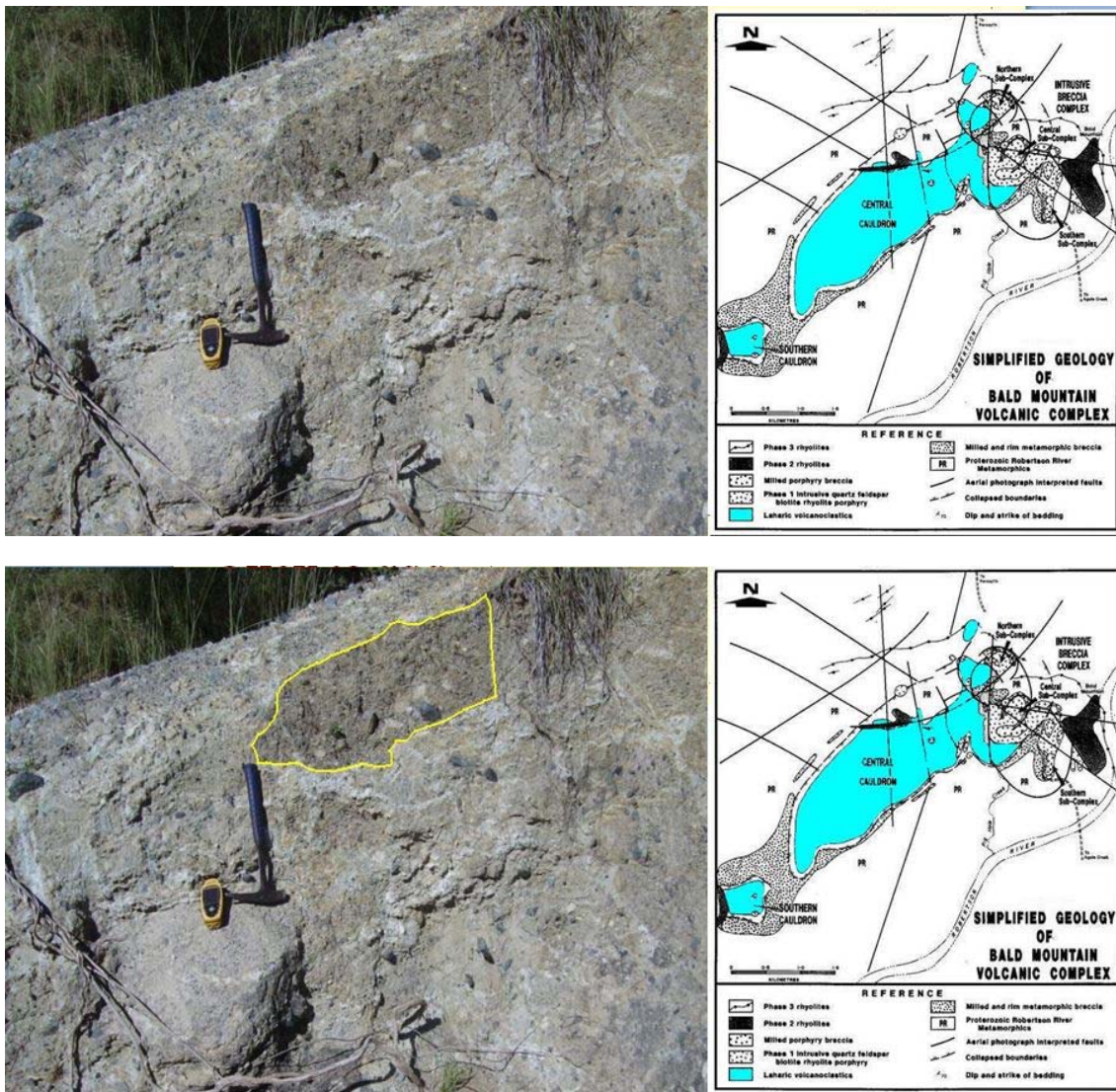


Figure 46: Phase 1 - Volcaniclastic cauldron fill - Breccias within breccias include clasts of volcaniclastics within volcaniclastics.

