

Summary of Work on Brumby Resources NT Project Yalco North

Compiled by: Margaret Hawke
February, 2012

Introduction

This report forms a summary of previous work on Brumby Resources' Northern Territory tenements (Figure 1) with particular focus on their Yalco North prospects and encompasses the following;

1. A brief outline of the target commodity, deposit morphology and nearby mineralisation with particular emphasis on the McArthur River Zn-Pb-Ag deposit to the south of the tenements.
2. A summary of previous exploration in the tenement areas,
3. Potential target units for mineralisation and related structures,
4. Recommendations for exploration in the area.

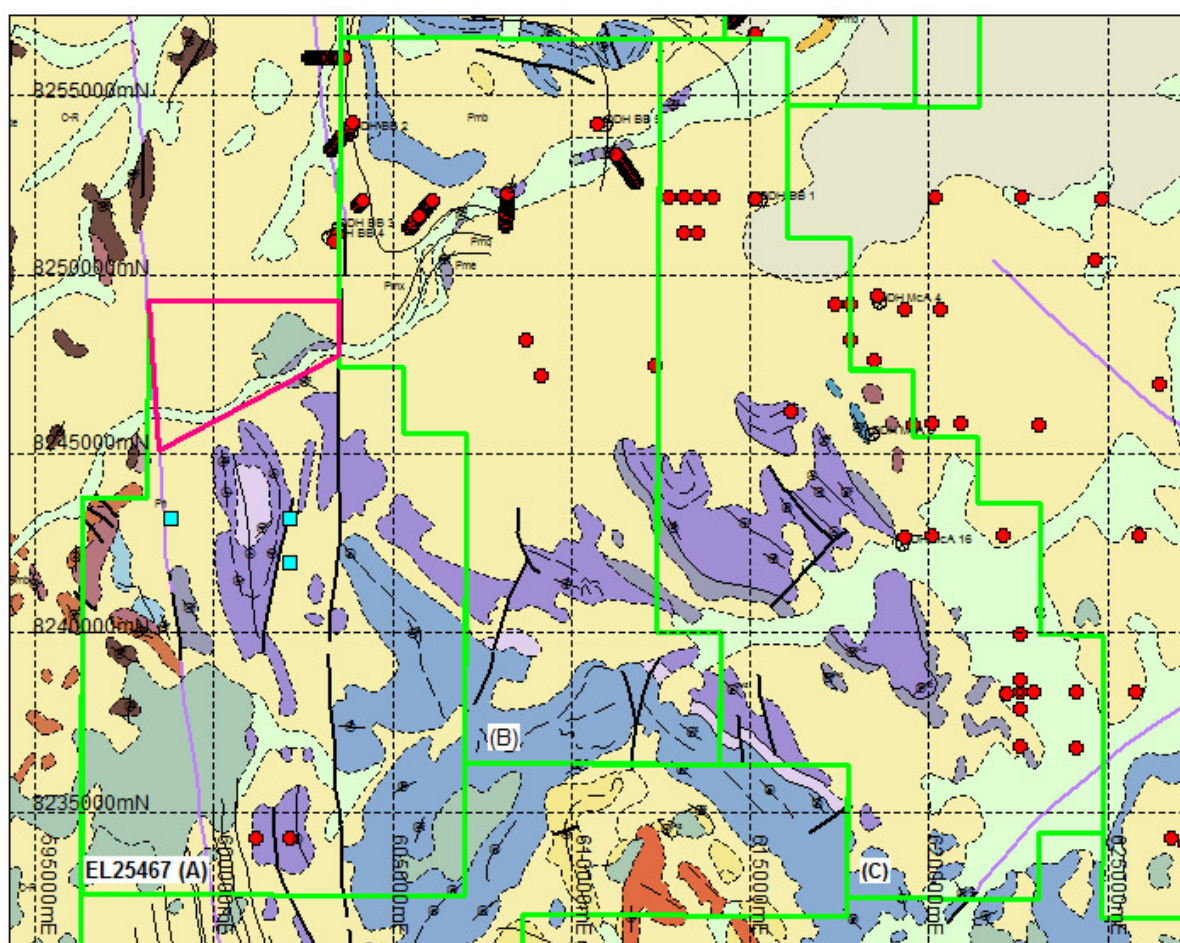


Figure 1. Brumby Tenements, shown divided into three tenements referred to in this report – from west to east, EL25467 (A) “Yalco North”, (B) “Central Tenement”, (C) “Eastern Tenement”.

Northern Australian SEDEX Deposits

Geological and sulphide paragenetic studies suggest that SEDEX deposits form by hydrothermal exhalative processes of metal-bearing brines discharging onto the basin floor (Yang et al., 2004).

All major stratiform zinc-dominant deposits on Northern Australia occur within rocks of the ‘sag’ phase of the youngest Isa superbasin, which was deposited between 1670 and 1580Ma. The Cannington Ag-Pb rich deposit is the only exception and is

hosted by high-grade metamorphic clastic sedimentary rocks that are temporally correlated to the basal extensive phase of the Isa superbasin. Mt Isa is the only stratiform Zn-Pb-Ag deposit with spatially associated copper (Large et al., 2005).

McArthur River Mine Geology

The McArthur River Zn-Pb-Ag SEDEX deposit (Figure 2) is located to the west of the Emu Fault, a regionally extensive, deep strike-slip fault. This fault is believed to be the conduit for mineralising fluids. The McArthur River mine displays the following characteristics typical of the Zn-rich deposits in Northern Australia (Large et al., 2005);

1. Located close to regionally extensive normal and strike-slip syn-sedimentary faults;
2. Organic rich black shale and siltstone host rocks;
3. Laminated, bedding parallel syn-sedimentary sulphide minerals;
4. Lateral zonation exhibiting an increasing Zn/Pb ratio away from the feeder fault;
5. Stacked ore lenses separated by putitic and Fe-Mn carbonate bearing siltstones.
6. Vertical zonation exhibiting decreasing Zn/Pb ratios up stratigraph
7. Extensive strata-bound halo of Fe and Mn-rich alteration in the sedimentary rocks surrounding and along stike of ore.
8. Broad range of $\delta^{34}\text{S}$ values for sulphide minerals (0-20 per mil) with pyrite exhibiting a greater spread than base metal sulphides.
9. Pb-isotope ratios that indicate derivation of Pb from intrabasinal sources with interpreted Pb model ages being similar to the measured zircon U-Pb ages of the host rocks.

The stratiform, high-grade McArthur River Zn-Pb-Ag ores are interpreted to be of syn-sedimentary exhalative processes with margins of lower grade syn-diagenetic replacement and open space fill. However, other related deposits, such as Century in Queensland, have high grade ores believed to have formed from syn-diagenetic replacement after 20 million years of sedimentation.

