

ANNUAL TECHNICAL REPORT

Pine Creek Property EL 28017

REPORTING PERIOD

25th November 2010 to 24th November 2011

January, 2012

Tim Hronsky



SUMMARY

EL 28017 forms part of St George Mining's Blue Thunder Gold Project which is a contiguous area comprised of EL 27732, EL 28016, EL 28017, EL 28232, EL 28332, EL 28463 and EL 28465.

All tenements are held in the name of Blue Thunder Resources Pty Ltd, a wholly owned subsidiary of St George Mining, other than for EL 27732. On the first of March 2009, St George Mining entered into an option to acquire 80% of EL 27732 in the Pine Creek, Northern Territory. EL 27732 is currently held by James Stewart (50%) and Geotech International (50%). St George Mining is the manager of the Project.

St George Mining has acquired EL 28017, which is located to the west of the main discovery area on the Pine Creek Property, with the aim of assessing the exploration potential of a discrete magnetic anomaly.

The 2011 exploration objectives for EL 28017 were:

- To determine if the discrete magnetic anomaly located on the tenement was of economic interest;
- Determine the accessibility of the prospect site and the cost effectiveness of exploring this target.

St George has developed a strong predictive and diagnostic geological and exploration model as the foundation for future exploration, and this was used in the initial assessment of EL 28017.

Review of current and historical drilling information indicates that the magnetic anomaly on EL 28017 did not appear to be related to part of a mineralised system.

The previous drilling by Homestake Gold Australia Limited (FEND-9A) intersected extensive granite with a limited intersection of proximal intervals of cherty iron-rich sediments; no gold intersections were made.

The linear magnetic features which appear to map the major faults and or shear-zones are linear in nature and show no evidence of deflection by late cross structures as on the major trend that exists to the east (EL 27732 and EL 28016). This reduces the likelihood of extensive dilation permissive of favourable structural sites gold precipitation.

The post mineral limestone cover in this area was $^{\sim}390$ m in depth and contains karst units that acted as acted as aquifer. This contrasts with the shallower and more massive limestone cover (<200 m) to the east of the basin.

Further work on EL 28017 must be decided on exploration results from the 2011 work in other areas of the Pine Creek property, and the available exploration funds.



TABLE OF CONTENT

SUMMARY	2
TABLE OF CONTENT	3
LIST OF FIGURES	3
BACKGROUND	4
LOCATION AND ACCESS	4
REGIONAL GEOLOGY & MINERALISATION	5
PREVIOUS EXPLORATION	9
EXPLORATION OBJECTIVE 2011	10
EXPLORATION ACTIVITY 2011	10
EXPLORATION FOCUS 2012	10
APPENDIX A- EXPLORATION MODEL	13
LIST OF FIGURES	
Figure 1 - Location of Pine Creek Property	4



BACKGROUND

EL 28017 forms part of St George Mining's Blue Thunder Gold Project which is a contiguous area comprised of EL 27732, EL 28016, EL 28017, EL 28232, EL 28332, EL 28463 and EL 28465. All tenements are held in the name of Blue Thunder Resources Pty Ltd, a wholly owned subsidiary of St George Mining, other than for EL 27732.

On the first of March 2009, St George Mining entered into an option to acquire 80% of EL 27732 in the Pine Creek, Northern Territory. EL 27732 is currently held by James Stewart (50%) and Geotech International (50%). St George Mining is the manager of the Project.

St George Mining has acquired EL 28017, which is located to the west of the main discovery area on the Pine Creek Property, with the aim of assessing the exploration potential of a discrete magnetic anomaly.

EL 28017 was granted to Blue Thunder Resources on the 25/11/2010 for a period of 6 years.

LOCATION AND ACCESS

The Company's Pine Creek Property is located 130 km SE of Darwin, Northern Territory, Australia and hosts the Blue Thunder Gold Project, which while centred on most explored EL 27732 also includes EL 28016, which covers potential extensions of the gold system discovered on EL 27732.

The logistics of the property are excellent: the area is well serviced by a major highway that runs from Darwin to Alice Springs, it is proximal to the main Darwin-Adelaide rail link, and any operation should be able to access the main gas-pipeline from the north coast.



Figure 1- Location of Pine Creek Property



REGIONAL GEOLOGY & MINERALISATION

The Pine Creek Property is located in the western section of the central domain of the Pine Creek Orogen (PCO), a major gold and uranium province in the Northern Territory with a known gold endowment of approximately 11 MozAu. At a regional scale, gold mineralisation in the PCO occurs in linear belts associated with regional structures at or near the greenschist facies brittle-ductile transition phase. Gold deposits within the sediments of the western area of the Central Domain of the PCO are concentrated within the Koolpin Formation.

