



CULLEN RESOURCES LIMITED

ACN 006 045 790
ABN 46 006 045 790

QUARTERLY REPORT

31 December 2000

HIGHLIGHTS

EXPLORATION

- **Gunbarrel:** Encouraging results from base-of-hardpan drilling indicate new gold targets north of the Taipan Prospect at Cobra-Green and also at Jake-Rattle, Dry Blowing North and Eureka Northwest. RC drill targets have been indentified at the Taipan Prospect. Several copper-nickel base-of-hardpan anomalies associated with ultramafic zones confirm potential nickel sulphide targets. Follow up vacuum drilling is scheduled for the end of the first quarter 2001.
- **Yanks Bore:** An option to acquire E 08/1135 (Red Hill West) gives Cullen access to 15 strike km of mineralised, brecciated and silicified carbonates. Within this zone, a 4km grid area has anomalous gold in soils up to 500 ppb and rock chips to 1.7 g/t Au. The area is located 7.5km south of the Yanks Bore prospect where rock chips of up to 20m @ 3.5 g/t Au have been obtained.
- **Killaloe:** An additional 22 km² area prospective for both structurally controlled gold deposits and nickel sulphide deposits has been applied for adjoining the western boundary of Cullen's Killaloe exploration licence application.

CORPORATE

- **Fund raising:** Completion of a placement of 20 million new ordinary shares at 1.8 cents per share raising \$360,000 (before expenses).

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EXPLORATION ACTIVITIES

NORTHEAST GOLDFIELDS W.A.

GUNBARREL PROJECT

Eureka Group (E 53/568, ELAs 53/818, 837, Cullen 100%, E 53/535, Cullen 82.1%)

Gold Exploration

Gunbarrel, which is located in the highly productive Northeast Goldfields, has been the most active of Cullen's projects during the quarter. Base-of-hardpan (BOH) geochemical surveys using a vacuum drilling rig were carried out over priority target zones within E 53/535 and E 53/568 during November. Results are encouraging with strong, well-defined gold anomalies over recognised prospects at Taipan (E53/535), Mt Eureka (E53/568) and others within broad target zones at Cobra-Green, Jake-Rattle, Northern, etc. It is anticipated that infill vacuum drilling of the BOH anomalies will develop targets for RAB/RC drilling.

A total of 1042 shallow holes was drilled, mostly at 200 x 50m spacings, within the 10.5 km² area covered. Holes averaged 2.1m deep with the basal section of the hardpan layer sampled and analysed for gold and base metals. The BOH technique involves sampling a fossil soil horizon where anomalous gold, if present, is concentrated at the base of the hardpan layer. The fossil soil horizon is a better defined and a more consistent sample medium than surface soils which are often dominated by aeolian sand.

The BOH survey method has proved to be effective within the Gunbarrel project. Geochemical surveys by previous explorers were limited to surface sampling or wide-spaced RAB interface sampling without proper regolith control.

The eastern Eureka Joint Venture BOH survey (the Taipan-Taipan South area) included coverage of the **Taipan Prospect**, where gold mineralisation occurs in broad zones of quartz veining, pyrite and carbonate alteration hosted by sheared mafic schists. The Taipan mineralisation extends for 700m along strike and up to 100m in width (best previous drill intercept 22m @ 2.2 g/t Au). A broad +10 ppb Au anomaly was obtained at Taipan over widths of 120 to 320m and peaking at 182 ppb Au. This is within a more extensive and complex pattern of +10ppb BOH Au values which extend from 250m south and 1500m north of the **Taipan Prospect**, in all a 2,500m strike by 400 to 800m wide.