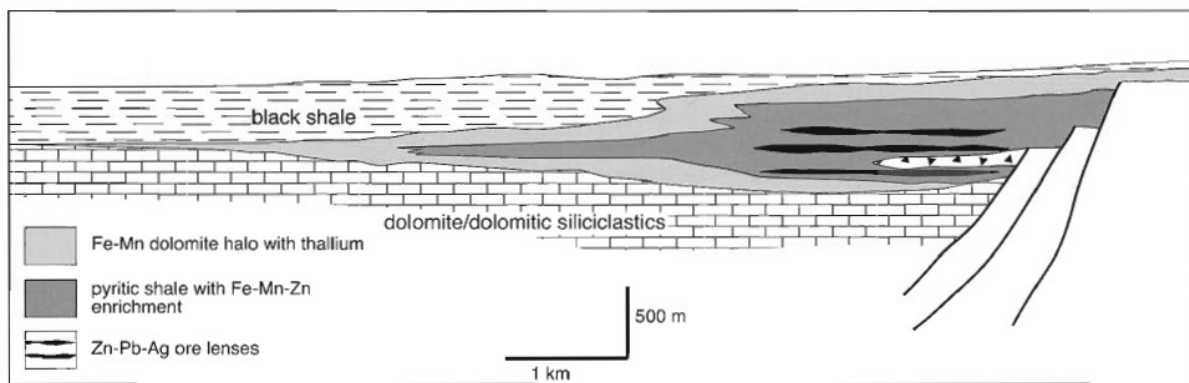


Figure 2. Schematic geologic cross section of a typical Proterozoic northern Australian stratiform Zn-Pb-Ag deposit, showing stacked ore lenses and the related carbonate alteration halo adjacent to a syn-sedimentary fault system that focused metalliferous brine upflow.

An extensive halo of Fe and Mn bearing carbonate with the dolomitic siltstones of the Barney Creek Formation exists west of the McArthur River deposit (Large, 2001). Manganese-rich dolomite surrounds the deposit and extends along the W-Fold Shale Member for approximately 23km west of the deposit. Mn values vary from 8-1%, decreasing further from the deposit. Outside of the Mn-rich zone is a broader halo (Figure 3) of Fe-bearing carbonate which consists of ferroan dolomite and ankerite throughout the lower part of the HYC Pyritic Shale for up to 20kms west of the deposit. Enrichment levels of Zn (>1000ppm), Pb (>100ppm) and Tl (>4ppm) occur within the ankerite halo (Large, 2001).

The Barney Creek Formation (BCF) is the major target stratigraphy for exploration in the McArthur Basin. It hosts the HYC Zn-Cu-Pb deposit which is associated with the Emu Fault and located to the south of Brumby's tenements. The BCF is described in the Mt. Young 1:250,000 scale map sheet as 'siltstone and mudstone, thin-bedded to laminated, variously dolomitic, carbonaceous and pyritic; dololomite, pink and green tuffaceous mudstone, rare breccia and sandstone'.

Minor base metal mineralisation occurs in other units such as the Caranbirini Member and Amelia Dolomite (eg. Apollo and Copper mine creek prospects). As yet this has not been found to be economic.

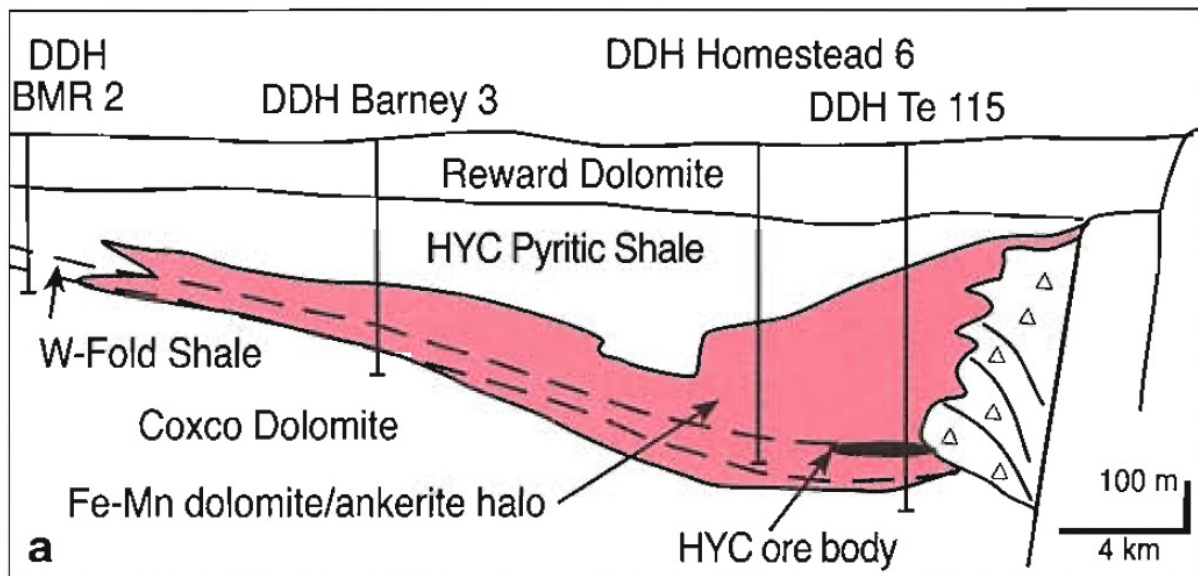


Figure 3. Schematic cross section through the McArthur River deposit displaying dispersal of the geochemical halo in pink. Elevated values within this halo include Al>50, TI >4ppm, $\delta^{18}\text{O}$ >22.5, ^{13}C <-2, $^{87}\text{Sr}/^{86}\text{Sr}$ >0.72 and illite > k-feldspar (Large et al., 2005).

Previous Exploration

A number of drillholes were designed as stratigraphic holes by prior companies with the main purpose to locate the favoured Barney Creek Formation. A summary of drillholes can be found in Table 1.

Bing Bong DDH (BB1-8): The Shell Company drilled six diamond holes (ref). Drillholes BB2, BB5 and BB6 were interpreted to have intersected the Barney Creek Formation. These drillholes are on the eastern side of the Emu Fault suggesting that the eastern side is uplifted in comparison to the western side.

Warramana RC: Within the tenement area, WMP14 and WMP15 were also completed by Shell (Dashlooty, 1983). Barney Creek Formation sediments were located within both drill holes, but did not indicate economic mineralisation.

Central tenement EL25467 (B): A further 182 RAB drillholes were completed by Shell Company in the north of the central tenement area (Figure 4) to delineate extent of Barney Creek Formation were drilled in the northern sub-basin, east of the Emu Fault (Bornman, 1981). The geochemical response of subcropping Barney Creek Formation was found to be very low. However, the northern margin of the basin structure appeared more geochemically active. Diamond drill hole BB6 was completed as a follow up to anomalous values of 150ppm Cu, 80ppm Pb and 420ppm Zn in this area.

Fandango: Two RC drillholes, FAN011 and FAN012 (shown on Figure 4 and Map 1), were completed with the central tenement area by Rio Tinto Exploration (Curtis, 2003). These were to target possible BCF, however geology logs do not identify the geological units intersected, only the presence of sandstone/siltstone etc.

