



TERRITORY IRON PTY LTD

***Desktop Study and Review  
of all available Open File Data  
for tenement  
EL29015***

***(Internal Company Report)***



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## SUMMARY

Territory Resource Limited completed a desk-top study of previous exploration activity in the area and note that various commodities were sought, especially precious metals and base metals, but at the time haematite mineralisation was not a priority. Sampling records of previous workers indicate the presence of haematitic outcrops.

All available Open File reports pertaining to the area of Exploration Licence 29015 were summarised (Appendix 1). Included are summaries of exploration activities pursuant to previous tenements: ATP1727, EL2226, EL4962, EL5139, EL6184, EL6777, EL7155, EL7674, EL8170, EL9026 and EL9393. Numerous references are made to outcrops of massive haematitic ironstone hosted by the Wildman Siltstone metasediments. No samples were analysed for Fe owing to the focus of earlier workers on precious metal and base metal systems. Results of the desktop study confirm significant potential exists for discovery of economic haematite mineralisation, consistent with Territory Resources Limited's current objectives.

## 2.0 PREVIOUS EXPLORATION

Some of or all 4 graticular blocks that comprise EL29015 were previously subject to Exploration Licences: 1727, 2226, 4962, 5139, 5512, 6184, 6777, 7155, 7674, 8170, 9026, 9393 and 23758. As might be expected, not all previous exploration was focussed precisely on Territory Resources Limited's tenement area but sufficient detail is available to formulate an overview that may assist our programme development. A substantial proportion of exploration work completed by previous companies concentrated on the Jessops (Sn) – Hill 156 – Hill 5 mineralised anticline and Mount Harris trend, both areas being adjacent to (but outside) our immediate area of interest. Dominion Mining Limited's exploration work (EL5139) is particularly useful owing to their focus being centred almost precisely on the area defined by EL29015.

The majority of previous exploration in the general area targeted stratabound precious metal and base metal mineralisation within the Koolpin Formation and invoked Cosmo-Howley as a typical model. Ironstone horizons within the Wildman Siltstone were viewed as a potential host for base metals and gold mineralisation, (Orridge, 1991), but all testing proved negative.

Clearly, haematite mineralisation was not a high priority for the previous explorationists and outcrops of haematite were examined only for the potential to host additional metals. No Fe assays are recorded but reference is commonly made to the presence of haematitic outcrops, especially within the Wildman Siltstone. Such parameters are consistent with Territory Resources Limited's current objectives.

## 3.0 GEOLOGY

Exploration Licence 29015 is situated in the Lower Proterozoic Pine Creek Geosyncline, the geology of which is indicated on the McKinlay River 1:100000 Geological Series map sheet, and explanation by Stuart-Smith et al, 1986. The Lower Proterozoic succession was intruded by conformable dolerite sills during a period of major deformation associated with regional metamorphism and the intrusion of A-type granites.

The tenement is located adjacent to the old Mount Harris battery which serviced the Mount Harris tin field. The geological sequence in the Mount Harris area consists of Lower Proterozoic rocks that have been metamorphosed to greenschist facies assemblages and which belong to the Mount Partridge Group and South Alligator Group. Individual members and formations are tightly folded into a series of NNW striking anticlines and synclines that plunge shallowly to the NNW and away from the Cullen Granite located south of the metasedimentary package.

Exposed sequences within Exploration Licence 29015 include two members of the Mount Partridge Group, Mundogie Sandstone and Wildman Siltstone. A basal member of the Mount Partridge Group, Coomalie Dolostone, has not been observed. Metasediments of the Koolpin Formation, the lowermost formation within the South Alligator Group, unconformably overlies the Mount Partridge Group and is in turn conformably overlain by the Gerowie Tuff member. Sills of the Zamu Dolerite are recorded at the Mount Partridge Group – South Alligator Group unconformity. The Cullen Granite intrudes the strata south of the tenement area.

The geological setting within EL29015 consists of a broad NNW plunging syncline, the core of which is comprised of South Alligator Group units enclosed by Wildman Siltstone ridges that parallel the fold axis, (Figure 2). Mundogie Sandstone defines the fold closure within the southern block of the tenement. Parasitic folding and shearing are reportedly associated with the fold nose. Massive haematitic ironstone lenses are also reported.