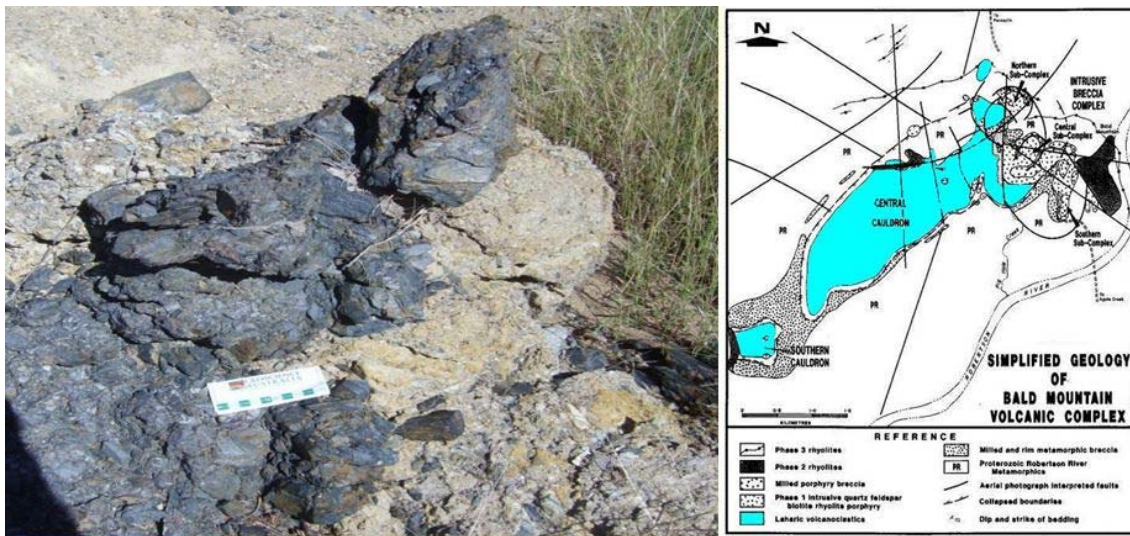


Figure 47: Phase 1 - Volcaniclastic cauldron fill - erratic megaclasts of metamorphic rim breccia within volcaniclastics.

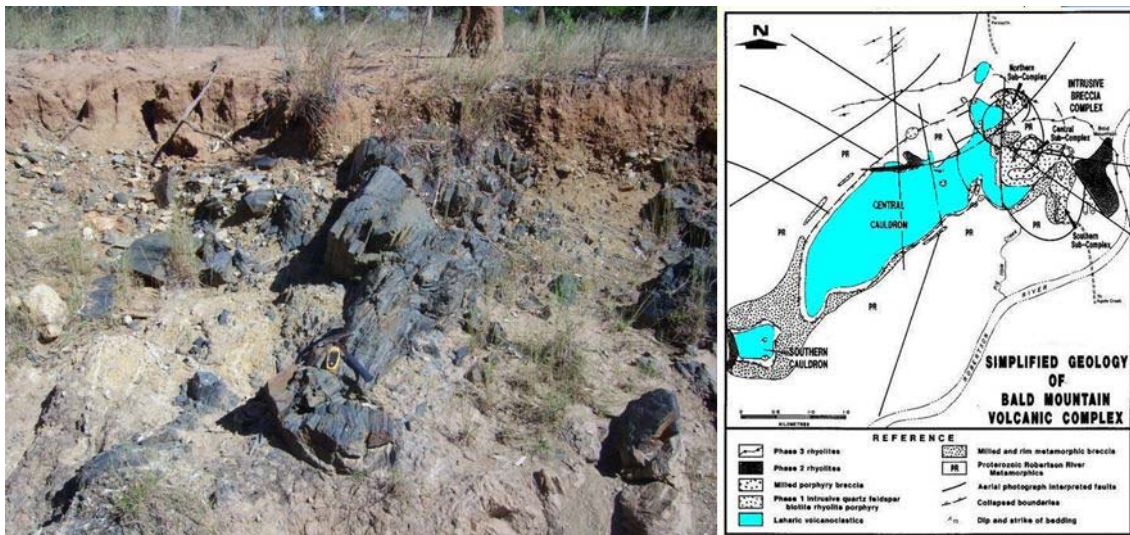


Figure 48: Phase 1 - Volcaniclastic cauldron fill - erratic megaclasts include blocks of unbrecciated metamorphics to several cubic metres.