McArthur Diamond Drillholes: Two diamond drill holes, McA4 and McA5 were completed by BHP minerals in 1983 respectively adjacent and within the eastern tenement (Unknown, 1983). McA5 tested a local gravity high near outcrop of Barney Creek Formation. It intersected anomalous Barney Creek Formation. Detailed sampling of thin pyrite beds within the anomalous zone returned up to 4.05% Zn and 1500ppm Pb.

Table 1. Summary of Drill holes and BCF thickness and results within Brumby Resources' Tenement area

Drillhole	Easting GDA	Northing GDA	Total Depth (m)	Depth to BCF (m)	Thickness of BCF (m)	Target	Comments
BB1 DDH	615112	8252107	95	NA	NA	-	Mara dolomite intersected
BB2 DDH	603752	8253917	442.9	249	168.2	Stratigraphic and geochemical information	Intersected BCF with no economic mineralisation. Highest geochemical values in dolomitic and carbonaceous samples (maximum Zn 0.12%, Pb 680ppm and As 420ppm)
BB3 DDH	603452	8251102	74	NA	NA	Gravity anomaly	Terminated due to drilling problems. Collared and terminated in Mara Dolomite. Gravity anomaly explained by dolomite. No significant Cu, Pb or Zn
BB4 DDH	603337	8250952	171.5	NA	NA	To confirm Mara Dolomite in BB3	Confirmation of Mara dolomite in BB3 and BB4. Elevated Cu (max 520ppm) between 81 and 139m
BB5 DDH	610722	8254197	370	214.6	130m	Geochem, stratigraphic and structural information	
BB6 DDH	615122	8256727	222.35	14	180m	Follow up to anomalous geochemistry in RAB holes. Stratigraphic and geochem information	
FAN011 RC	608732	8248167	127	NA	NA	Broad, discrete, mod-intense conductors possible for BCF.	EM conductors interpreted to be caused by thick weathering and clay profiles
FAN012 RC	609132	8247167	120	NA	NA	Broad, discrete, mod-intense conductors possible for BCF.	EM conductors interpreted to be caused by thick weathering and clay profiles
LP21 RC	612348	8247488	120	NA	NA	EM target	Anomaly considered a result of lateritisation
McA4 DDH	618575	8249424	181.65	NA	NA	BMR magnetic low, a selected gravity high and patially geochemically anomalous chip sample from BL23	Encountered Mallapunyah, no BCF
McA5 DDH	618481	8247597	495.99	40	365.5	Gravity high and anomalous base metal mineralisation from BL12. Test for BCF beneath Cainozoic cover	BCF intersected: elevated Pb (169ppm) and Zn (760ppm) over 66m between 295-361m.
WMP14 RC	607094	8262169	74	50	8	Test unweathered basal part of BCF including pyritic shale member	Intersected possible weathered BCF (50-58m) and ended in Mara Dolomite from 58-74m. Maximum Cu 166ppm, Pb 85ppm, Zn 34ppm
WMP15 RC	606252	8262194	100	78	22+	Test unweathered basal part of BCF including pyritic shale member	BCF intersected (78-100m). 60-78m may be Reward Formation (R1). Maximum Cu 48ppm, Pb 28ppm, Zn 20ppm. Unclear if base of BCF reached

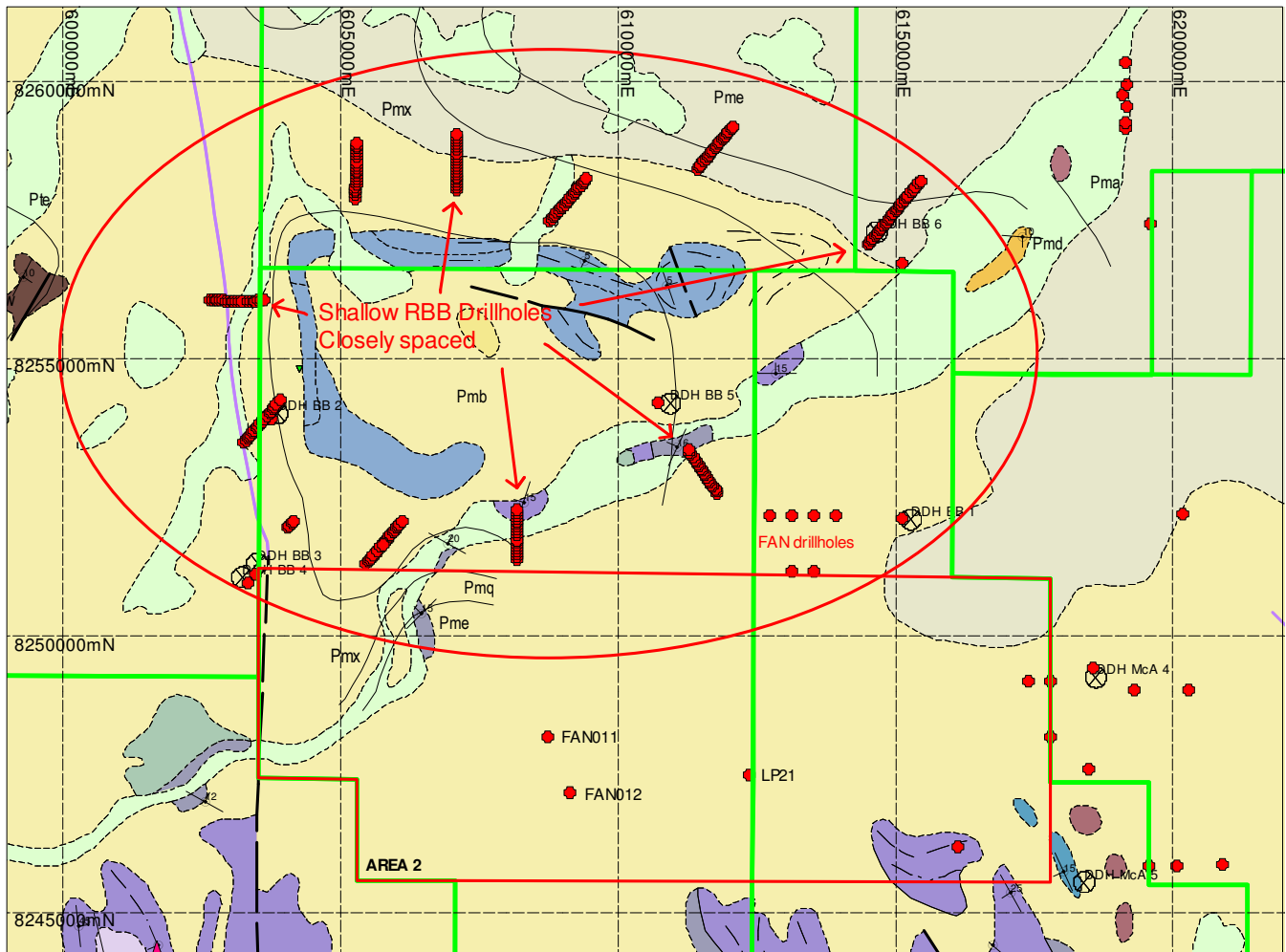


Figure 4. Location of the Shell Company's RBB drillholes to the north of Brumby's tenements.