### Mineralisation

Previous mining in the Mt Masson area focussed primarily on Sn mineralisation and various exploration ventures considered potential for uranium, gold and base metals. Exploration efforts located and sampled ironstone lenses in Wildman Siltstone and Koolpin Formation strata but were obviously concerned with precious metal and base metal content of these outcrops.

Tin mineralisation hosted by fractured Mundogie Sandstone located adjacent to and within the contact metamorphic aureole of the Cullen Granite was mined at Mt Masson, Mt George and Mt Harris, whereas at Jessops, mineralisation is associated with Wildman Siltstone lithologies. At some locations quartz – cassiterite veins may also contain anomalous quantities of Au, Ag, Pb, Zn and Bi, thus leading earlier explorationists to consider Mount Partridge Group stratigraphy for precious metal and base metal potential.

Territory Resources Limited view EL29015 as prospective for high grade haematite mineralisation. Several references are made by previous explorers to haematite lenses within the Wildman Siltstone.



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## Geological Model

Iron ore mineralisation in the Frances Creek region is interpreted to be of stratiform replacement style hosted by folded and brecciated Wildman Siltstone lithologies, or otherwise, in association with the margins of folded Zamu Dolerite bodies. The haematite deposits are thought to be the result of hydrothermal enrichment along stratigraphic and structural pathways followed by supergene processes. Fluid pathways are largely restricted to approximately strike continuous breccias situated near the base of the Wildman Siltstone. Mineralisation is concentrated in fold hinges, adjacent to lithological contacts and within faults. Mineralisation is also observed in the Upper Wildman Siltstone sequences, especially immediate to dolerite contacts and associated with parasitic folding on the limbs of  $F_2$  structures. It is speculated here that permeability may be generated by the simple mechanism of competency contrast between dolerite and metasedimentary packages whereby the former behaves in a ductile manner and enclosing siltstone brecciates immediate to the contact when folded.

- A summary of geological criteria considered to provide control on the location of haematite mineralisation is indicated:
- Mineralisation is stratiform and hosted by Lower Wildman Siltstone breccias.
- More than one and possibly two mineralised horizons may exist within the Wildman Siltstone.
- Pyritic black shale is generally footwall to the mineralisation.
- Mineralisation is best developed within the cores of large (overturned) synclinal structures but may also be found on the limbs of anticlines.
- Mineralisation may form at the contact between Wildman Siltstone and dolerite sills, especially in association with parasitic folds and irrespective of where the sills occur within the sequence.

## 7.0 CONCLUSION

Previous workers report the presence of haematitic ironstone outcrops hosted by Wildman Siltstone sequences located adjacent to and within EL29015. The outcrops contain weakly anomalous quantities of gold and base metals and were previously explored for these commodities without success. Territory Resources Limited concludes that indications are favourable for the presence of high grade massive haematite mineralisation.

## 8.0 REFERENCES

Orridge G.R., 1991: Exploration Licence 7115 Near Mount Masson Northern Territory Report for the Year Ending 4<sup>th</sup> December 1991. *Open File Rpt. CR92/258 (unpub.)*.

Stuart-Smith P.G., Needham R.S., Wallace D.A. and Roarty M.J., 1986: McKinlay River, Northern Territory, Bureau of Mineral Resources, Australia, 1:100000 Map Commentary.



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## Open File Report Summaries

### EL5139

CR19880033 – EL5139 & EL5140. Dominion Mining (operator) and Peko Wallsend (Golden Dyke Joint Venture). Possible Cosmo-Howley style gold mineralisation. Rare massive haematite lenses within the Wildman Siltstone.

CR19890095 – EL5139 (Douglas Creek East). Dominion Gold Operations Pty Ltd Golden Dyke Joint Venture (with Peko Wallsend Operations Pty Ltd). Partial relinquishment report. Previous exploration within the tenement consisted of regional stream sediment sampling by the GDJV and mid-Koolpin Formation strata was assessed for stratabound gold and base metal mineralisation. Current exploration activities included 1:10000 geological mapping, -80 mesh, BCL and pan concentrate stream sediment sampling and rock chip and float sampling targeting gold mineralisation. Five geochemically anomalous results but no gold mineralisation. Mapping identifies a NW plunging syncline, the core of which contains Gerowie Tuff with Koolpin Formation defining outer ridge crests. Wildman Siltstone is located in the western blocks and conformable Zamu Dolerite sills are located between the Upper Wildman Siltstone and Koolpin Formation contact. Parasitic folding in the fold nose area associated with gossanous outcrops and quartz reefs. Majority of anomalous results attributed to the synclinal fold closure while remainder were thought to be derived from outside the tenement. Partial relinquishment but retain previously identified anomalies. *[EL5139 coincides with Territory Iron tenement EL29015. Located on McKinley River 1:100000 Sheet 5271 and situated approximately 55km due north of Pine Creek.]*

CR19890243 EL5139. Dominion Gold Operations Pty Ltd partial relinquishment report. Dominion retain one single block which covers the synclinal fold closure location.