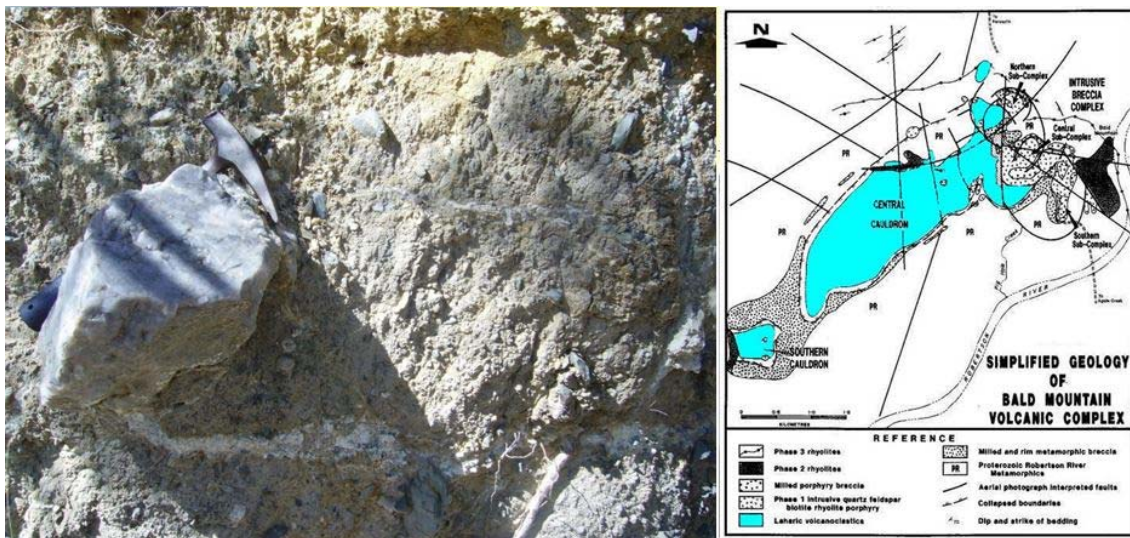


Figure 49: Phase 1 - Volcaniclastic cauldron fill - erratic megacrysts include blocks of Proterozoic metamorphic quartz.