Yalco North Prospect (Figure 5): Two Diamond drill holes, YN9701D and YN9702D, angled at 80°W and 60°W respectively, were completed by MIM Exploration Pty Ltd in 1997 (Huddy, 1997). Information for these holes is displayed in Table 2.

Table 2. Drillhole information for MIM Exploration diamond drillholes.

Drillhole	Location	Depth (m)	Comments
YN9701D DDH	602000E, 8234100 N	410.56	Collared in Hot Spring Member. The hole is interpreted to have intersected green-grey dolomitic and tuffaceous sediments as the dominant lithology, interbedded with thin bedded to laminated carbonaceous dolomitic stilstones and minor sandstone. It displays shallow water carbonated textures which are a distinguishing characteristic of the Hot Spring Member. The hole did not intersect the Caranbarini member.
YN9702D	601050E, 8234100 N	351.9	The second drill hole was 1000m west of YN9702D and also collared in the Hot Spring member. It is interpreted to intersect the Caranbarini member at 85.2m and the Reward Dolomite at 332.12m. The drill hole ends at 351.9m without intersecting Barney Creek Formation.

Limited geochemical data is provided for these two drillholes (Fe%, Zn and Pb) and they appear to have been selectively assayed for the Caranbirini formation. Both drillholes were to target an interpreted conductor at 200-300m depth. YN9701D did not intercept any explainable conductor. YN9702D intercepted a thick unmineralised intersection of bituminous pyritic siltstone interpreted as within the Caranbirini formation. The depths to stratigraphy in these two drillholes suggest that the block west of the middle fault has been uplifted. NTGS cross sections given on the Mt. Young 1:250,000 map sheet does not indicate the presence of the Barney Creek Formation within the Emu Fault zone. However, the indicated geology in YN9701D and YN9702D suggests that the Barney Creek Formation may be present at depth (Figure 6)

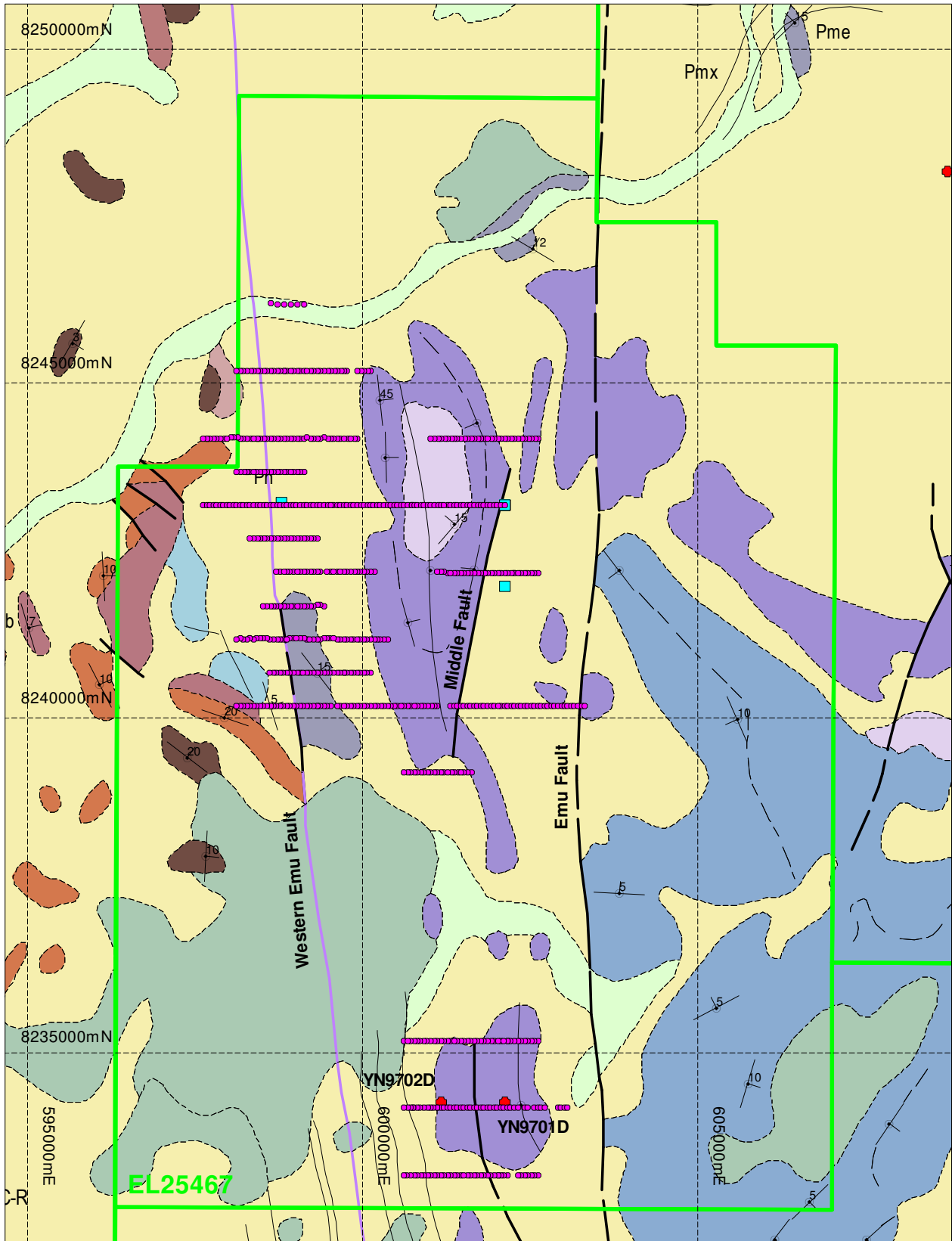


Figure 5. Location of MIM Exploration's 1995 soil-lag samples. Location of samples in pink.

There is a reference to maximum values from surface lag sampling by Huddy (1997) with maximum values of 530ppm Cu, 1500ppm Pb and 340ppm Zn. However, in the original source report by McGeough (1995) these results are not all from the one sample but represent the maximum values from the entire lag sampling program. Results considered anomalous (18 geochemical targets) are presented in Appendix 1 with the best values in Table 3, and sample locations for the entire soil lag sampling program displayed on Map 1. Drill hole YN9702D was drilled in 1997 to target one of the Pb lag anomalies (1500ppm Pb, 19ppm Zn and 14ppm Cu) and was coincident with a 1996 TEM anomaly.

Table 3. Best geochemical values from MIM soil-lag sampling program. Locations for these samples can be found in Figure ? and in Map 1.

