



# CULLEN RESOURCES LIMITED

ACN 006 045 790

ABN 46 006 045 790

## QUARTERLY REPORT

30 September 2001

### HIGHLIGHTS

#### EXPLORATION

- Gunbarrel Nickel:** Preliminary evaluation by WMC confirms high nickel sulphide potential.
- Gunbarrel Gold:** Follow up BoH and RAB/RC drilling awaiting grant of 2 EL Applications.
- Yanks Bore:** Best assay of 3m @ 2.41 g/t Au (incl. 1m @ 6.65g/t Au) from re-assays of 1m samples originally combined into composite 4m drill samples.
- De Courcy:** Prospective multiple quartz veins within Highway Zone Central with grab rock chip assays up to 2.17 g/t Au discovered during recent mapping programme.
- Killaloe Gold:** Priority gold targets from re-interpretation of airborne magnetics. New RAB targets for gold from recent auger sampling.
- Killaloe Nickel:** Priority nickel targets identified from airborne magnetics interpretation. Keen interest from potential joint venture partners.

#### CORPORATE

- Pokrovskiy Gold:  
Russia (Cullen 2%).** Heap leach gold production for six months to June 30 2001 was 32,000 ozs.

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ASX Code : CUL  
Level 4, 118 Christie Street  
ST LEONARDS NSW 2065  
AUSTRALIA

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Phone: +61 2 9437 4588 Fax: +61 2 9437 4599  
Email: [info@cullenresources.com.au](mailto:info@cullenresources.com.au)  
Website: [www.cullenresources.com.au](http://www.cullenresources.com.au)

## **EXPLORATION ACTIVITIES**

### **NORTHEAST GOLDFIELDS W.A.**

#### **GUNBARREL PROJECT (Eureka Group E 53/568, E 53/535, ELAs 53/818, 837, Cullen 100%)**

##### ***Gold Exploration***

RAB drilling last quarter upgraded the Eureka North Zone to the status of a major regional target. Results included a significant intersection in YRB 151 of 20m @ 0.60 g/t Au from 46m to the bottom of the hole at 66m, including 8m @ 1.07 g/t Au from 55m. The zone represents a significant new drill target zone.

So far, three strike kms have been partially explored by RAB and shallow geochemical drilling. Magnetics indicate an extension of the structure northwards for about 20km into Cullen's EL applications E 53/818 and E 53/837. These applications cover three important gold targets recognised from previous wide spaced RAB drilling by Dominion and Plutonic. Baseline North (3,200 x 1,000m), Baseline South (3,000 x 500m) and Doyle Bore Gold (2,200 x 500m) are extensive target areas defined by clusters of anomalous gold in bottom-of-hole samples. Follow up drilling at Gunbarrel has been deferred until the tenement applications are granted.

##### ***Nickel Sulphide Exploration***

WMC has the right to earn a 75% interest in the tenements for nickel/base-metal deposits by completing a six-month Evaluation Phase, spending \$1,000,000 over 4 years (Earning Phase) and maintaining the tenements in good standing. Cullen's 25% interest will be free carried by WMC to a Decision to Mine. Gold and silver are excluded and Cullen is free to continue its gold exploration.

During the Evaluation Phase, WMC has carried out detailed compilation of previous exploration data integrated with Landsat TM imagery and aeromagnetics, field reconnaissance and discussions with Native Title claimants.

WMC reports that a number of positive exploration features have been identified for Gunbarrel:

- Geology is similar to the productive Leinster-Mt Keith Greenstone Belt;
- Favourable ultramafic stratigraphy present;
- Indications of thicker prospective channel facies ultramafics from magnetic data;
- No modern Ni exploration, the area is mostly covered (15-20% outcrop).
- Ni-Cu geochemical anomalies from earlier exploration;
- Occurrences of nickel sulphides in previous drilling.