Other areas with significant BOH anomalies in the Taipan-Taipan South and Jake-Rattle areas include the following:

- In the Taipan-Taipan South survey area, the +10 ppb Au BOH contour has outlined a broad zone (up to 800m wide) of gold anomalies with a peak value of 434 ppb Au near the **Cobra-Green** target zone. Wide spaced RAB holes drilled by Pegasus several years ago, in the general vicinity of several of the BOH anomalies, are strongly anomalous in gold (e.g. 4m @ 1.0 g/t Au from 12m) but have not effectively tested these targets.
- At **Jake-Rattle**, a +10ppb BOH Au pattern defines the **Rattle** target zone where elevated to strongly anomalous BOH Au values (212 ppb Au peak) extend 1500m along a major structure. RAB drilling in this area by Pegasus is restricted to three sections (320m apart) and there are some gold anomalous drill holes over part of the BOH anomaly.

There are also significant BOH gold anomalies within the Eureka North survey area:

- Three discrete +10 ppb Au anomalies were outlined within the Eureka Survey area – **Mt Eureka Prospect**, **Eureka Northwest** and **Dry Blowing North**. The strongest and best defined anomaly (200m

by 700m at +40 ppb Au, peak value 182 ppb Au) is immediately east of the line of the historic workings at Mt Eureka where previous RC drilling has been concentrated.

- A strong BOH anomaly was also located on the northern-most line drilled on the Eureka North Grid, 1km NW of the Mt Eureka gold prospect – **Eureka Northwest**. Gold is anomalous over a 250m width at +10 ppb Au (maximum 281 ppb Au). There has been no previous RAB or RC drilling in the immediate vicinity of the Eureka Northwest anomaly. The anomaly is open to the north and extension of the BOH sampling is warranted.
- The **Dry Blowing North** BOH anomaly is approximately 2km SSW of **Eureka Northwest** and possibly on the same structural contact as Eureka Northwest and the Northern anomaly. It extends 800m N-S, is up to 200m wide, and peaks at 158 ppb Au. Previous RAB and RC drilling north of the anomaly area returned up to 40m @ 0.6 g/t Au in YRC 8. This has not been followed up, nor has the extension into the Dry Blowing anomaly area.

The BOH Au anomalies within the Eureka Group tenements provide the obvious focus for Cullen's gold exploration programs at the beginning of the 2001 field season. There are several areas for extension of 50 x 200m BOH survey coverage, e.g. **Eureka Northwest** (E53/568) and infill 50 x 100m BOH sampling is required to develop the stronger and better defined anomalies as drill targets.

Follow up of the gold intersection in MERC 22 (22m @ 2.2g/t Au) at the **Taipan Prospect** will be a priority for the coming season. The mineralisation plunges at 30° to the NNE and the shallower and deeper extensions have not been tested effectively. The mineralised zone was intersected by two Pegasus holes MERCs 16 & 17 (approximately 100m SW of MERC 22), but these were drilled grid south which is sub-parallel to the trend of the mineralised zone. Similarly, extensions of RC hole MERC 12 (22m @ 0.9 g/t Au) have not been tested. The intersections in MERC 12 and 22 are possibly different mineralised shoots within the same NNE trending shear zone.

Nickel Sulphide Exploration

Assessment of the nickel exploration potential of E53/535 and 568 continued with resampling and analysis of ultramafic rock intersections in Pegasus RC drill chips. The dunites and peridotites in two sections of the RC drilling within E53/568 are sulphidic and there are geochemical indications, e.g. anomalous copper with strongly anomalous nickel, that the sulphides may be of magmatic origin.

Base-of-hardpan vacuum geochemical drilling surveys over sections of E53/535 and 568 indicate potential for drill targets within broad gold exploration target zones. BOH samples from Eureka North (E53/568) show some samples with both high copper and nickel, e.g. 82 ppm Cu, 504 ppm Ni. The BOH sampling shows a well defined +300ppm nickel anomaly extending N-S for 2.6 km and 300-600m wide. Many of these samples are along a major contact of ultramafic and mafic rocks. These anomalies provide direct leads for magmatic nickel sulphide exploration.

White Well, (E 53/645 and ELA 53/933 Cullen 100%)

The White Well gold and base metal anomalies are to be followed up by BOH geochemical sampling commencing at the end of the first quarter, 2001.