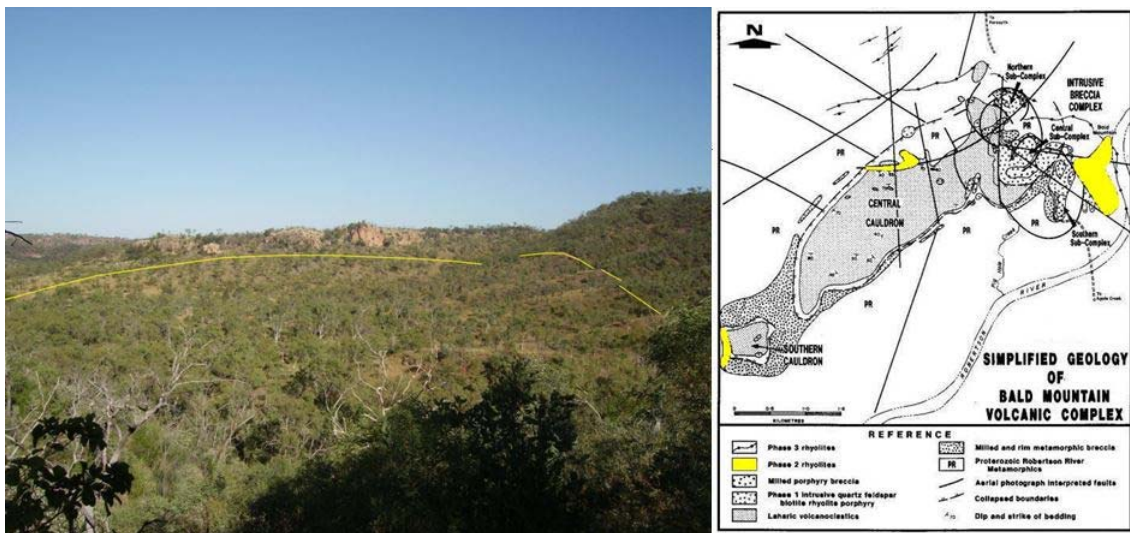


Figure 50: Phase 2 - Rhyolite flow-domes are positive topographic features, have extrusive textures, are not hydrothermally altered and rim the phreatic cauldrons.

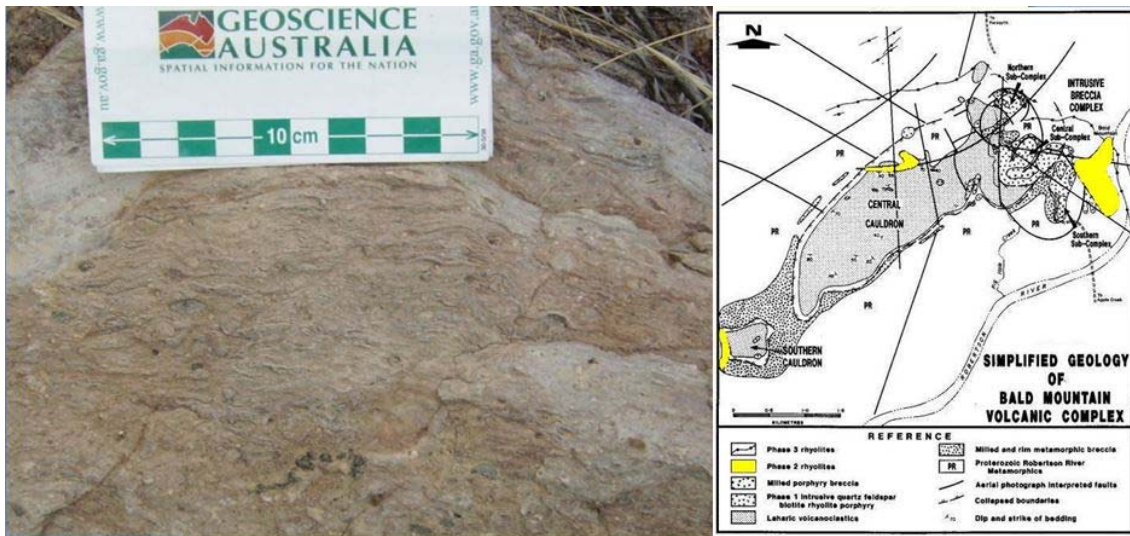


Figure 51: Phase 2 - Rhyolite flow-domes have extrusive textures such as prominent flow banding and stretched spherulitic texture.