The detailed compilation has identified nine target areas with potential for nickel sulphide deposits. Once discussions with Native Title Claimants have been completed, WMC will seek to expedite the grant of applications E 53/818 and 53/837. The airborne electromagnetic (EM) survey is now expected to start in November.

#### **WHITE WELL (E 53/645 Cullen 100%)**

No field work was carried out during the Quarter.

## **ASHBURTON GOLD PROVINCE W.A.**

### **YANKS BORE AND RED HILL WEST PROJECTS (E 08/1022 Yanks Bore, Cullen earning 65% from Udu Resources NL, E 08/1135 Red Hill West, Cullen can acquire 100% from Goldfields Exploration Pty Ltd)**

The Yanks Bore tenement (E 08/1022) covers 14 strike km of the gold-anomalous silicified structure (Hunter Zone) which extends SSE from Yanks Bore into the Red Hill West tenement (E 08/1135). At the Kays Bore Prospect (E 08/1135), Goldfields outlined several targets where gold soil anomalies extend over four strike km with values peaking at 500 ppb Au with rock chips to 1.7 g/t Au. The southern 10km extension of this structural target has not been systematically explored. Cullen now has access to approximately 25 strike km of the prospective Hunter Zone.

Scout RAB hammer drilling (11 holes, total 603m) was completed late last quarter, five targets were in E 08/1022 and two in E 08/1135. Drilling was spread over approximately eight strike km of the Hunter Zone. The eleven hole percussion drilling programme consisted of five holes at Aberfoyle Knoll, one at each of Aberfoyle North, Aberfoyle South, Fig Tree Ridge and Marshall Find and two at Cummins Hill.

Assays of 4m composite samples and follow-up of 1m samples confirm that the Hunter Zone is a significant gold-mineralised structure. The best individual intersection is 3m @ 2.41g/t Au in YBR 05 (incl. 1m @ 6.65g/t Au) and the widest 14m @ 205 ppb Au in YBR 01. The gold is associated with broad zones (up to 20m down hole) of anomalous arsenic in the range 100 to 2100 ppm As.

Further drilling along the 12km Hunter Zone within E08/1022 and E08/1135 requires better definition of targets. Closer spaced soil and/or rock chip geochemistry, geological mapping and detailed aeromagnetics are planned.

Recent reconnaissance mapping, rock chip sampling and stream sediment geochemistry evaluated four target areas over inferred structures parallel to the Hunter Zone and the SSE extension of the Hunter Zone beyond the Kays Bore Prospect. Geochemical results show no evidence of gold anomalies in structures parallel to the Hunter Zone. However rock chips from several areas on the Hunter Zone, SSE of Kays Bore, are anomalous in gold and base metals and follow up is planned.

An airborne magnetic survey is scheduled for next quarter.

### **SLATE BORE (M 08/79, Cullen 100%, E 08/1021, Cullen 100%)**

No field work was carried out. Expressions of interest have been received from a potential joint venture partner.

### **DE COURCY (E 47/874, 875, 903 and 1004– 100% Cullen)**

Geological mapping and rock chip sampling were carried out over target zones at Grid A, Grid D, Scorodite West and Highway Zone Central following bush fires earlier in the year. These areas had previously been totally obscured by thick spinifex vegetation. Anomalous gold values to 0.72 g/t Au were obtained from quartz veins exposed in Grid A. At Grid D, several prospective zones of quartz-carbonate veining hosted by quartz-mica schist were located during the mapping. Anomalous rock chip assays from 30ppb to 1.33 g/t Au were obtained. At the Highway Zone Central, zones of felsic dykes and multiple quartz veins around an altered granite plug were discovered during the mapping. Rock chip sampling returned strongly anomalous gold values up to 2.71 g/t Au. These results justify follow-up soil and rock chip sampling.

Expressions of interest were received from potential joint venture partners.