CR19900269 – EL5139. Dominion Gold Operations Pty Ltd. *[Report pursuant to last remaining block of EL5139 and coincides with southernmost block in EL29015.]* Sequence contains rare massive haematitic ironstone lenses located within the Wildman Siltstone. Ironstone also reported in the mid-Koolpin Formation. Zamu Dolerite was mapped at three stratigraphic horizons: between Wildman Siltstone/Koolpin Formation contact; between Mid- and Upper-Koolpin Formation members; at Koolpin Formation and Gerowie Tuff contact. Structural trends define tight NW trending and NW plunging synclines. Gerowie Tuff forms the core of the syncline with Koolpin Formation and Wildman Siltstone forming ridges // to the fold axis. Reference is made to a coarse grained sandstone unit defining a tight fold closure within the block *[is probably Mundogie Sandstone, not Wildman Siltstone]*. Parasitic folding and shearing is reported in the fold nose area. Soil sampling, rock chip sampling and mapping of areas previously deemed to be anomalous (GDJV and Geopeko) failed to confirm any significant mineralisation. Relinquishment of EL5139 was recommended.



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## EL6184

CR19900097 EL6184. Wyralla Pty Ltd., Mt Harris Project. *[The NW most unit of EL6184 coincides with southern block of EL29015.]* Nine Mineral Claims existed within EL6184 which covered the Margaret and Nelson No2 Sn-mines. In the NW portion of the tenement South Alligator Group metasediments are folded into north plunging fold structures. Reports of qtz vnd Fe-stone lenses located north of the Mary River road in the west of the tenement area. Reported Au associated with Sn concentrates derived from MLs. No record of alluvial or hard rock gold occurrences outside of the mine lease areas. Rock chip geochemistry focussed in the northern portion of the tenement (North of the Mt Harris road) where Wildman Siltstone, Koolpin Formation and Gerowie Tuff units crop out. Sub-cropping massive laterite is noted at several locations. Colour of siltstones and shales is typically red-brown and purple-green *[Wildman Siltstone]*, gossanous and brecciated in places. Maximum Au value recorded is 0.027 g/t coincided with a maximum As value of 780 ppm. Sample MH40 recorded as BIF *[located within southern block of EL29015.]*

## EL6777

CR19910296 EL6777. J M Sime. Prospector using pan concentrates and dollied rock samples to generate possible small scale targets for gold and/or tin mineralisation. *[Located immediately east of Territory Iron EL24040.]*

CR19920324 EL6777. J M Sime. Gold prospecting by traditional methods. Detailed sample locations lacking.

CR19930378 EL6777. J.M.Sime. Traditional prospecting methods. No sample sites recorded.

## EL7155

CR19920258 EL7155. Mainline Gold Mines Pty Ltd. MT Partridge Group and South Alligator Group with Zamu Dolerite sills and Cullen Granite. Work included literature research and field inspections. Literature review suggests potential for two possible types of mineral system including: base metal/gold assoc. with bedded sulphides in carbonaceous phyllites of the Wildman Siltstone, perhaps stratiform or remobilised; stratiform Au mineralisation assoc with BIF horizons in the Koolpin Formation. En-echelon series of ironstones at Jessops, 1400m length, on the western limb of major regional anticline. Anomalous Au values from drainages at Hill 156 Prospect *[south of Hill 5 Prospect]*. Proximity to Cullen Granite outcrop is noted and ironstone outcrops in Wildman Siltstone.

CR19930075 EL7155. Mainline Gold Mines Pty Ltd. Exploration included review of previous drilling at Jessops Mine (high grade Sn), sampling of waste dumps at Jessops, prospecting Hill 5 *[situated on western limb of an anticline and within Koolpin Formation]*, seek farm-in partners. No significant Au from sampling of gossanous outcrops north of area previously drilled by BP Gold. Rpt contains review of previous mineral exploration activities in the area.