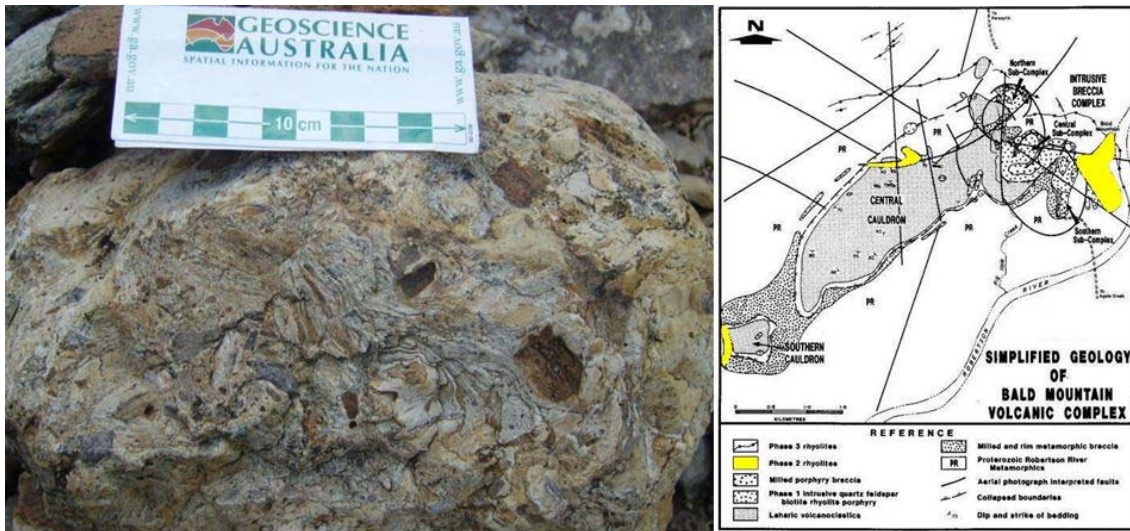


Figure 52: Phase 2 - Rhyolite flow-domes - flow breccias with basement clasts.