## **HARDEY JUNCTION (E 08/1145, ELA 08/1189 and ELA 08/1166 –100% Cullen)**

No field work was carried out. Newly acquired Landsat 7 shows several major WNW trending structural zones which form part of the Paraburdoo Hinge Zone. In the light of discoveries of gold mineralisation along the Hinge Zone to the east (at Cheela and Electric Dingo), reported by Newcrest and Sipa, the structures at Hardey Junction are prospective for gold.

## **EASTERN GOLDFIELDS W.A.**

### **KILLALOE PROJECT (EL 63/722\*, EL 63/765\*, P 63/1131, 1132, 1133, Cullen 100%,\*7.5% NPI to Xplore Pty Ltd)**

Both EL 63/722 (Killaloe) and EL 63/765 (Bansha) have now been granted to Cullen. The tenements located 30km NE of Norseman cover 150 km<sup>2</sup> of Archaean greenstones between the Zuleika Shear and the Boulder-Lefroy Fault at the southern end of the prospective Norseman-Wiluna Greenstone Belt. Cullen has compiled an extensive exploration database, acquired high quality detailed aeromagnetics and has carried out preliminary field reconnaissance. From this work, it is concluded that the Killaloe Project contains numerous indications of base and precious metal mineralisation and has significant exploration potential for both gold and nickel deposits.

Studies of the magnetic and radiometric data by Lithofire Geological Consultants have provided a new interpretation of project geology and identified specific targets for both gold and nickel exploration.

#### ***Nickel Exploration***

Lithofire has identified 8 high priority targets for nickel exploration, several of which may reflect prospective channel structures. A number of companies were invited to consider farming in to the nickel rights at Killaloe. There has been keen interest as previous nickel explorers in the 1970s and early 1980s identified nickel targets, most of which were not investigated by deeper drilling. Discussions are being held with interested parties.

#### ***Gold Exploration***

Lithofire identified 12 priority targets for gold mineralisation based on associations of structural zones with magnetic features characteristic of hydrothermal alteration.

Cullen recently completed a soil (pedogenic carbonate) auger geochemical survey over selected structural and geochemical targets over 9 strike kms of the Eastern Greenstone Sequence. The survey included areas in and around recognised gold prospects such as Duke, Killaloe and three of the Lithofire gold targets. There is gold anomalism over Duke (max 72 ppb Au) consistent with earlier auger surveys and deeper drilling. However, the regolith over Killaloe proved unsuitable for the survey method. Well defined low level gold anomalies (>10ppb Au, max 426ppb Au) have been obtained along the northeast border of the sampling grid approximately 1.5km north of Duke. The anomaly is open to the northeast. Other gold anomalies were located 2km east and 1.5km southeast of Duke. Multi-element analyses showed several strong and well defined base metal anomalies including a strong copper-nickel anomaly west of Duke.

A programme of follow up RAB drilling of gold targets is planned for next quarter. Where the recent auger survey duplicated earlier geochemical surveys, the gold results are of similar order. This will allow Cullen to progress direct to RAB drilling of areas, such as Peninsula, without having to verify the anomaly.

## **CORPORATE**

### **RUSSIAN FAR EAST**

#### **Pokrovskiy Rudnik (Cullen 2%)**

Cullen holds a 2% interest in the Joint Stock Company Pokrovskiy Rudnik (Pokrovskiy Rudnik), the Russian company which owns the mining lease and mining assets covering the Pokrovskiy gold deposit in the Amur

Region of Russia. UK based Peter Hambro Mining Limited owns 53.1% of Pokrovskiy Rudnik.