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CR19930187 EL7155. Mainline Gold Mines Pty Ltd. Report on relinquished areas. Work completed includes photogeological mapping and reconnaissance rock chip sampling. No significant rock chip sample results. *[Good indications of iron mineralisation]:* e.g. Sample 328223: Fe-stone within ferruginous shale; 328230: quartz-haematite breccia; 327179: haematitic bif, etc.

CR19940090 EL7155. R M Biddlecombe. No field work. *[Excellent discussion of previous mining and exploration work at Jessops.]*

CR19950637 EL7155. Territory Goldfields NL. (Jessops (partial) Relinquishment Report.) Exploration included data compilation and geophysical interpretation. *[2 sub-blocks retained cover the Jessops Sn occurrence and Hill 156 and Hill 5 Au prospects located north of Jessops.]* Past exploration in the area has generated many low order geochemical anomalies.

CR19960055 EL7155. Territory Goldfields NL. (Annual Report).

CR19960909 EL7155. Territory Goldfields NL. Regional soil sampling programme completed over the two graticular blocks. 189 soil samples collected. BLEG analysis. Peak assay 14 ppb Au (8528448N/805424E). Low order Pb, Zn & Cu results specific to SW corner of tenement, (805204E/8526550N, 805304E/8526550N).

CR19970149 EL7155. Territory Goldfields NL. (Final Report.) Tenement initially granted to Mainline Gold Mines NL (Dec. 1990), later transferred to G R Orridge, R M Biddlecombe then Northern Territory Gold Mines NL and finally transferred to Northern Territory Gold Mines NL. *[Exploration tended to focus on the Jessops trend that extends approximately north of Jessops Sn occurrence to include Hill 156 and Hill 5 Prospects.]*

### EL8170

CR19950639 EL8170. Territory Goldfields NL. McKinlay River East. (Year 2 Annual Report.) Potential for bulk tonnage – low grade Au mineralisation in quartz stockworks. Apparently fault controlled Sn, Mn and Pb vein-type occurrences occur. No fieldwork undertaken during the second year of tenure. Area covered by South Alligator Group and Mt Partridge Group sequences including Wildman Siltstone, Koolpin Formation, Gerowie Tuff and Mt Bonnie Formation. Zamu Dolerite sills intrude the sequence. All units isoclinally folded about NNW-SSE axes which are sub-vertical and plunge northward. Drag folds on the limbs near fold closures are common. Rocks are metamorphosed to greenschist facies.

CR19950640 EL8170. Relinquishment report. Territory Goldfields NL. McKinlay River East. 21 sub-blocks relinquished *[including portion of area covering Territory Iron EL29015.]*

CR19950603 EL8170. Territory Goldfields NL. McKinlay River East. Work programme included acquisition and manipulation of digital data and a regional soil sampling programme, (312 samples, fire assay). Peak result of 5ppb Au (sample 142124: 8524574N/798913E). *[outside EL29015]*

CR19970544 EL8170. Territory Goldfields NL. McKinlay River East. 42 soil samples were collected and submitted for BLEG analysis. Peak spot anomaly of coincident Pb (136ppm), Zn (234ppm) and As (46ppm), but no anomalous Au. *[outside EL29015]*



CR19970582 EL8170. Territory Goldfields NL. McKinlay River East. Report on partial relinquishment. 6 sub-blocks retained, all northern blocks relinquished. *[outside EL29015]*

CR19980589 EL8170. Territory Goldfields NL. McKinlay River East. Final report. *[outside EL29015]*

## EL1727

CR19680007 – Australian Geophysical Pty. Northern Territory Joint Venture report looking at soil and rock sample from stream sediments, Covering EL1727 *(also intersects EL29015)*, 1729, 1728, 1751, 1730. Focus is on base metals Co, Cu, Pb, Ni and Zn. EL1727 (Nagi Creek) mentions soil enrichment with iron oxides – Kookaburra Fm *(now part of the Mcarthur gp, aka Balma gp)*. EL1729 (Rosie Creek) outlines the main geology of the area as massive quartz sandstone and ferruginous siltstone lodes *(this may indicate the boundary between Mundogie Sst and Wildman Spt)*. Sample RCR<sub>4</sub> – highly weathered ferruginous siltstone. EL1927 (Mary River Area) is situated within the Wildman Siltstone, with Fe Shales and siltstones. In places the siltstones and shales contain 'blows' of hematite. 4 rock samples – MPR2: banded hematitic siltstones, MCR4: quartz hematite breccia, MCR9: massive hematite and MPR3: quartz cemented by goethite. *(All Samples are within EL29015)*. Cross section indicates sst and spt bed that have been Fe altered.