The region is characterised by early Proterozoic meta-sedimentary rocks occurring in a geosynclinal setting over a gneissic and granitic Archean basement. The PCO sequence is unconformably overlain by the Middle Proterozoic McArthur Basin to the east and by the Middle Proterozoic Victoria Basin and Cambrian-Ordovician and Mesozoic sequences (Daly and Bonaparte Gulf Basins) to the west and southwest. Major sedimentation and volcanism occurred between 2000 to 1870 Ma in an intra-cratonic basin formed by crustal extension of the predominantly Achaean granitic basement. The stratigraphic sequence is dominated by mudstones, siltstones, greywackes, sandstones, tuffs, and limestones. The sediments and basic intrusions were folded and metamorphosed to amphibolite facies between 1870 to 1899 Ma and then subsequently intruded by the Cullen batholith.

The Cullen Batholith is comprised of 23 individual plutons that are mostly highly fractionated, and sometimes metal-enriched, leuco-granites. The extent of contact zone of the host rocks varies and is comprised of an albite + epidote + hornblende metamorphic facies. Hydrothermal fluids are concentrated at the roof and margins of these plutons. The presence of numerous roof pendants and the distribution of the thermal aureole around these plutons suggest a high level of emplacement.

The rocks of the South Alligator Group form a distinctive sequence of iron-rich sediments resting unconformable on older rocks. The area of the South Alligator Group includes the basal Koolpin Formation which is overlain by the Gerowie Tuff, which is conformable with the Mount Bonney Formation. The Gerowie Tuff and overlying Mount Bonney Formation are similar in composition and may act as a stratigraphic seal for mineralisation found in the ferruginous and carbonaceous rocks of the underlying and preferentially mineralised Koolpin Formation.²

Although the Cullen Batholith is not magnetic, the surrounding contact aureoles are. The vast majority of PCO gold deposits, including all the larger ones, lay within these contact aureoles.

The magnetic response of these zones implies hydrothermal iron enrichment has occurred as part of the contact alteration. Epigenetic iron may play an important role in localising gold mineralisation. A similar relationship between gold and concentrations of iron exists at the Tennant Creek Goldfield (5+ MozAu), to the south, which lies to the south within the same Proterozoic terrane.

The Cosmo Howley deposit (2+ MozAu) is one of these gold deposits that are situated in the inner contact aureole of the Cullen Batholith. Cosmo Howley and most of the known gold deposits in this district are hosted by the Koolpin Formation, situated on the sheared eastern limb of a regional anticline (Pine Creek Shear). The Pine Creek Property is situated on the sheared western limb of this interpreted regional anticline (Fenton Shear) and hosted by the folded continuation of the prospective Koolpin Formation. The core of this anticline may have been intruded by a major pluton.

¹ "Proterozoic Lode Gold and (Iron)-Copper-Gold Deposits: A Comparison of Australian and Global Examples"; Partington GA and Williams PJ; IN Australian & Global Proterozoic Lode Au & (Fe)-Cu-Au Deposits (Chapter 2), 2000

² "A contribution of geology, petrology and geochemistry to the Cullen Batholith and related hydrothermal activity responsible for the mineralisation, Pine Creek Geosyncline, Northern Territory"; Bajwah ZU (1994); NT Geological Survey Report No. 8



The deposit style and the host-rock sequence at Cosmo Howley are strikingly similar to those of the giant Homestake gold deposit (~57 MozAu) in South Dakota. A direct genetic link is inferred on the basis of similar age, sedimentology, deformation style, sulphide species, pathfinder elements, isotopic data, and forensic signatures in the sulphides. This is an important consideration for the prospectivity of the local area (Cosmo Howley and Blue Thunder), and as both gold occurrences are hosted by the same stratigraphic unit and are also similar in their setting and their stratabound style of mineralisation it is suggested that they formed from the same large gold system.

Large gold systems cluster within well-defined periods of lithospheric growth including the Paleo-Proterozoic. ⁴ Recent geochronology offers new constraints on evolution of the Pine Creek Orogen, ⁵ allowing inter-regional comparisons and correlations to be made with the Tanami and Tennant Creek Regions. Previously, age dating of Paleo Proterozoic gold mineralisation in the Northern Territory appears to have based on inferred genetic links between the ages of spatially related granites and the gold mineralisation (e.g. Tennant Creek). ⁶ Contrasting views has also argued that the gold mineralisation in the Pine Creek area is much younger than previously thought⁷. While dating is still imprecise and incomplete, the NT gold deposits appear to be clustering around an age range of 1760 - 1700 Ma, towards the end of the PaleoProterozoic.