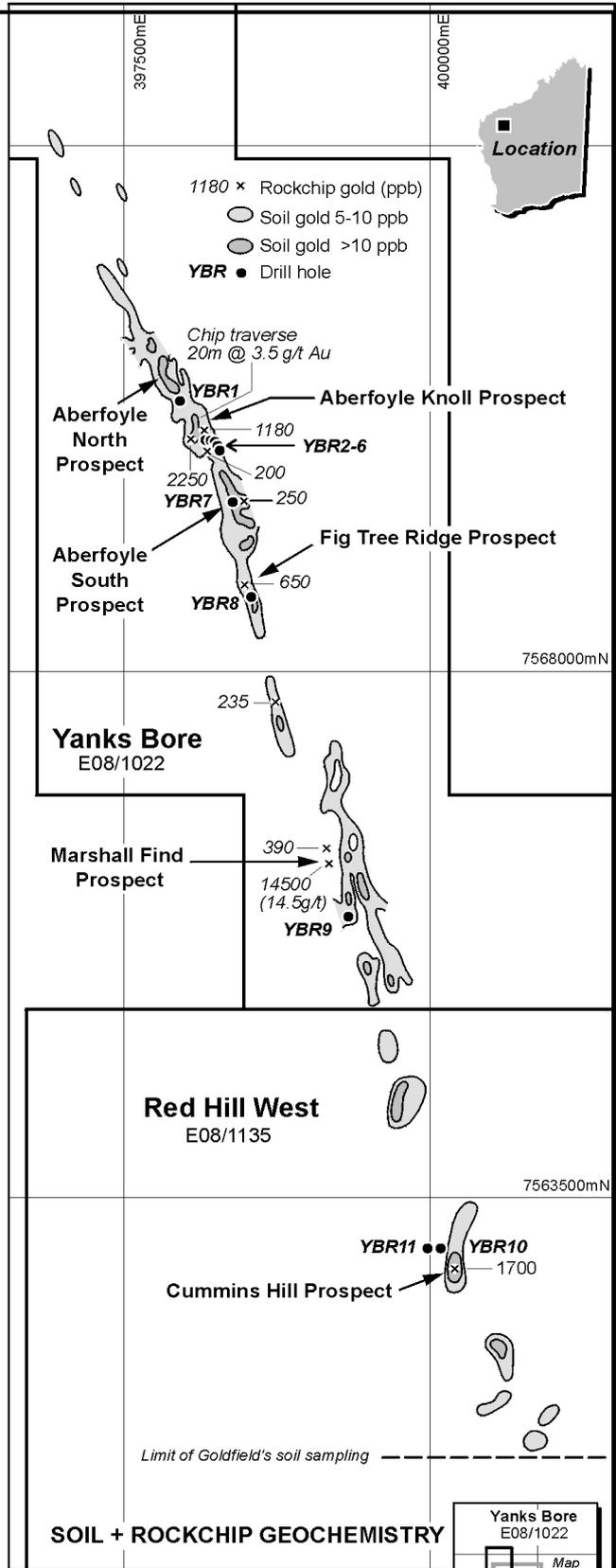
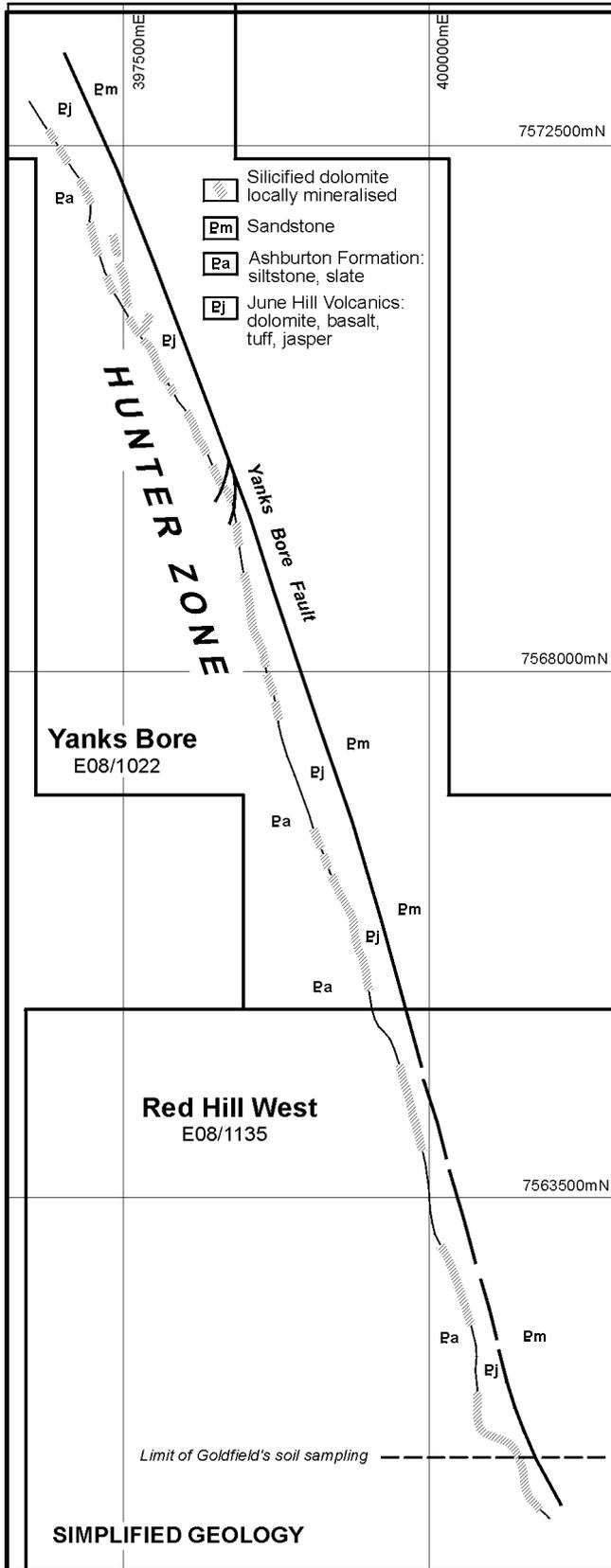
The project is now in its second year of heap leaching and is forecast to produce approximately 80,000 ounces of gold for the 12 months to 31 December 2001 with an estimated operating profit of US\$7.0 million. Actual production for the six months up to 30 June 2001 was 32,000ozs gold. Peter Hambro Mining Ltd reports that in the calendar year 2000, a total of 397,000 tonnes of ore at an average grade of 7.5 g/t Au was placed on the leach pads with 49,800 ozs of gold produced. Cullen is awaiting an update on resource and reserve estimates from Peter Hambro Mining Ltd.