The strongly anomalous base metal results from Cullen's June 2000 lag geochemical survey over the Pegasus gold anomaly within White Well E53/645 and follow-up reconnaissance mapping and sampling during October 2000 together indicate potential for sulphide mineralisation associated with a concealed high level intermediate or mafic intrusion. The June 2000 samples were reanalysed in December for a broader range of elements including lithochemical indicators. Results show anomalous to strongly anomalous nickel (up to 1346 ppm) and chromium (up to 3434 ppm) suggestive of a mafic to ultramafic intrusive source for the metals.

ASHBURTON GOLD PROJECT WA

Red Hill West (E 08/1135, Cullen can acquire 100% from Goldfields Exploration Pty Limited)

Cullen has finalised an option with Goldfields Exploration Pty Limited (Goldfields) which gives Cullen an exclusive right to explore E 08/1135 for three years. Cullen can exercise the option at any time during the three years to purchase 100% of the tenement for a cash consideration of \$15,000 and a 2.5% NSR royalty on any precious and base metal production.

The 131 km² tenement covers 15 strike km of the complex gold-anomalous silicified structural zone that extends SSE from Yanks Bore. At the Kays Bore prospect, Goldfields has outlined a number of targets on an extension of the Yanks Bore structure where several gold in soil anomalies extend over 4 strike km with values peaking at 500 ppb Au with rock chips to 1.7 g/t Au. The southern 10km of the structural zone has not been explored by Goldfields.

This option strengthens Cullen's position in the Yanks Bore district. Cullen now has access to about 25 strike km of the Hunter Zone and Yanks Bore Fault including 12 strike km of the most prospective sections where gold mineralisation is hosted in brecciated silicified carbonates. Target definition leading to RAB/RC testing will be carried out in conjunction with the Yanks Bore programme.

Yanks Bore (E 08/1022, Cullen earning 65% from Hunter Capital Limited)

No fieldwork was carried out during the quarter. A priority RC drill target has been established at the Yanks Bore Prospect (20m @ 3.5g/t Au in rock chips). Infill soil/rock chip sampling to identify other RAB/RC targets in the Hunter Zone is proposed for the 2001 field season. Preliminary work will include follow up sampling of soil anomalies in the Southern Grid adjoining the Yanks Bore Fault and inspection of rock chip anomalies in the Hunter Main and Cullen South Grids leading to a RAB/RC programme in the second quarter of 2001.

Slate Bore (M 08/79, Cullen 100%, E 08/1021, Cullen 75%)

No fieldwork was carried out. Results of Cullen's previous drilling programme were compiled and further assessed. This shows that some specific targets remain along the 2 km shear zone. Also, the extensive and largely covered areas north of the mineralised ridges have had no effective drilling. Further exploration should include detailed mapping, ground magnetics, IP surveying and shallow geochemical drilling to define RC targets. Cullen is currently seeking a farmin partner to progress the project.

De Courcy (E 47/874, 875, 903 and 1004,- 100% Cullen)

No fieldwork was carried out. A programme for the 2001 field season is in preparation. Higher priority targets and target zones for exploration include Lizzie (extensive Au As Sb rock chip and soil anomalies), Mungie-Metawandy and Highway Zone West (Au,As, Sb biogeochemical anomalies) and Cullen 2/Cullen Northeast (Au and Au As soil and rock chip anomalies). Further expressions of interest have been received from potential farmin partners.

Hardey Junction (E 08/1145 and ELA 08/1166 -100% Cullen)

De Courcy Southwest and the adjacent granted EL De Courcy South together cover some 30 strike km of a geological setting comparable to the Paraburdoo district gold deposits. Cullen has continued to compile a regional data-base that is substantially complete and there are indications that the current compilation, will identify target zones and probably some specific targets.

EASTERN GOLDFIELDS W.A.

KILLALOE PROJECT, (ELA 63/722, ELA 63/765, P 63/1131, 1132, 1133, Cullen 100%)

Highly prospective ground adjoining the western boundary of ELA 63/722 (Killaloe) was applied for by Cullen as ELA 63/765 "Bansha". The 22 km² area contains 4 strike km of the NW trending western ultramafics and 3.5 strike km of an interpreted banded iron formation which is strongly disrupted by NNE and NE structures. Previous geochemical leads include anomalous copper and nickel in soils related to the ultramafics and isolated strong gold anomalies along some of the structures. A NNW trending shear zone passing through the Bansha ELA is interpreted by the Geological Survey of WA as the Zuleika Shear.