This is suggestive of a major global-scale late Paleo-Proterozoic gold event, post regional metamorphism and magmatism, during shift from brittle-ductile to brittle deformation, and provides an approximate correlation between gold deposits of the Northern Territory and the mineralising event responsible and capable of forming the giant Homestake gold deposit.

The Pine Creek lode gold deposits are spatially related to regional anticlines that were formed early, above thrust-ramp and thrust duplex structures. Suitable trap sites within these structures appear to have been present as illustrated by the strata-bound nature of some of the gold deposits beneath thick dolerite sills or greywacke units on the crests of anticlines. The thrusts appear to have acted as channel ways for hydrothermal fluids from deep larger structures into anticlines and subsequent trap sites.

Two major phases of deformation that pre-date granitoid intrusions have been recognised in the Pine Creek Geosyncline. The earliest widely recognised structures in the Pine Creek Geosyncline are bedding-concordant fabrics and breccia zones (D_1). The second phase of deformation produced the north to north-west trending folds that still dominate the district (D_2). The folds vary from open and upright to overturned and isoclinal with the development of a penetrative slaty cleavage.

Gold occurs in all rock types except granite. The higher-grade deposits have an association with carbonaceous or iron and sulphur rich sedimentary horizons, such as the Koolpin Formation. More competent lithologies in turbidite-style sequences form vein-stockwork deposits (e.g. Enterprise and Mount Todd), whereas those with both contrasting competency and geochemistry form strata-bound vein and replacement deposits (e.g. Cosmo Howley).

³ "Geochemistry and depositional environment of the gold-mineralized Proterozoic Koolpin Formation, Pine Creek Inlier, Northern Australia: a comparison with modern shale sequences"; Matthai SK and Henley RW; Precambrian Research 78 (1996) 211-235

^{4 &}quot;Lithospheric controls on the formation of provinces hosting giant orogenic gold deposits"; Bierlein FP, Groves DI, Goldfarb RJ & Dubé B (2006)

⁵ "Pine Creek Orogen: a synthesis through time and space"; Worden K, Geoscience Australia - Evolution and Metallogenesis of the NAC (ALICE SPRINGS, 20-22 JUNE 2006)

^{6 &}quot;Metallogenic Potential of Australian Proterozoic Granites"; Budd AR, Wyborn LA, Bastrakova IV; Geoscience Australia Record 2001/12

^{7 &}quot;Timing of gold mineralisation in the Pine Creek orogen, Northern Territory, Australia: its significance to the thermal aureole gold model"; Sener AK, Groves DJ and Fletcher IR; Mineral Exploration and Sustainable Development



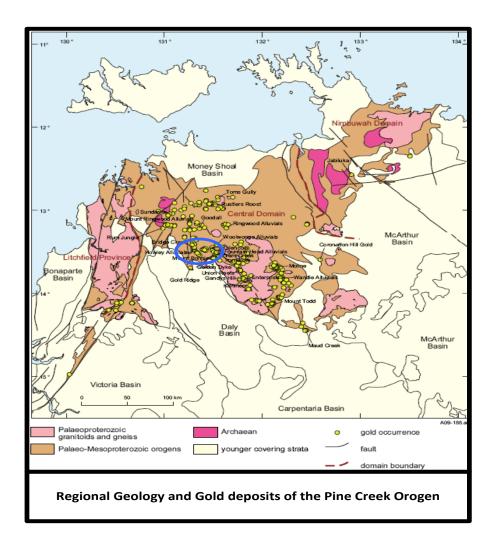


Figure 2 - Regional Geology and Gold Deposits of the PCO, the blue circle showing the approximate location of St George's Pine Creek Property