Assembly of a 1MTPA processing plant is underway with commissioning scheduled for May 2002. To date, all available free cash flow from the project has been directed at repayment of borrowings incurred to meet the capital costs of commissioning the processing plant and stacking of the heap leach pads. Debt reduction continues to be a priority for the project's operators in the short term, however the receipt of future dividends from the project is now a real possibility given the operational success achieved in Russia.

The largest shareholder in the project, Peter Hambro Mining Limited is examining ways of providing all shareholders with a mechanism to provide liquidity for their investment by, for example, seeking a stock exchange listing. Cullen will maintain a keen interest in developments in this regard with the objective of realising value for its interest in the project.

**Note:** The information contained in this report, relating to the Company's is based on information compiled by The State Committee on Geology of the Russian Federation which is the overseas equivalent of being a member of the Australasian Institute of Mining and Metallurgy. This report accurately reflects the information compiled by this committee.

**John Horsburgh**  
**Director**

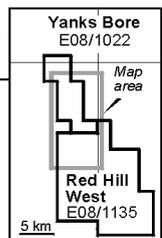


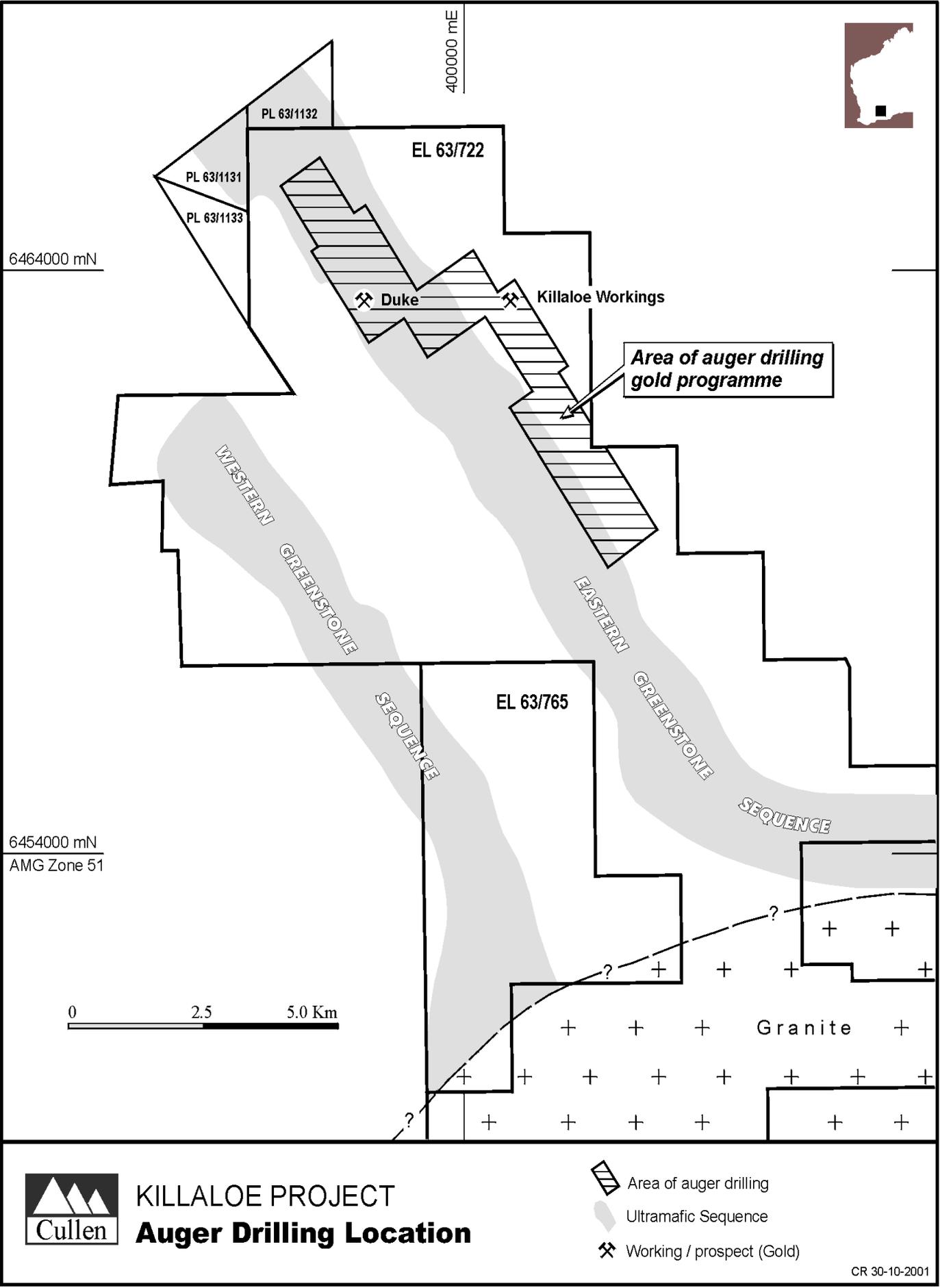
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**YANKS BORE - RED HILL WEST**