Compilation of previous gold and base metal exploration for ELA 63/722 Killaloe is continuing. Of special interest is the recognition of strongly anomalous tellurium values in rock chips. This could indicate a tellurium-gold association which is often a signature of high grade auriferous quartz lodes such as those at Norseman.

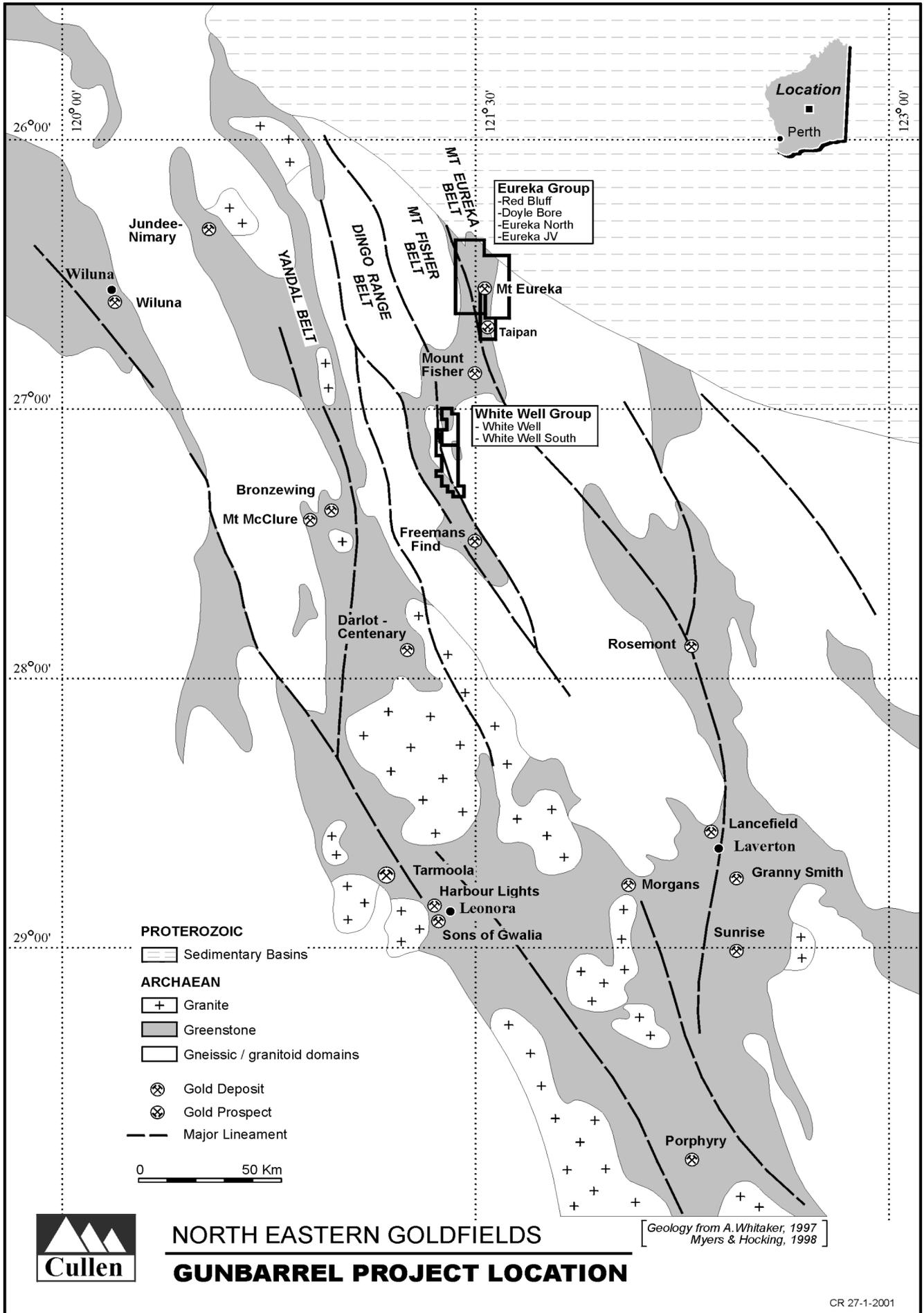
CORPORATE

During the quarter, the Company completed a small fund raising via a placement of 20 million new ordinary shares at an issue price of 1.8 cents per share to clients of State One Equities Pty Ltd. The