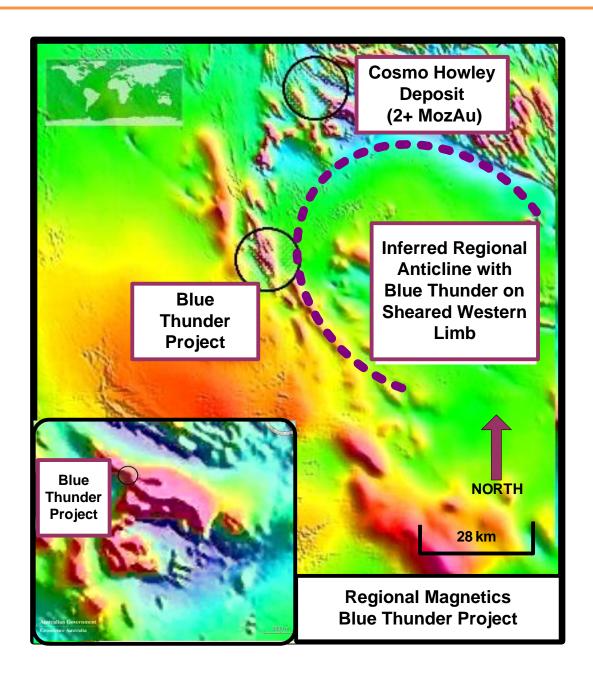


Figure 3 – Regional relationship between the Blue Thunder Gold Project and the Cosmo Howley Deposit against a magnetics background.



PREVIOUS EXPLORATION

The Pine Creek Orogen has been explored for gold for over a century, following the discovery of gold from a hole dug for the construction of the overland telegraph line in the 1870's. A substantial quantity of gold was then produced from 1884 – 1915, with peak production around 1891 – 1895.

Modern gold exploration did not commence until 1980, when increased gold prices and improved mining and metallurgical technology drove renewed exploration. Systematic geological mapping, geochemical surveys and drilling, mostly were conducted around previously known occurrences. A number of previously known occurrences such as Enterprise, Cosmo Howley, Golden Dyke, were re-evaluated and subsequently mined. Several new gold deposits were also discovered. The depressed gold price during the 1990s curtailed exploration from the late 1990's until a recovery in 2005 stimulated further exploration and mining.

The Pine Creek shear hosts most of the known deposits including the Cosmo Howley gold deposit (2+ MozAu). The Pine Creek Property is located approximately 50 km to the south west from the Cosmo Howley Mine but connected by the same target horizon (Koolpin Formation). The project is hosted by the regional Fenton shear zone, which is covered by some younger sedimentary units, notably the Gerowie Tuff, the Mount Bonney Formation and Cambrian limestone units. The Fenton shear was not seriously explored until the regional Homestake programme in the 1990's.

Initial limited exploration in the area involved an aero-magnetic survey, some geochemical surveys and a photo-geological survey. An exploration to this time appeared to rule out any major surface or subsurface gold mineralisation because of the younger overlying sedimentary horizons.

Homestake Gold of Australia (Homestake) was subsequently granted tenure over the ground and approached the area with the new strategy of exploring for concealed ("under cover") gold deposits. Homestake had noted the similarities between the stratigraphy and mineralisation of the South Alligator Group, especially similarities between the Koolpin and Homestake Formation, which hosts the giant Homestake deposit (~57 MozAu)⁸ in Lead, South Dakota (the "Homestake deposit"). This assumption was the basis of their exploration model.

Homestake had purchased geophysical data, magnetic and gravity data from a multi-client survey and also acquired a 1:100,000 TMI (total magnetic intensity) image. The TMI image was from the Aerodata multi-client survey and E-W line soakings of 200 m, sensor height was 70 m and image pixel size was 50 m. In 1995, they conducted a gravity survey along 2 E-W lines with lengths of 14 and 16 km. Readings were taken at 100 m spacing's in milli-gals. These lines were combined with regional Northern Territory Geological Survey (NTGS) and AGSO (Australian Geoscience Survey Organisation) data. All available geophysical images, satellite TM imagery, topographical and geology maps, and air photos were synthesised at the 1: 500,000 scale map of the south western section of the Pine Creek Orogen. The compilation provided the basis for the subsequent regional diamond drilling programme.

Hole FEND 9-A was drilled into the magnetic anomaly presently covered by EL 28017 as part of a regional diamond drilling programme conducted by Homestake.

^{8 &}quot;Proterozoic Lode Gold and (Iron)-Copper-Gold Deposits: A Comparison of Australian and Global Examples"; Partington GA and Williams PJ; IN Australian & Global Proterozoic Lode Au & (Fe)-Cu-Au Deposits (Chapter 2), 2000



EXPLORATION OBJECTIVE 2011

The 2011 exploration objectives for EL 28017 were:

- To determine if the discrete magnetic anomaly located on the tenement was of economic interest;
- Determine the accessibility of the prospect site and the cost effectiveness of exploring this target.