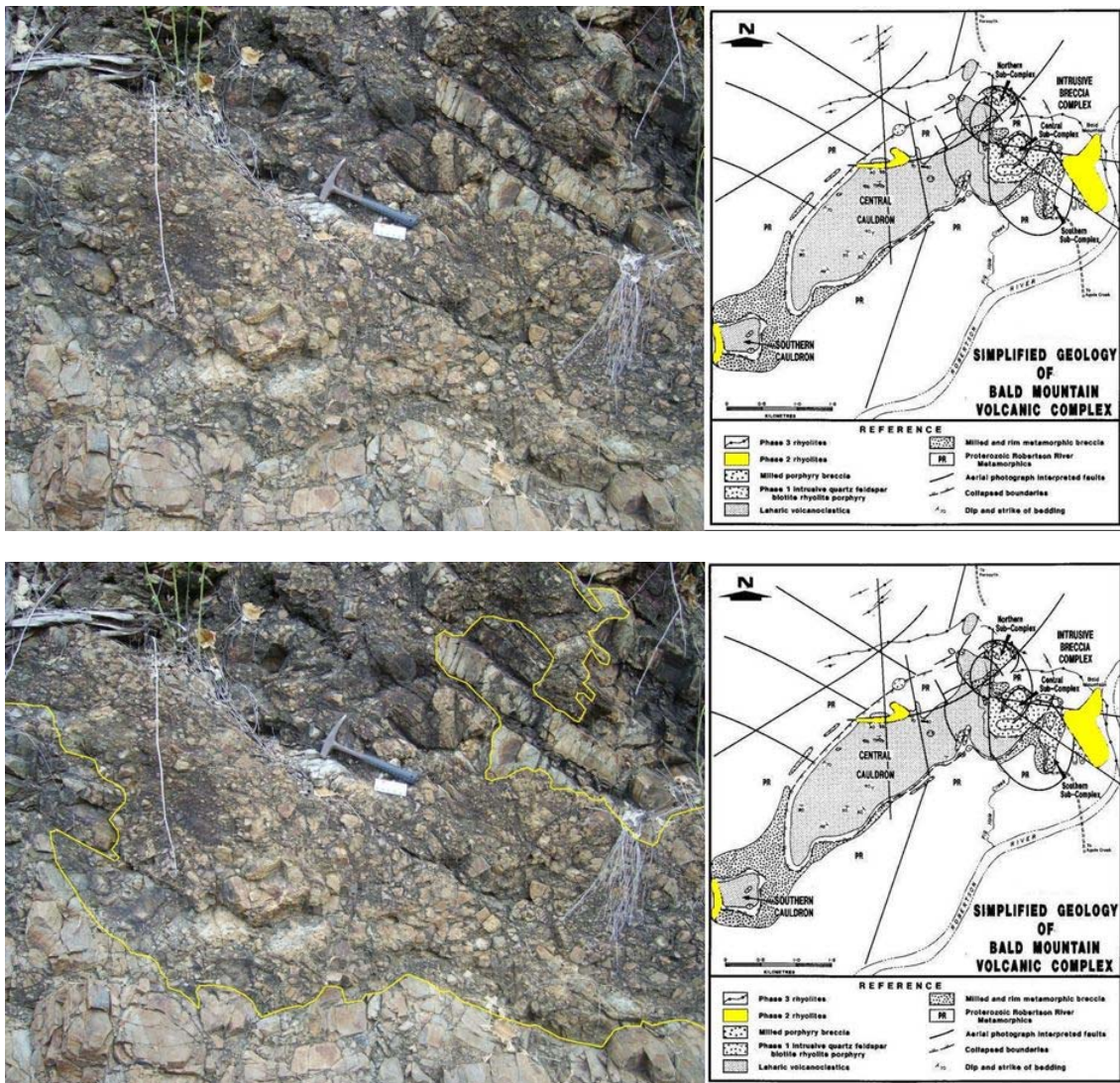


Figure 53: Phase 2 - Rhyolite flow-domes - autobrecciated flow-front aprons on basement.

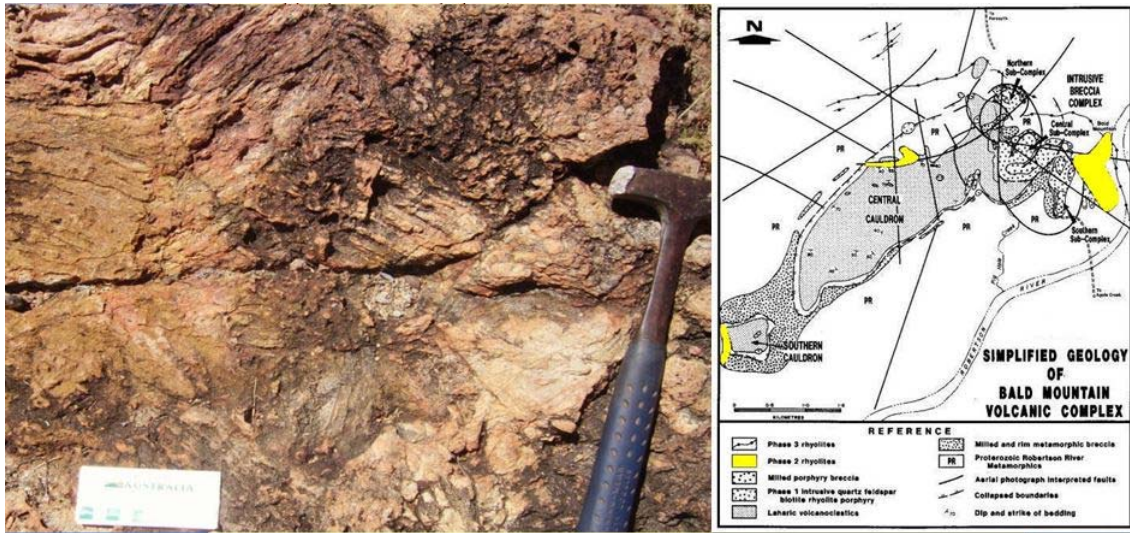


Figure 54: Phase 2 - Rhyolite flow-domes - autobrecciated flow-centres.