issue raised a total of \$360,000 (before expenses). These funds will be directed at advancing the Company's exploration efforts primarily at its Gunbarrel and Ashburton projects and on new project generation.

As highlighted above, a key objective of the Company's exploration strategy for 2001 will be concluding joint ventures on selected properties. To this end, various discussions are underway with interested parties.

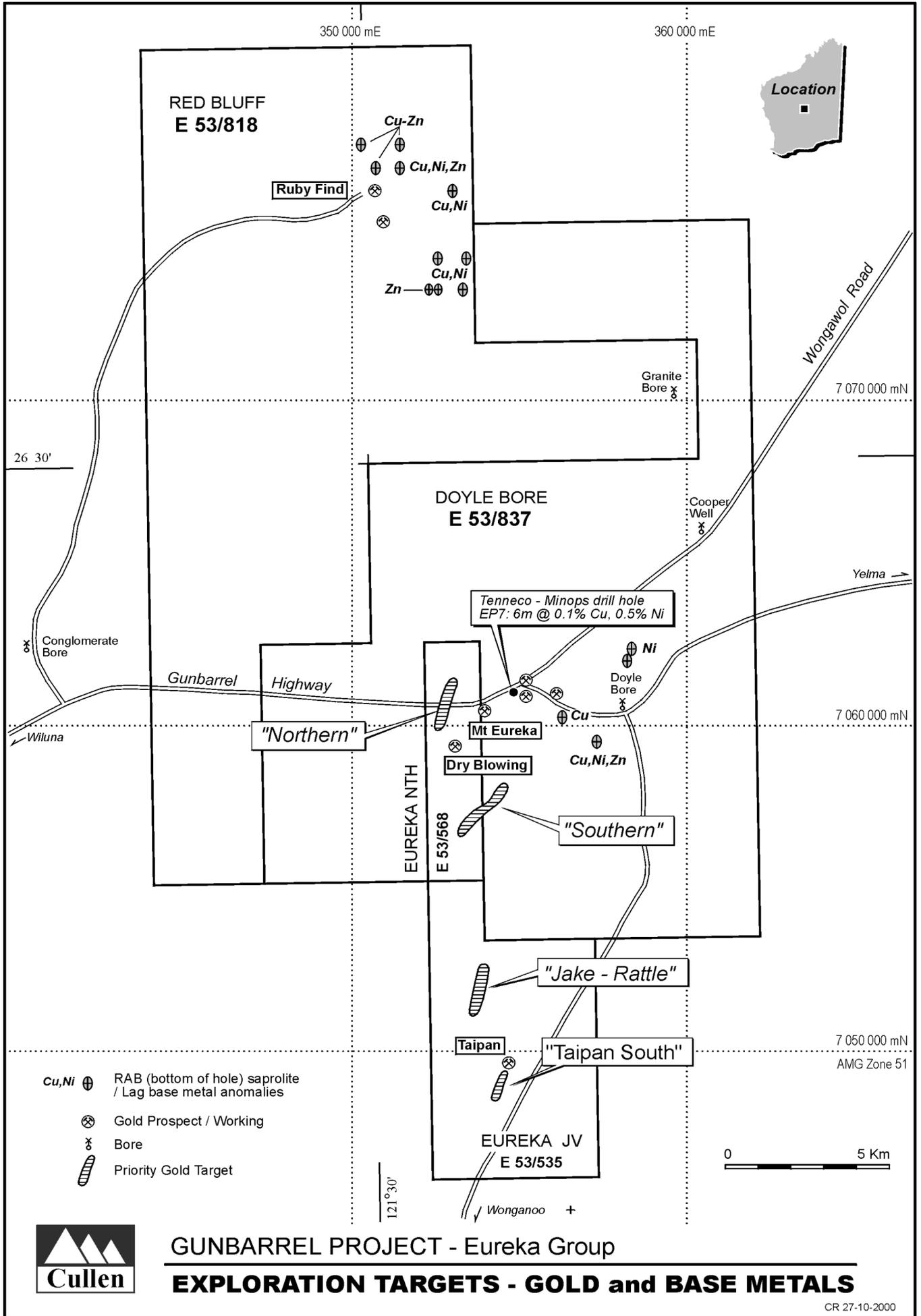
Following the placement, the Company had available cash resources of approximately \$795,000 at the end of the quarter.