*Information around EL1727 is the most relevant in terms of Fe mineralisation and location, however, this is within the Mary River National Park.*

## EL2226

CR19690003 – Australian Geophysical Pty. Ltd. 3 EL's 2220, 2227 and 2226. Continuation of previous year's work, area of interest for TTY is area "MD" (Mary River Area) *(EL2226 this is situated within EL29015 and interprets FE mineralisation in the area, possibly Wildman siltstone)*. Results for MD (EL2226/EL1727) were low. Search focussed on base metals *(in tenement EL2226 the focus was on Pb, Zn and Cu)*. They associated Pb-Zn anomalies with goethite-hematite mineralisation in the Mary River area within the Mt Masson formation and diamond drilling is recommended *(this could suggest that goethite-hematite surface mineralisation is underlain by base metal mineralisation)*. Attached to the report are detailed maps and cross sections that displays hematite leases inter-bedded with ferruginous shales and siltstone (Wildman Siltstone) *Mary River Area area is relevant to Jessops prospect and the new tenement EL29015.*

CR19710006 – Australian Geophysical Pty Ltd reporting around ATP2226. *Is relevant to EL29015 and the main focus of the report is based around Mary River (National park proximity?)* The project consisted of RC, diamond drilling and geological mapping, searching for high Pb and Au values. In general links sulphide mineralisation with massive 'hematite bodies' appearing in areas of shearing and brecciated with the shales and sandstones (thin layers or veins) *could be describing the Wildman siltstone/Mundogie sandstone*. Dip of ferruginous shales is predicted at 80 degrees to the north-east, 'Massive hematite-limonite rock is extensively developed within the shale sediments'. Also refer to gossan capping the iron mineralisation. *Due to the low Pb and Au values the 'gossan' they refer to could be ferricrete. Green Sandstone could be Dolerite intrusions?* Mentions graphitic black shales with pyrite usually associated with Wildman siltstone. Later refers to the term hematite rock instead of gossan due to the lack to Pyromorphite and low Pb/Au values associated





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(lead). *However the geological description is similar to that found around Frances Creek and within the strata of the Wildman Siltstone.* Hematite: 'generally occur as hard dark red or black fragments (goethite/manganese)...it is intermixed with ferruginous shales (breccia)'. Samples MA1/1/10, MA1/1/15: Mainly ferruginous shale, massive hematite, brown hematite with quartz. *No Fe values recorded in the samples. Good cross section (SECT07) displaying hematite depth within a hole. Also detailed outcrop mapping of massive hematite.*

CR19710097 - Australian Geophysical Pty Ltd, Mary River Uranium Joint Venture around prospect ATP2226 *Is relevant to EL29015, same area to the report above but different commodity.* Airborne and ground spectrometer (radiometric) surveys for high Uranium; factored in anomalies in the data due to the Cullen granite and high iron oxides. *Strong potassium reading could be linked to hematite from hydrothermal fluids traced from the granites?* Presence of ferruginous shales on the ground surveys and laterite outcrops on the surface.

### EL7674

CR19930186 Geonorth Pty Ltd. *[Partial overlap of EL7674 with EL29015.]*

CR19940541 – Geonorth Pty Ltd (R M Biddlemore) exploring Gold mineralisation and other base metals (Ag, Au and others) in tenement EL7674 *(partial overlap with EL29015)* Focus on tin associated with 'quartz-hematite breccia' units; tin bearing reefs at Mt Harris, Nelson, Buffalo and Margaret. At Mt Harris the tin is accompanied by significant traces of Gold. Activities in the report include past exploration reviews, geological surveys and rock-chip analysis. Big Julie pit near Jessop assay Gold at ranging between 9.0 – 2.38 g/t. Fe assay results are low (20%Fe), BJ03 is the quartz-hematite breccia at 22%Fe. *[High silica due to quartz presence; presence of iron found in the quartz breccia (hematite) and the iron rich gossan cap.]*

CR19950096 Geonorth Pty Ltd. Exploration focus is Mount Harris Tin Field, viewed with a possible gold association. Limited stream sediment sampling and soil sampling proved discouraging. The Mount Harris Field is considered less prospective than the Jessops trend. Outcrops of quartz-haematite breccia mark the surface expression of mineralised vein systems. Reconnaissance only carried out in the relinquished portion of the tenement. *[Relinquished portion of tenement includes the area that overlaps EL29015.]* Brecciation thought to be due to volume changes associated with deep weathering.