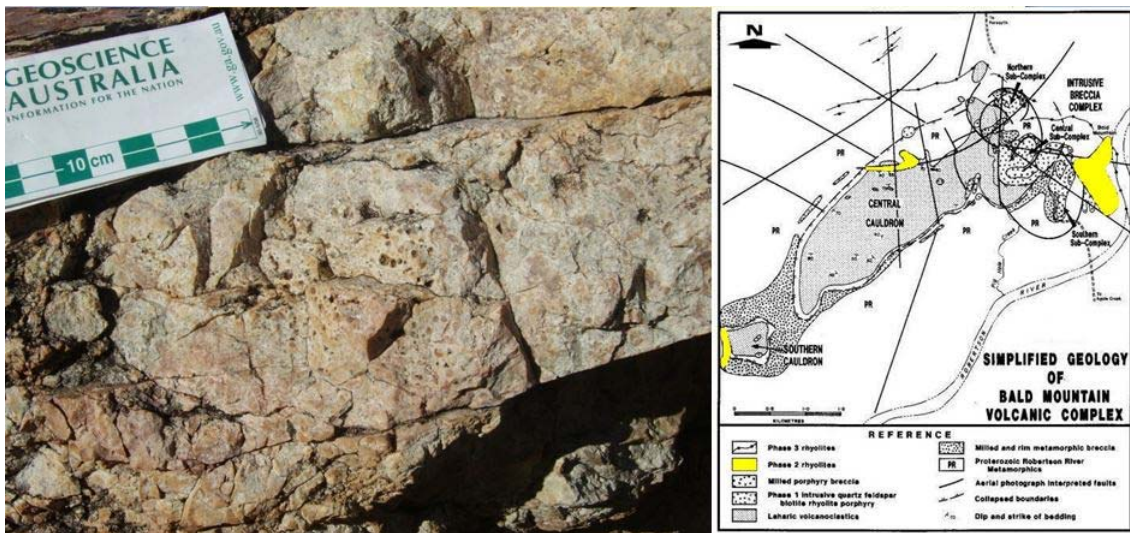


Figure 55: Phase 2 - Rhyolite flow-domes with stubby quartz crystal lined vesicles.

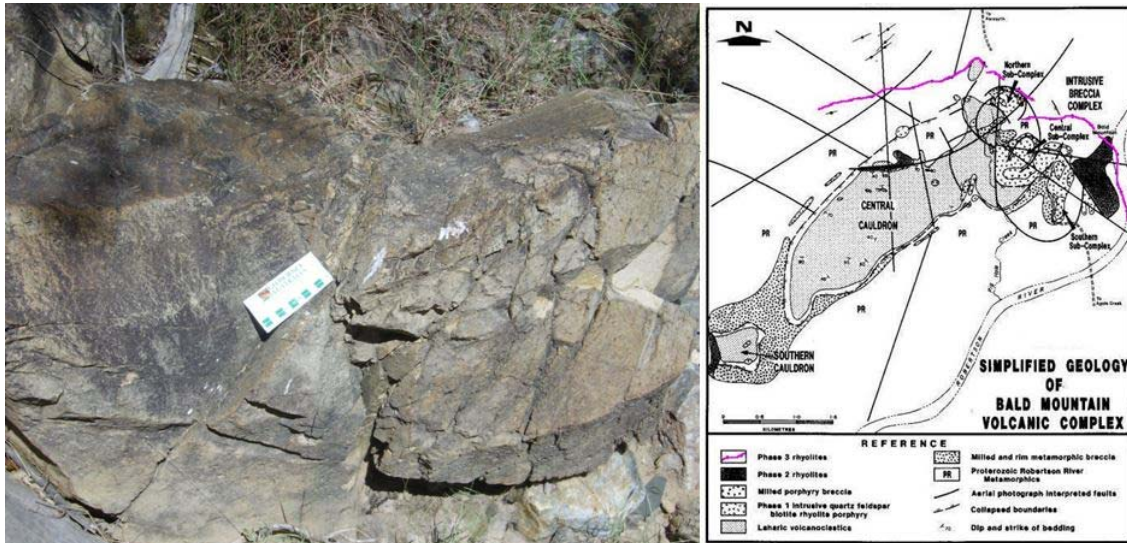


Figure 56: Phase 3 - Rhyolite porphyry dykes cut Phase 2 Bald Mtn flow-dome, are not hydrothermally altered and may accompany final incipient caldera collapse.

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16. BIBLIOGRAPHIC DATA SHEET

REPORT TITLE: EPM 17739 Malcolm Ck 2. Exploration Report for Year 2 to 14 April 2013.

PROSPECT NAME: Malcolm Ck, Bald Mountain, Kimberley Sue Maar Complex, Kangaroo Creek, Tin Mine Mountain

TENEMENT NUMBER: EPM 17739

OWNER / JV PARTNERS: Fred Skeritt and Simon Terry.

COMMODITIES: gold, tin, tantalum

TECTONIC UNITS: Georgetown Inlier, Kennedy Igneous Province.

STRATIGRAPHIC UNITS: Robertson River Metamorphics

1:250,000 MAP SHEET: Georgetown SE 54-12,

1:100,000 MAP SHEET: North Head 7560, Forsyth 7660

KEYWORDS: Mylonite, gold, porphyry, maar, geochemical sampling, IP surveys, RC drilling.