J. HORSBURGH
DIRECTOR



**NORTH EASTERN GOLDFIELDS
GUNBARREL PROJECT LOCATION**

CR 27-1-2001

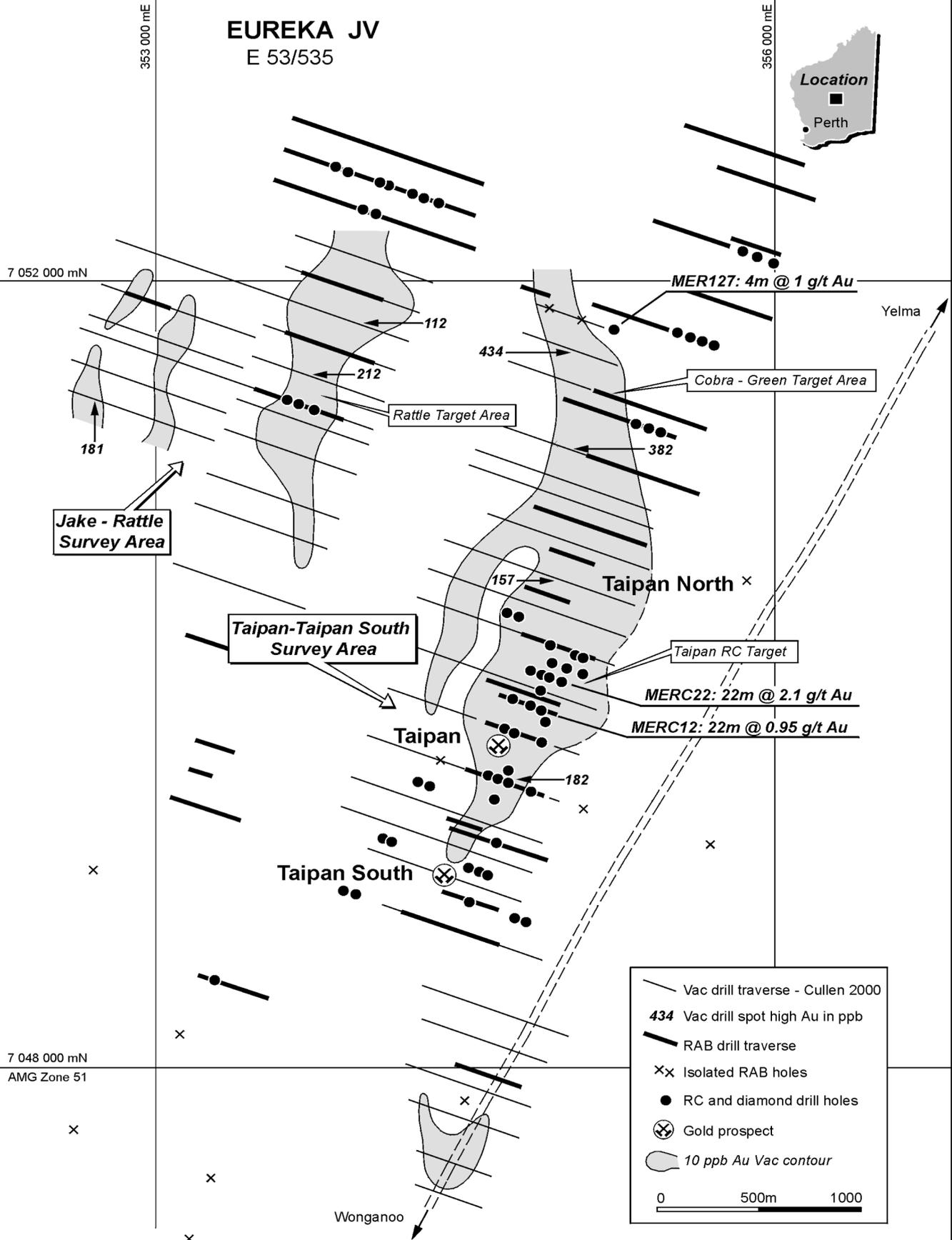


