



PNX Metals

Yellow Track Review, Burnside Project

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Northern Territory, GDA94 MGA Zone 52

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Yellow Track – Background



VMS/skarn/vein style base metal target in PNX's Burnside Project.

Located in the Burrundie Dome within the Proterozoic Pine Creek Geosyncline. It is an area of good outcrop between the McMinns Bluff Granite to the SW and Margaret Suite Granites to the NE.

Yellow Track is defined by 1.3km Zn and 600m Pb anomalies that are offset and cross cut stratigraphy.

Eight RC and three diamond holes were drilled by Aztec Mining in 1992.

Associated with VTEM targets BLT139 and BLT140.

BLT119 is a VTEM target located 1.2km to the SW of Yellow Track.



Yellow Track Zn (blue) and Pb (green) soil anomalies over 100k geology.

Yellow Track – Geology



The Yellow Track mineralisation is similar to the Mt Bonnie and Iron Blow stratiform base metal mineralisation (Butler 1992).

The mineralisation occurs as sphalerite associated with pyrrhotite in a silicate/sulphide lode just above a limestone unit in the Lower Koolpin Formation (Butler 1992).

100k geology shows the core of the anticline mapped as Wildman Siltstone.





Yellow Track drill section (Butler 1992).

Yellow Track Zn (blue) and Pb (green) soil anomalies, drill collars (orange) and section location (red) over 100k geology.

Yellow Track – Magnetics



From 2011 VTEM survey.

The magnetics generally maps stratigraphy, with the Koolpin Formation and Wildman Siltstone associated with magnetic highs.

There is structural information in the magnetics that has yet to be utilised. There appears to be a structural relationship to the Zn anomalism, as shown to left.

The Yellow Track area is associated with a relative magnetic high within the Wildman Siltstone.

Pyrrhotite is likely the cause of the magnetic high. Pyrrhotite is associated with base metal mineralisation at Yellow Track, Mt Bonnie and Iron Blow.



Yellow Track VTEM targeting shown over RTP magnetics (1VD) with interpreted faults (black), 100k geology outlines, SGC strong conductors (yellow lines) and Beinke target (yellow poly).

Yellow Track – 2011 VTEM



The Wildman Siltstone and the Koolpin Formation are associated with high conductivity.

VTEM targets BLT_139 and BLT_140 (SGC 2012) occur in the vicinity of the Yellow Track anomalism.

Also of interest is target BLT_119, ~1.5km to the SSW of Yellow Track.

Target 2M, ~400m west of Yellow Track, was picked as a lower priority in 2014 (Beinke).

The VTEM data contains structural information.



Yellow Track VTEM targeting shown over VTEM Time Channel 40 with interpreted faults (black), 100k geology outlines, SGC strong conductors (yellow lines) and Beinke target (yellow poly).



Base metal mineralisation at Yellow Track sits within an anticlinal fold hinge and is reported to be associated with pyrrhotite and a limestone unit in the Lower Koolpin Formation (mapped as Wildman Siltstone).

Zn and Pb soil anomalies are offset and displaced from historic drilling.

Zn anomalism seems to be associated with brittle structure.

VTEM targets have been picked in the area by SGC (2012) and Beinke (2014), and have had little or no follow up.

Yellow Track and VTEM targets BLT119 and 2M are associated with magnetic highs, likely to be due to pyrrhotite.

Conductivity and magnetics map lithology and structure in the Yellow Track area.



Structure, magnetics and conductivity should be used for targeting in the Yellow Track area.

A detailed interpretation of the VTEM and magnetic data over the Yellow Track area should be undertaken to map lithology and structure, with anomalous conductivity and/or magnetic highs constituting targets, particularly if associated with structure.

Modelling of magnetic and conductivity data should be undertaken for high priority targets.

The usefulness of ASTER data for mapping alteration/carbonate associated with mineralisation should be investigated.