EXPLORATION ACTIVITY 2011

Attempts were made to conduct a site investigation of the prospect area on EL 28017 but access to this site could not be established by public and private roads.

A compilation and review of available current and historical information was completed within the context of the predictive and diagnostic exploration model and the findings were:

The post-mineralisation Cambrian limestone cover increases substantially in the central parts of the Daly River Basin in comparison with the limestone sequences to the east. This was demonstrated through reviewing the historical Homestake drill logs. The limestone cap in FEND-9A, which is drilled on the current EL 28017, is $^{\sim}$ 360 m in depth, in comparison with a cover thickness of $^{\sim}$ 140 – 180 m further to the east. This observation is supported by the more diffuse magnetic response in the area, compared to those further to the east.

Informal conversations with NTGS staff indicate the existence of an additional lime stone unit in the more central parts of the basin and this unit is "karst" in nature and accordingly acts as a major aquifer.

FEND-9A drilled by Homestake largely intersected granite with one interval of chloritic, cherty, iron-rich sediments but the target formation did not have any gold mineralisation.

The magnetic lineaments that appear to be proxies for the major faults and shear zones are very linear nature and did not show the same degree of deflection by cross structures seen in the magnetic ridge further to the east where know mineralisation exists. These intersections of NE-SW cross structures with major northerly trending structures act as preferential sites for localising gold mineralisation. Accordingly, the structural using magnetics suggest this is a less than favourable area because either excessive depth hides such target features, or they don't exist.

EXPLORATION FOCUS 2012

Further work on EL 28017 must be decided on exploration results from the 2011 work in other areas of the Pine Creek property, and the available exploration funds.



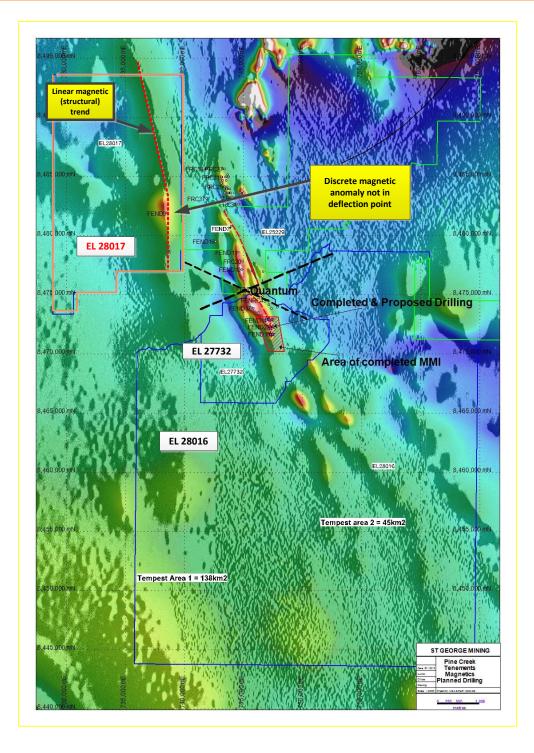


Figure 4 – Shows the discrete magnetic anomaly on EL 28017 and the position of the historical drill hole FEND-9A against a Total Magnetic Intensity (TMI) background.



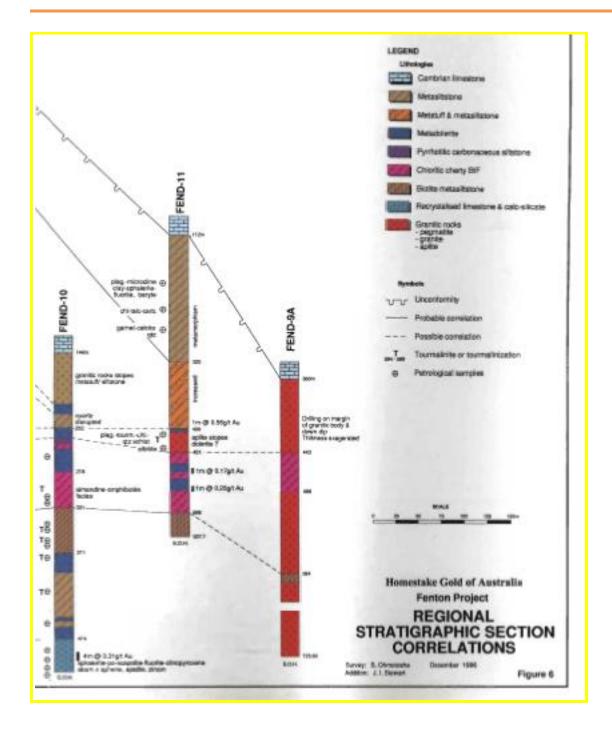


Figure 5 – Shows the geology of FEND-9A and other comparative holes to the east.