**Tenement Location-Geology-Geochemistry**

0 1km

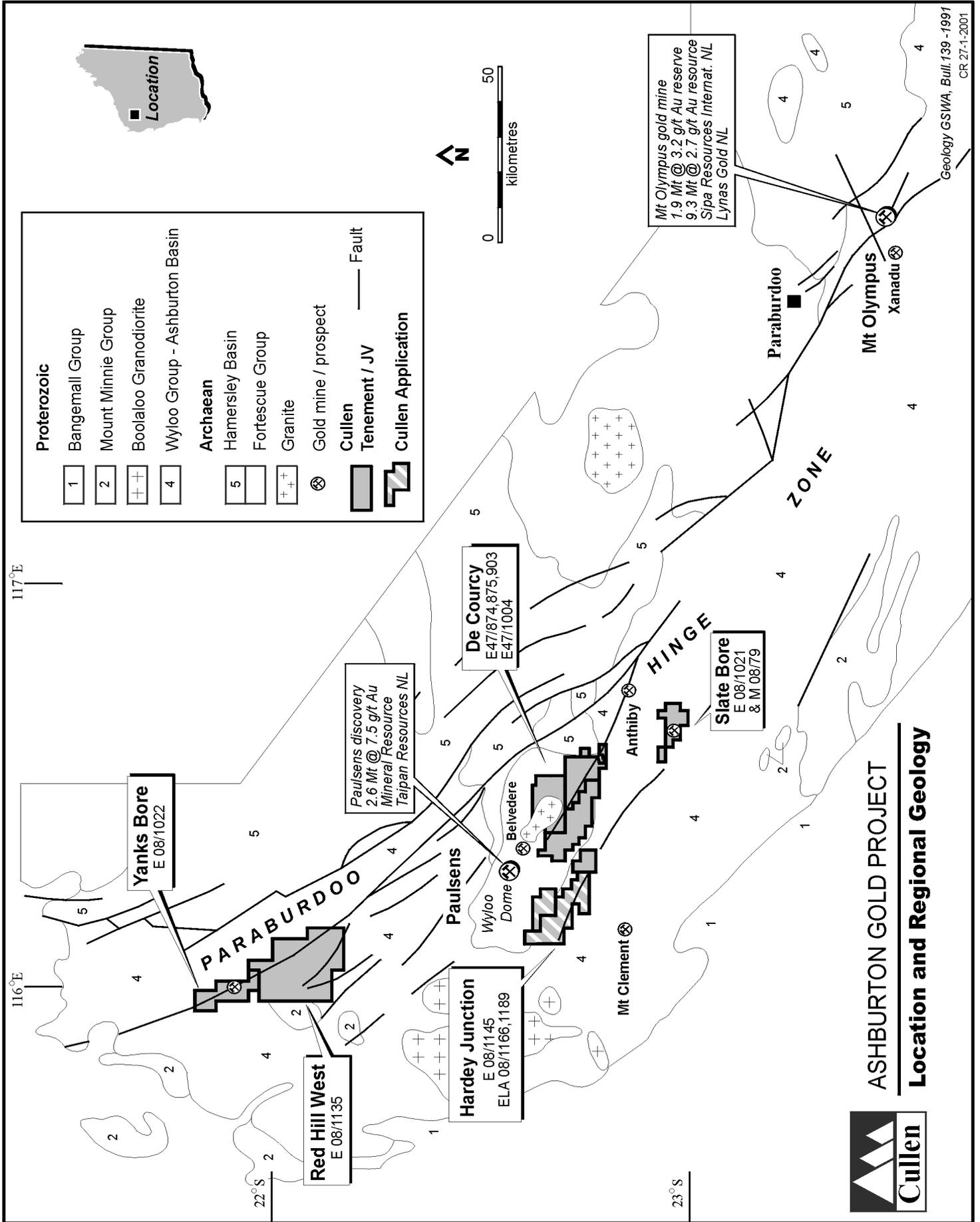


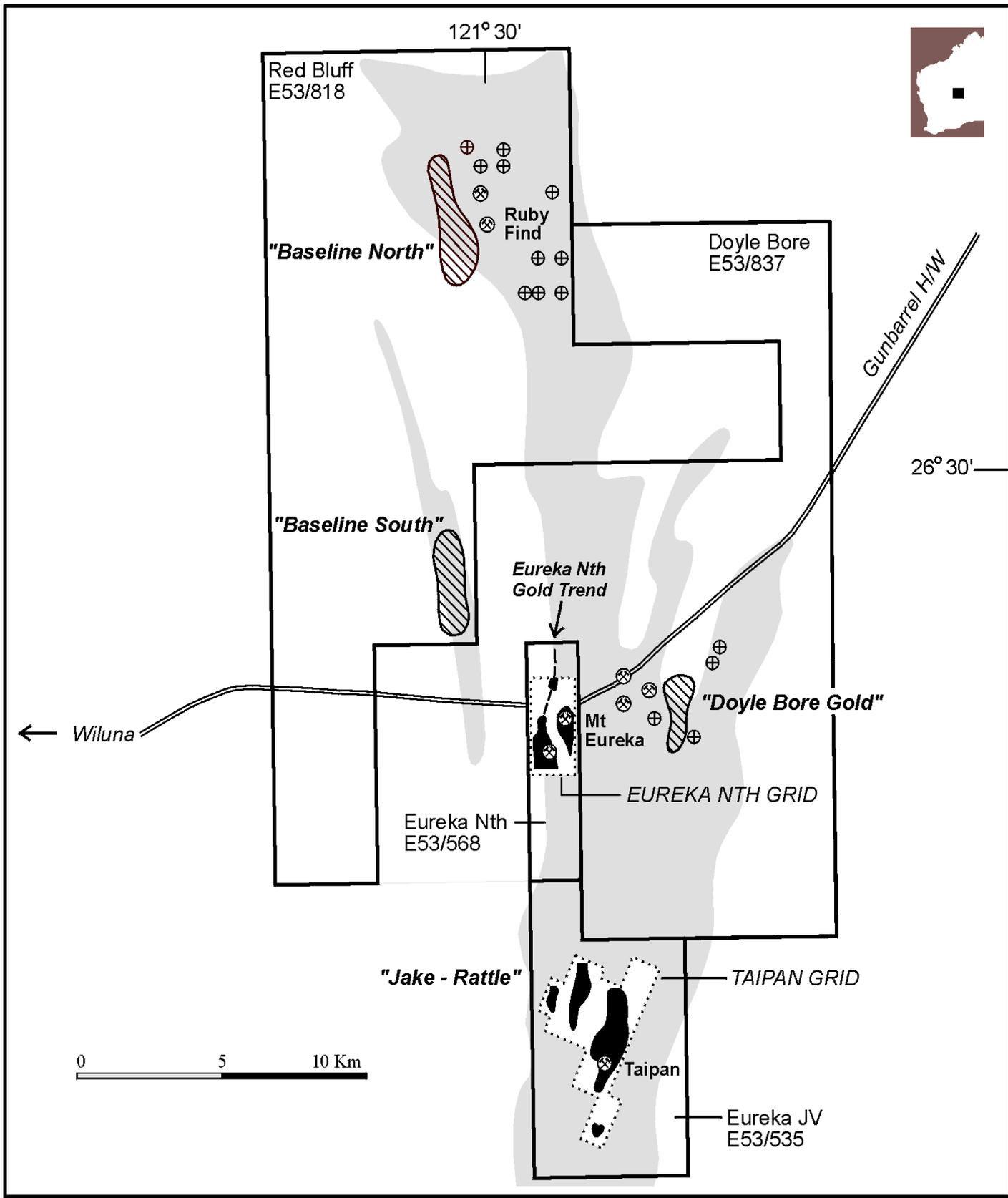


**KILLALOE PROJECT**  
**Auger Drilling Location**

-  Area of auger drilling
-  Ultramafic Sequence
-  Working / prospect (Gold)

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GUNBARREL PROJECT - Eureka Grp  
**Exploration Targets -  
 Gold + Base Metals**

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-  Gold Prospects
-  Base Metal Prospects (Cu, Ni, Zn)
-  Greenstone
-  Gold Zones (10ppb)
-  Gold Target Zones
-  Outline Prospect grid