Target	Details	Sample	Easting MGA	Northing MGA	Pb ppm	Zn ppm	Cu ppm
1	Between East and West Emu Faults in upraised block, Pmnh at surface, elevated Pb	835404	601513.6	8234178.4	1500	19	14
8	West of WEF splay, anomalous geochem likely to be attributed to Amelia Dolomite - stratigraphically lower than BCF	838951	598324.1	8241186.6	115	280	140
13	East of WEF splay, Aeolian sediments at surface, Pmnh or Pmnc presumably underlying. Moderately elevated Cu, Pb and Zn. Cu (430ppm) closest to the fault, high Pb (1010ppm) 300m east of fault.	837587	598967.6	8242179.4	1010	290	210
15	East of WEF splay, elevated Cu in Aeolian sediments, presume Pmnc underlying, moderately elevated Pb and Zn	835121	598728	8243185	430	210	220

There is a 3.5km zone of anomalous geochemistry (predominately elevated Cu) north-south between anomaly 16 and 6, along the western Emu Fault splay (Figure 7). Higher anomalism appears to be associated with values to the west side of the western Emu Fault overlying interpreted Amelia Dolomite. The Amelia Dolomite is known to have elevated base metal mineralisation of sub-economic values at prospects such as Apollo to the Western side of the McArthur Basin.

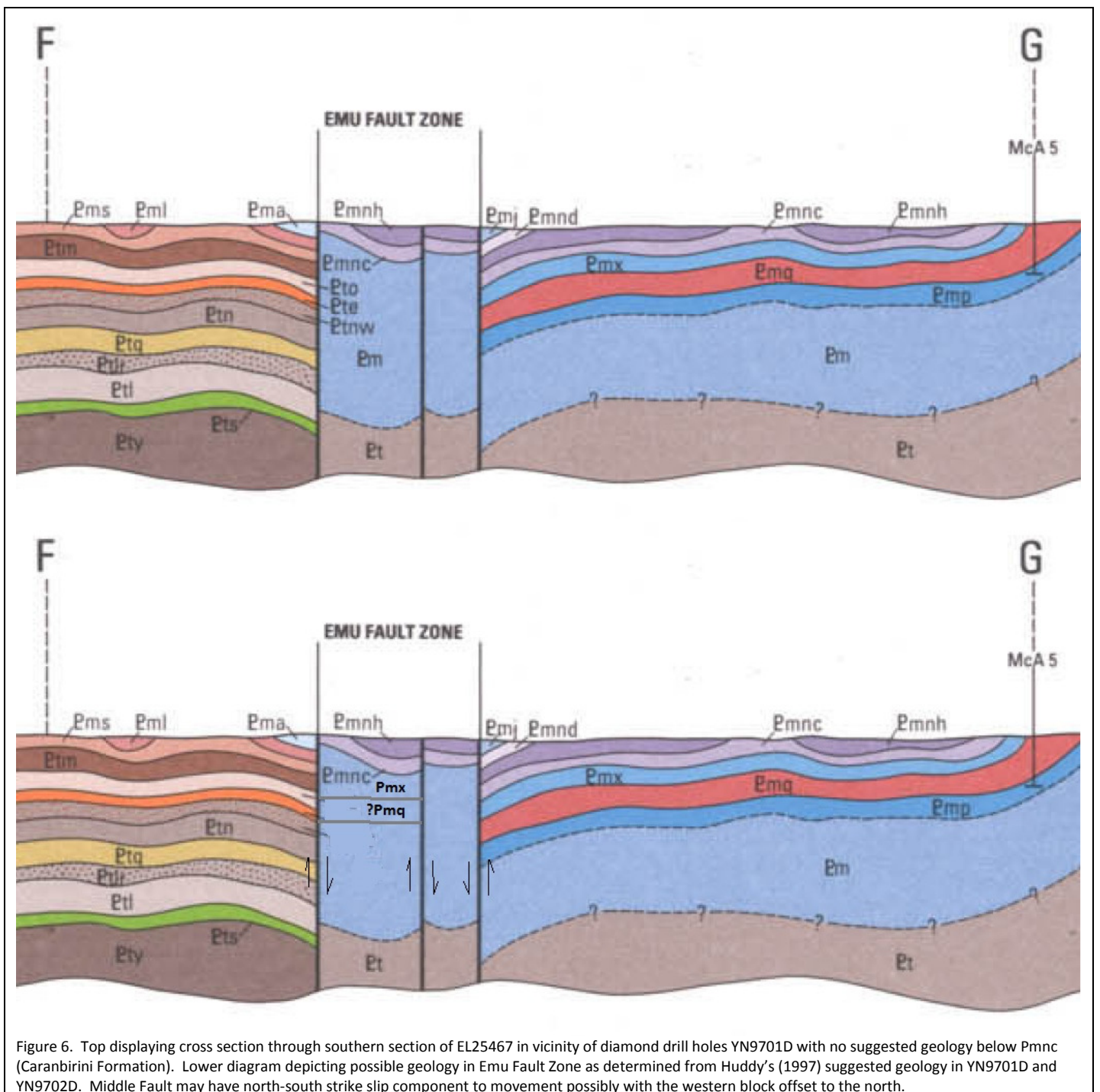


Figure 6. Top displaying cross section through southern section of EL25467 in vicinity of diamond drill holes YN9701D with no suggested geology below Pmnc (Caranbirini Formation). Lower diagram depicting possible geology in Emu Fault Zone as determined from Huddy's (1997) suggested geology in YN9701D and YN9702D. Middle Fault may have north-south strike slip component to movement possibly with the western block offset to the north.