APPENDIX A- EXPLORATION MODEL

ATTRIBUTES	MAPPABLE PRESENTATION	COMMENTS		
DISTRICT SCALE				
Syn-orogenic "pull-apart" sedimentary basins formed during early regional strike-slip faulting	Dilational sites along regional sinistral shears	Primary control on reactive host rocks		
Archean basement domes	Marginal gradients of regional gravity highs	Structures create competency contrasts to surround rocks and low pressure zones formed by deflection of regional foliation		
Contact metamorphic aureoles of syn-orogenic fractionated felsic granites (Cullen Suite)	Annular magnetic feature with a non-magnetic core and a magnetic (hornfels) outer ring The position of the biotite isograd in the contact metamorphic halo	Archean domes margins may focus syn-orogenic fractionated felsic granite magmatism Structures create competency contrasts to surround rocks and low pressure zones formed by deflection of regional foliation Less massive and more brittle (outer) sections of hornfelsed aureoles are favourably deformed		
Intersection of northerly and easterly regional axial foliations and fold hinges that progress to brittle ductile shears and then later syn-mineral dextral brittle structures that host gold mineralisation	Map using Pb-Ce geochemical response and features from magnetics Subsequent northerly and easterly shears proxy for earlier and overprinted axial foliations of same orientation	Pb-Ce defines crustal contribution Intersections of structures and shear deflections by massive rheological contrasting bodies create low pressure zones — these are aquicludes for metamorphic, meteoric and magmatic-hydrothermal fluids		
Zones of pyrrhotite rich mineralisation emphasising.	Magnetic and electromagnetic highs in the primary zones	Local desulpidation of pyrite in and capture of metals from enriched hydrothermal solutions		



Pre Orogenic sedimentary units with appropriate chemical composition and competency contrasts. Massive and chemically inert overlying sequences to act as cap rocks to sediment units and unconformities	Carbonate and carbonaceous pelitic sediments (e.g. Koolpin Fm) AND strongly interbedded and contrasting rock types (e.g. grey wacke and siltstones) Massive units like Gerowie (welded) tuff and massive sandstones	Low pressure aquicludes and transport pathways for metamorphic, meteoric, hydrothermal fluids and later acidic basinal brines Carbon rick sediments precipitate oxidised gold and uranium-REE fluids along REDOX gradient		
DEPOSIT SCALE				
Fold axes and hinge zones (foliations and shears) Intense faulting and sometimes brecciation accompanies the he slaty cleavage of these axial shears	Structural intersection and dextral flexure (rotation of NW to more northerly orientation) Areas of intense deformation and brecciation which indicate high fluid flows Localised variation of gold zones between steep and subhorizontal orientations around fold geometry	Plunge of ore would be guided by fold axes plunge and interplay with cross structures (likely localised subvertical, layered zones and pipes at fold hinges		
Step-out alteration is large scale potassic alteration which leaches sodium and calcium from rocks	K-rich minerals in broader alteration aureole around deposit			
Siliceous veins hosted gold occurs within 50 m of	Geochemical (REDOX) gradients and contrasting competencies of local rock assemblage Resistive zones in EM (electro- magnetic) and IP electrical surveys	Siliceous veins pre-date gold mineralisation but provide local competency contrast and deform in brittle manner		
Vein assemblage is K-feldspar + biotite + Andalusite + cordierite. High fluorine levels in biotite	Map mineral assemblages Whole rock geochemistry			



Preferred iron-rich horizons within Koolpin Formation	Interbedded iron horizons in the sediment with 10-15% iron as oxides and sediments. May show up as elevated magnetic responses among surrounding iron poor sediments	Majority of mineralisation in the Middle and Lower Members of the Koolpin[in Formation at Cosmo Howley Iron source important for sulphidation process and precipitation
Gold is closely associated with sulphides such as pyrite, arsenopyrite, and trace sphalerite. Pyrrhotite is an important mineral below weathered zone	Sulphides in drill core/ chips Detectable by EM in hypogene zone	
Anomalous gold-cobalt geochemical association Unique mineral introduced as part of metamorphic concentration of similar metals	MMI regional and infill geochemical surveys: (Au + Co + variable base metals)	Co is a ferromagnetic metal Cobalt occurs in copper and nickel minerals and in combination with sulfur and arsenic. Consistent chemistry with other ore minerals