### EL9026

CR19960406 EL9026. Northern Gold NL. No field work 1995/1996.

CR19970245 EL9026. Northern Gold NL. Digital data acquisition and manipulation, regional soil sampling programme. 110 soil samples collected from southern portion of the tenement and assayed for base metals and gold. Best result 1.4ppb Au. *[The northern 4 sub-blocks of EL9026 coincide with EL29015.]*

CR19970450 EL9026. Northern Gold NL. Partial relinquishment report. Western and northern sub-blocks retained.



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CR19980307 EL9026. Northern Gold NL. 63 soil samples collected within the NW sector of the tenement. 2 anomalous N-S trending zones of coincident Au, As, Ag & Cu anomalies. Peak results: 8.3ppb Au, 134ppb Ag, 39.3ppm As, 114.4ppm Cu.

CR19980437 EL9026. Northern Gold NL. Partial relinquishment report. 6 sub-blocks retained. *[The 6 sub-blocks retained include all 4 sub-blocks of EL29015.]*

CR19980588, EL9026. Territory Goldfields NL. Final Report. Inactive at start of 1998/1999 year of tenure. Gold exploration, regional soil sampling (110 samples across eight 400m spaced lines) and digital data studies (Landsat imagery, SPOT imagery and AGSO mapping). Soil sampling in the north-west corner of EL9026 (within EL29015) returned Au, As, Ag and Cu anomalies in a north trending zone. *[Northern section of EL9026 lies on the southern region of EL29015 however soil sampling did not consider Fe].*

### EL4962

CR19880289 EL4962. Central Electricity Generating Board Exploration (Aust.) Pty Ltd (CEGBEA). Uranium exploration. Airborne geophysical surveying followed by detailed ground magnetic and radiometric surveys. Uranium Anomaly U1 correlates with radiometric ridges and intense magnetic horizons. Five diamond drill holes (percussion precollars) cut fresh graphitic and pyritic shale b/n 20-30m. Weak radioactivity coincident with weathering interface. The anomalous values attributed to uranium daughter elements dispersed by groundwater movement via faulted black shales (with fault orientations mirrored by linear outcrops of qtz vein material). A detailed ground survey at Uranium Anomaly U5 indicated a weak-moderate anomaly in the SE quadrant of the grid. *[One sub-block located on western margin of EL4962 coincident with EL29015. ?U5 grid.]*

CR19890492 EL4962. Central Electricity Generating Board Exploration (Aust.) Pty Ltd (CEGBEA). Gold & base metals exploration. PJ Prospect (first discovered by CRAE) re-examined with costeaning programme. Results confirm the ferruginous vein quartz mark zones of extensive faulting. Mineralisation is very patchy and density of quartz veining is highly variable with most quartz veins being barren.

CR19970142 EL9352, EL9353, EL9388, EL9392, **EL9393**, EL9394. Tripe Eight Gold Pty Ltd. Retain EL9352, EL9388 and EL9394 *[all three tenements centred on McKinlay River]. [EL9393 partially covers area of EL29015.]* Target: Epigenetic Gold associated with sulphide-quartz stockworks and sheeted veining related to faults/shear zones proximal to granite intrusions. Units considered prospective include: Koolpin Formation, Mount Bonnie Formation, Burrell Creek Formation and Zamu Dolerite.



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## **ATP1727**

CR19680007 Australian Geophysical Pty Ltd. Three lead anomalous areas spatially distributed around the Cullen Granite located by rock and stream sediment geochemistry.

CR19690003 Australian Geophysical Pty Ltd. The "MD Grid" was established over the Mount Harris area to study low order Pb-Zn anomaly. *[The grid extends westward to include the southern portion of EL29015.]* Red brown ferruginous shales (Masson Shales) are likely to be underlain by black carbonaceous shales at depth *[Wildman Siltstone]*. Reference is made to outcropping quartz-haematite-goethite-limonite lenses to 10m width and 300m length. Only low order lead anomalism with peak values b/n 360-650ppm in soil samples. Rock samples derived from mineralised lenses are moderately anomalous in Zn but deficient in Pb. MD Grid area is dominated by the nose of a symmetrical syncline. This major structure consists of a syncline with two minor anticlinal structures on its western flank.