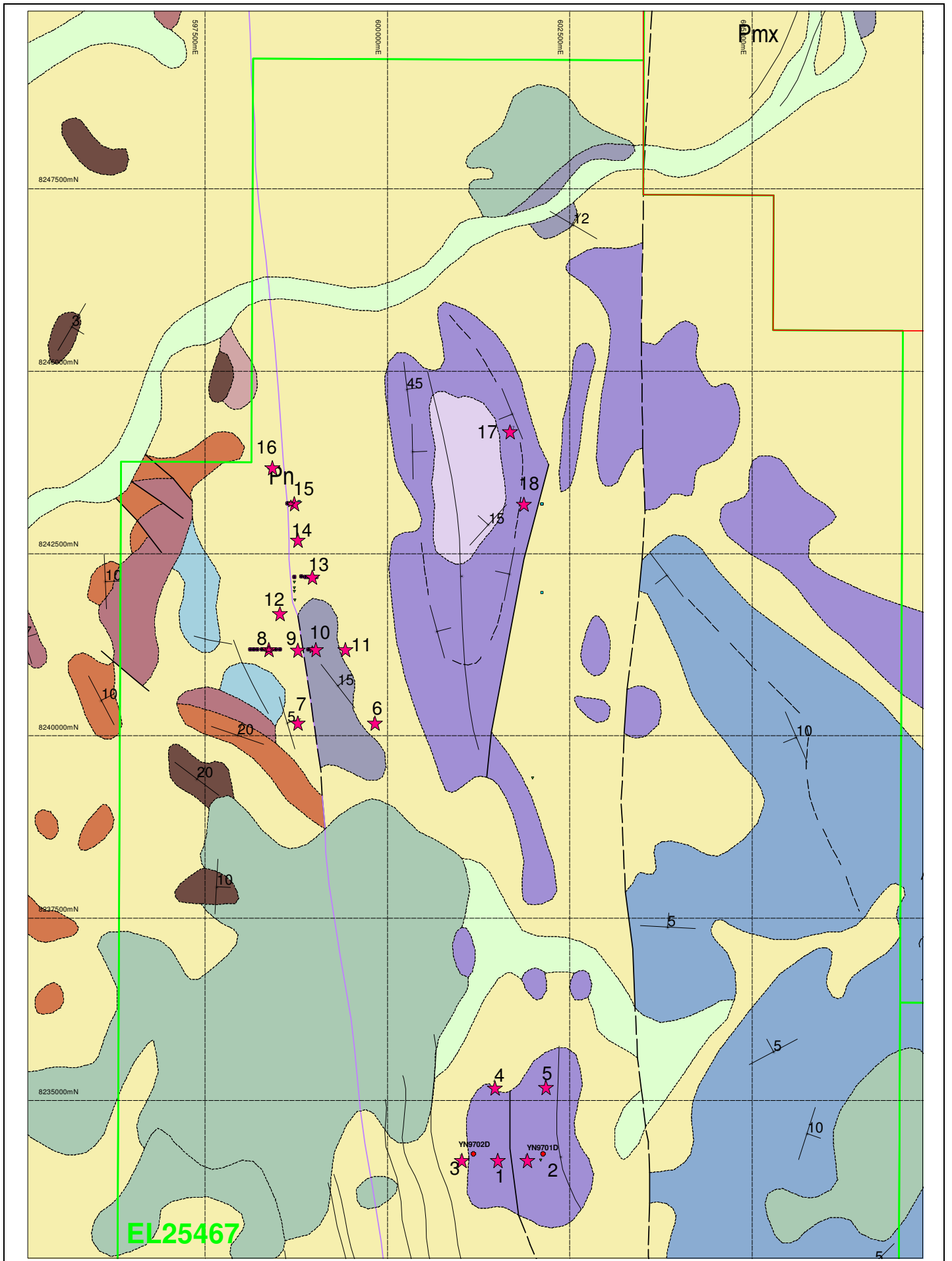


Figure 7 Tenement EL25467 showing geochemical anomalies obtained from MIM soil-lag program (see Appendix 1 for full geochemistry).

Several rock chip samples were taken in the area for whole rock geochemical analysis and three rock chip samples for base metal geochemistry (Table 3). Samples QP114282 and QP114284 are located along the middle fault, with QP114287 located along Western Emu Fault (Figure 8). These are also plotted on Map 1. The rockchip samples returned the following results;

Table 3. Rock chip samples collected within Yalco North tenement area

Sample	QP114282	QP114284	QP114287
Easting (GDA)	602119.6	602118.7	598789.8
Northing (GDA)	8241961.7	8243177.5	8243213.5
Cu (ppm)	180	175	260
Pb (ppm)	86	105	270
As (ppm)	120	150	70
Zn (ppm)	440	74	170
Mn (ppm)	5100	3420	730
Fe (%)	32.6	19.3	12.8

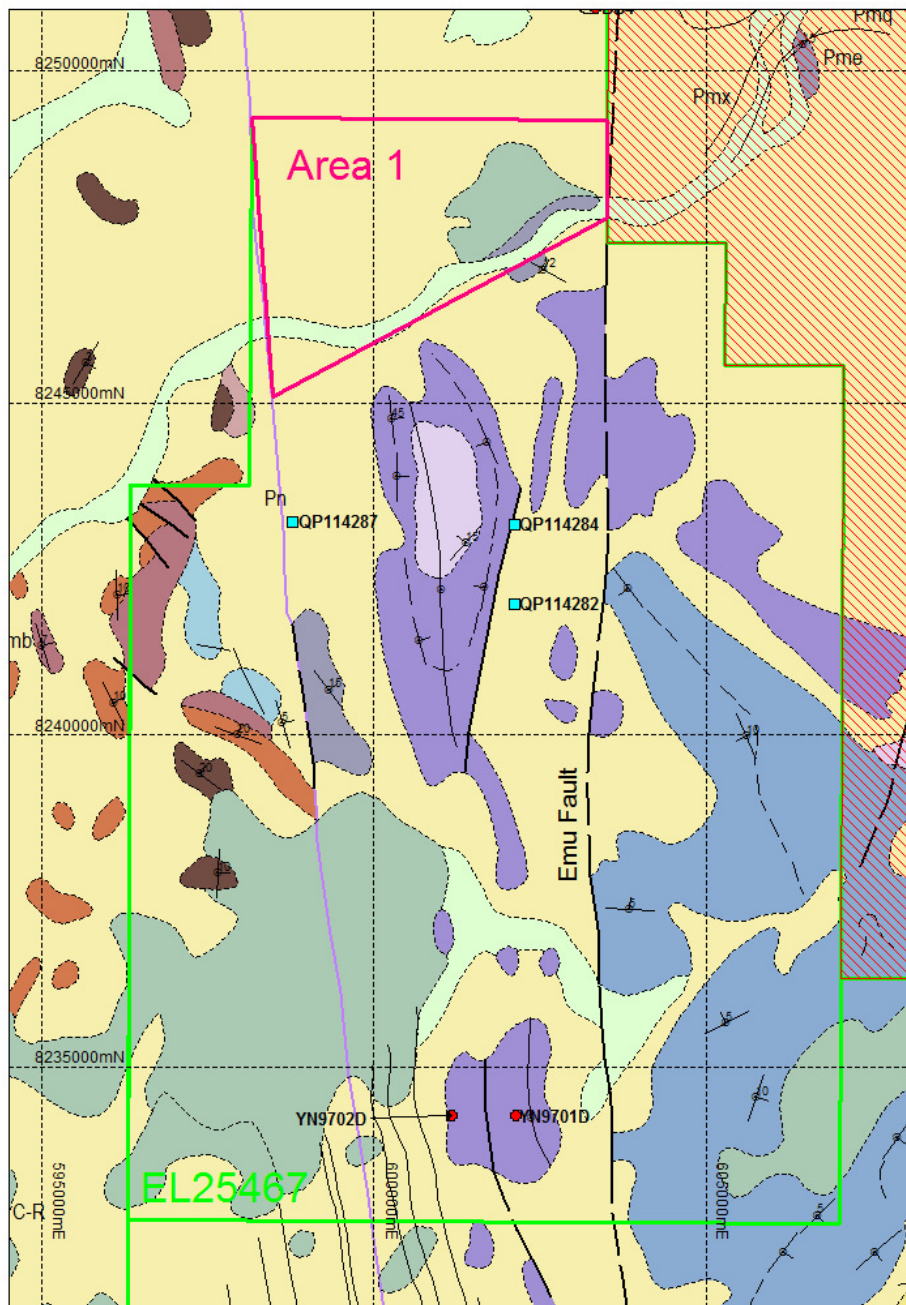


Figure 8. Tenement EL25467 displaying previous drillholes, rock chip samples and NTGS geology

Elevated Pb samples QP114284 (105ppm Pb) correlates with the anomalous soil-lag target 18 with 590ppm Pb, and QP114287 (270ppm Pb) correlates with anomalous soil-lag target 15 with 430ppm Pb. This confirms the anomalous results in soil are coming from the underlying rocks.

Geophysics

The McArthur River HYC deposit lies beneath a black-soil plain in the McArthur River valley. Geophysics played no part in the discovery of the McArthur River SEDEX deposit although it is an important element in the detailed exploration of the deposit and surrounding areas (Shalley and Harvey, 1992). HYC has no clear magnetic signature with regional airborne magnetic delineating structures including the Emu fault which may be important in the localisation of the deposit. Early EM methods were unsuccessful but TEM has given excellent results in profiling and sounding modes.

Reference is made by Borman (1981) that anomalous gravity highs were due to the Mara dolomite whereas the weathered and leaved shales and siltstones of the Barney Creek Formation were associated with gravity lows. EM could be useful in locating the black shales of the Barney Creek Formation although many targets in the past have proved to be highly weathered clays. For this reason, it could be a useful survey to complete over areas 1 and 2 in order to define whether there is BCF near surface in these areas.

Recommendations

Yalco North: Except for the geochemical program by MIM in 1995, little work has been completed on the Yalco North tenement area. Suggestions for preliminary work are as follows;

1. Surface geochemical data (soils and rock chip samples for Ag, As, Zn, Cu, Pb, Tl, U, Mn, Fe) should be collected across the tenement utilising a portable XRF device. Line spacing 500m where no sampling exists with 50m sample spacing along E-W orientated lines. In fill lines at 250m spacing between anomalous geochemical zones.
2. Follow-up physical sampling in anomalous areas as confirmation to the XRF.
3. Detailed geological mapping of the tenement should be carried out to identify structures and stratigraphy of the area as well as to later put the geochemical data in context.

Sulphide mineralisation is reported in faults and fractures within the two MIM Exploration drillholes (YN9701D and YN9702D) although no economic mineralisation was intercepted. Both of these drill holes were targeting a TEM anomaly in the Caranbirini Member dolomite and as such did not reach the favourable Barney Creek Formation. In addition, there has been question as to the reliability of the data provided for diamond holes YN9701D and YN9702D. As such, the following recommendations are made;

1. View the diamond core if stored at the NTGS in Darwin. Relog, photograph and use XRF on core if deemed necessary to confirm the stratigraphy in the drillholes.
2. A stratigraphic hole to the west of the Emu fault zone could be drilled to prove the existence of the Barney Creek Formation at depth in this area. This could either be in a similar location as YN9701D and YN9702D, or in a location as determined from geological mapping and geochemical sampling. The western most fault block between the middle and western faults may prove a shallower target.
3. A further two diamond drill holes could be centred either side of the middle fault in the northern parts of the tenement.

Area 1 (Figure 8; Map 1): A 2.8km long area exists between NTGS mapped Caranbirini Member dolomites (at approx 602790E, 8247900N) and diamond drillholes BB3 (603452E, 8251102N) and BB4 (603337E, 8250952N). Although over half of this area is not located on Brumby's ground and the western tenement boundary corresponds to the Emu Fault, there is a substantial amount of room further to the east within Brumby's ground within which a shallow sequence of Barney Creek Formation may be located. Suggestions for work in this area include;

1. Surface geochemical data (soils and rock chip samples) should be collected across the tenement utilising a portable XRF device and taken along north-south oriented lines (right angles to presumed strike of bedding).
2. Follow-up physical sampling in anomalous areas which could include Ag, As, Zn, Cu, Pb, Tl, U, Mn, Fe.
3. Shallow RAB/RC drilling to identify the bedrock unit under the Cainozoic/Cretaceous cover sediments.

If looking for an area easily accessible and with similarities to the HYC deposit. The western side of the Emu fault is favoured. The intersection of Barney Creek Formation in drill hole BB2, to the east side of the Emu Fault and further north from this proposed exploration area proved uneconomic.

Area 2 (Map 1; Figure4): Area 2 is largely untested except for three shallow percussion drill holes. Given that there is BCF at shallow depths to the east and north of this area, there is a chance of intersecting it within this region. Drill hole logs from drill holes FAN011 and FAN012 described the rock but did not give any clear indication of the geological formation. For this reason the following is suggested;

1. Surface geochemical data (soils and rock chip samples) should be collected across the tenement utilising a portable XRF device and taken along north-south oriented lines (strike of bedding presumed to be similar to that of Area 1).
2. Limited RC or diamond program to 300m targeting any anomalous base metal geochemistry and to identify underlying Proterozoic rock units.

Manganese: Although the author does not believe that any substantial manganese mineralisation will be discovered in the area it is not to be discounted. As discussed previously, manganese forms a substantial halo around the McArthur River deposit and as such may be used as a vector to base metal mineralisation, especially if found with a combination of other factors specified by Large et al (2005). Manganese mineralisation in the units younger than the Barney Creek Formation (eg. Cretaceous sediments) may have leached up faults, remobilising geochemistry from lower down.

Further possibilities - Isotopes

Pb isotopes on sulphides – these could be used to classify the source and age of fluids where mineralisation is present and use as a comparison to MacArthur River and other mineralisation in the district.

In addition, within the ankerite/dolomite halo, McArthur River displays elevated ^{18}O ($\delta^{18}\text{O} = 21$ to 26%) and depleted ^{13}C ($\delta^{13}\text{C} = -1.5$ to -4%) with respect to normal Proterozoic sedimentary values ($\delta^{18}\text{O} = 20$ to 23% and $\delta^{13}\text{C} = 0$ to -2%). Strontium isotope studies of the halo around McArthur River also show enrichments with $^{87}\text{Sr}/^{86}\text{Sr}$ values of 0.735 to 0.765 in comparison with regional sedimentary dolomites of the Barney Creek Formation with $^{87}\text{Sr}/^{86}\text{Sr}$ ratios of 0.706 to 0.711 (Viezer et al., 1992; Lindsay and Brasier, 2000; Large, 2001).

Large (2001) proposed carbon, oxygen and strontium isotopes as an important tool to assist the discrimination of halos associated with major carbonate/shale-hosted SEDEX deposits from geochemically anomalous zones unrelated to major ore deposits. However, this could prove to be an expensive technique.

References

- Borman J. C. (1981) Metals Division, Annual Report of EL 1728 Bing Bong Creek, Nth Territory 20th July, 1980 – 19th July, 1981. Report no. 081071. October 1981. The Shell Company of Australia Limited. CR1981-0261.
- Curtis R. A. (2003) First annual report for the period 5 July 2002 to 4 July 2003, EL10103 Warramana, EL10317 Yalco, and EL10329 Yalco 1, McArthur Base Metals Program, Bauhinia Downs SE-5303 & Mt Young SD-5315 Northern Territory. Rio Tinto Exploration Pty. Ltd. CR2003-281.
- Dashlouty S. A. (1983) Metals Division, Final Report on EL2072 Waramana Creek N. T. Report no. 08.1259. March 1983. The Shell Company of Australia Limited. CR1983-0123.
- Huddy C. J. (1997) Technical Report No. 2865, Exploration License No. 6236 “Yalco North” Northern Territory. Annual Report for the year ended 16th November 1997. MIM Exploration Pty Ltd. CR1998-108.
- Large, R.R., Bull, S.W., and Winefield, P.R. (2001) Carbon and oxygen isotope halo in carbonates related to the McArthur River (HYC) Zn-Pb-Ag deposit, North Australia: Implications for sedimentation, ore genesis, and mineral exploration. *ECONOMIC GEOLOGY* 96, 1567-1593
- Large R. R., Bull S. W., McGoldrick J. and Walters S. (2005) Stratiform and Strata-Bound Zn-Pb-Ag Deposits in Proterozoic Sedimentary Basins, Northern Australia. *Economic Geology* 100th Anniversary Volume pp. 931-963
- Lindsay, J.F., and Brasier, M.D., (2000) A carbon isotope reference curve for ca. 1700-1575 Ma, McArthur and Mount Isa basins, Northern Australia. *Precambrian Research* 99, 271-308.
- McGeough M. (1995) Technical Report No. 2545. Exploration Licence No., 6236 “Yalco North” Northern Territory Annual Report for Year Ended November 16, 1995. M.I.M. Exploration Pty. Ltd. CR1995-0912
- Shalley M. J. and Harvey T. V (1992) Geophysical responses of the HYC Deposit. *Exploration Geophysics* 23, 299-304.

Unknown (1983) Exploration Licence 3278 Bone Lagoon, Mt. Young, N. T. Annual Report for the year ended 29th June, 1983. BHP. CR1983-0202.

Veizer, J., Plumb, K.A., Clayton, R.N., Hinton, R.W., and Grotzinger, J.P. (1992) Geochemistry of Precambrian carbonates: V. Late Proterozoic seawater, *Geochimica et Cosmochimica Acta*, 56, 2487-2501.

Yang J., Large R. R. And Bull S. W. (2004) Factors controlling free thermal convection in faults in sedimentary basins: implications for the formation of zinc-lead mineral deposits. *Geofluids* 4, 237-247.

APPENDIX 1

Target	Details	Sample	Easting MGA	Northing MGA	Pb_ppm	Zn_ppm	Cu_ppm	Mn_ppm	Fe_%
1*	Between East and West Emu Faults in upraised block, Pmnh at surface, elevated Pb	835404	601513.6	8234178.4	1500	19	14	10200	11
2	Between East and West Emu Faults in upraised block, Pmhc at surface, elevated Zn	835412	601916	8234182.1	580	82	22	34600	5.34
3	Between East and West Emu Faults in upraised block, Pmnh at surface, elevated Pb	839094	601017	8234180.6	490	52	19	97000	8.43
4	Between East and West Emu Faults in upraised block, Pmnh at surface, elevated Pb	839074	601468.9	8235176.5	720	34	23	44400	9.61
5	Between East and West Emu Faults in upraised block, Pmnh at surface, elevated Zn	839060	602168.8	8235178.8	85	150	12	1830	3.01
6	Between East and West Emu Faults in upraised block, located in Aeolian sediments but adjacent to the east of Pmnh outcrop, located on west limb of synclinal structure 15NE dip, moderately elevated Pb and Cu.	839015	599825.9	8240181	120	23	145	280	20.9
7	East of WEF splay, geochem could be attributed to Amelia dolomite	839036	598768.2	8240181.2	49	130	29	1180	31.1
8	West of WEF splay, anomalous geochem likely to be attributed to Amelia Dolomite - stratigraphically lower than BCF	838946	598522.2	8241183.5	53	160	66	1250	25
		838947	598472.9	8241183.7	72	115	110	3410	23.6
		838948	598423.7	8241183.9	61	130	130	5860	23.5
		838949	598374.4	8241183	70	220	120	31600	21.5
		838950	598324.1	8241186.6	65	200	115	26000	20.8
		838951	598324.1	8241186.6	115	280	140	29600	21.6
		838952	598275.9	8241182.4	99	260	105	19800	21.2
		838954	598219.2	8241182.6	58	210	98	5650	20.7
		838955	598166.7	8241185.1	23	150	77	1180	14.6
838956	598120.7	82411831.1	27	270	73	1240	21.9		
9	West of WEF splay, anomalous geochem likely to be attributed to Amelia Dolomite - stratigraphically lower than BCF	838941	598772.7	8241180.2	74	110	140	620	17.1
10	East of WEF splay, Pmnh at surface. Surface bedding dips 15NE. Stratigraphically two units above BCF. Moderately elevated Cu and Zn	837651	599020	8241184.6	42	185	175	2250	26.5
		837652	598973.9	8241184.8	27	110	125	890	9.43
		837653	598917.2	8241184	93	125	155	1200	15.7
11	East of WEF splay, adjacent to the west of Pmnc outcrop. Moderately elevated Zn	837643	599420.4	8241185.1	94	340	58	280	29.5
12	West of WEF splay, anomalous geochem likely to be attributed to Amelia Dolomite - stratigraphically lower than BCF	838938	598522.2	8241678	28	170	64	870	13.5

Target	Details	Sample	Easting MGA	Northing MGA	Pb_ppm	Zn_ppm	Cu_ppm	Mn_ppm	Fe_%
13	East of WEF splay, Aeolian sediments at surface, Pmnc presumably underlying. Moderately elevated Cu, Pb and Zn. Cu (430ppm) closest to the fault, high Pb (1010ppm) 300m east of fault.	837586	599023.3	8242176.9	760	170	190	1260	16.6
		837587	598967.6	8242179.4	1010	290	210	31800	28.7
		837588	598917.3	8242179.6	400	165	105	14300	30.4
		837589	598871.3	8242179.8	180	120	91	6580	32.8
		837590	598822.1	8242185.6	94	100	72	870	30.1
		837592	598720.3	8242182.7	220	340	430	3230	29
14	East of WEF splay, elevated Cu in Aeolian sediments, presume Pmnc underlying.	838876	598773.9	8242683.6	39	20	170	440	24.3
15	East of WEF splay, elevated Cu in Aeolian sediments, presume Pmnc underlying, moderately elevated Pb and Zn	835119	598628.4	8243184.3	220	140	165	3500	41.6
		835120	598677.6	8243184.1	310	155	180	1800	42.1
		835121	598728	8243185	430	210	220	2900	32.5
16	West of WEF splay, anomalous Cu geochem likely to be attributed to Amelia Dolomite - stratigraphically lower than BCF	838857	598423.9	8234681.9	91	39	165	1150	29.2
		838858	598379	8243678.8	70	31	150	870	30.8
17	Between East and West Emu Faults in upraised block, Pmnc at surface, located on east limb of synclinal structure, elevated Pb	838811	601676.7	8244173	640	13	17	34000	5.87
18	Between East and West Emu Faults in upraised block, Pmnc at surface, located on east limb of synclinal structure, elevated Pb	835345	601870.3	8243180.8	590	28	30	13100	5.95