GUNBARREL PROJECT - Eureka Group

EXPLORATION TARGETS - GOLD and BASE METALS

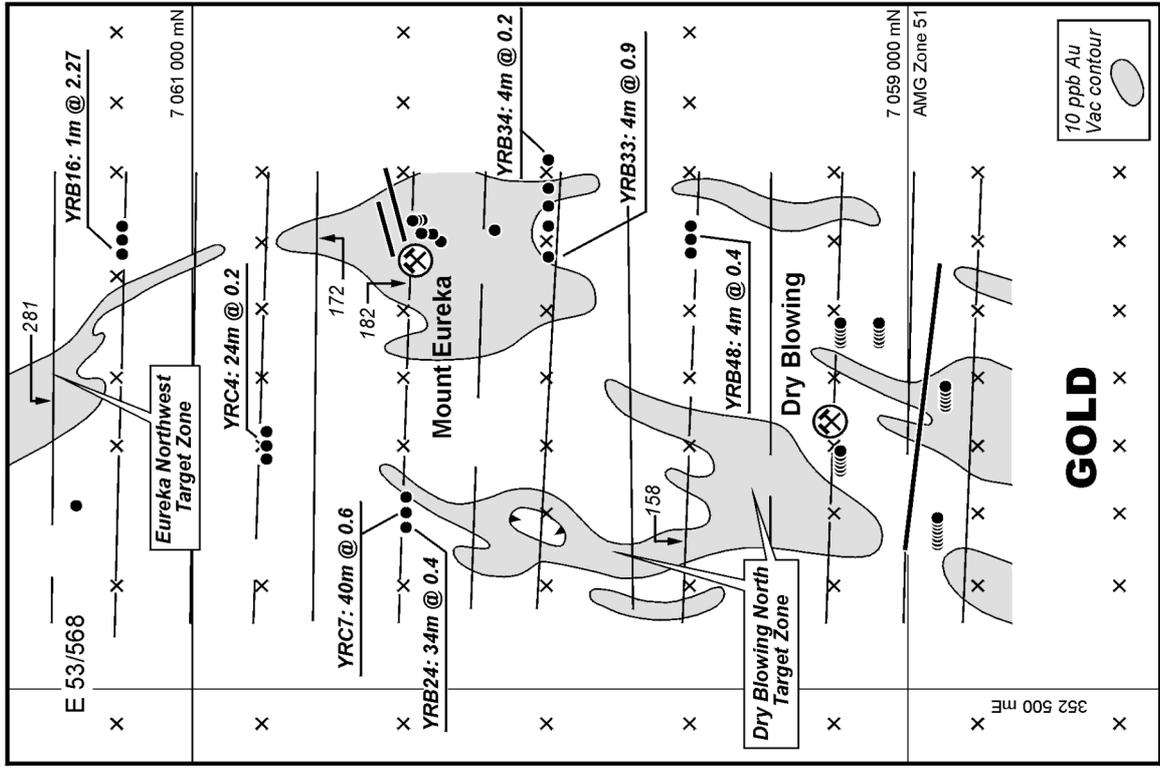
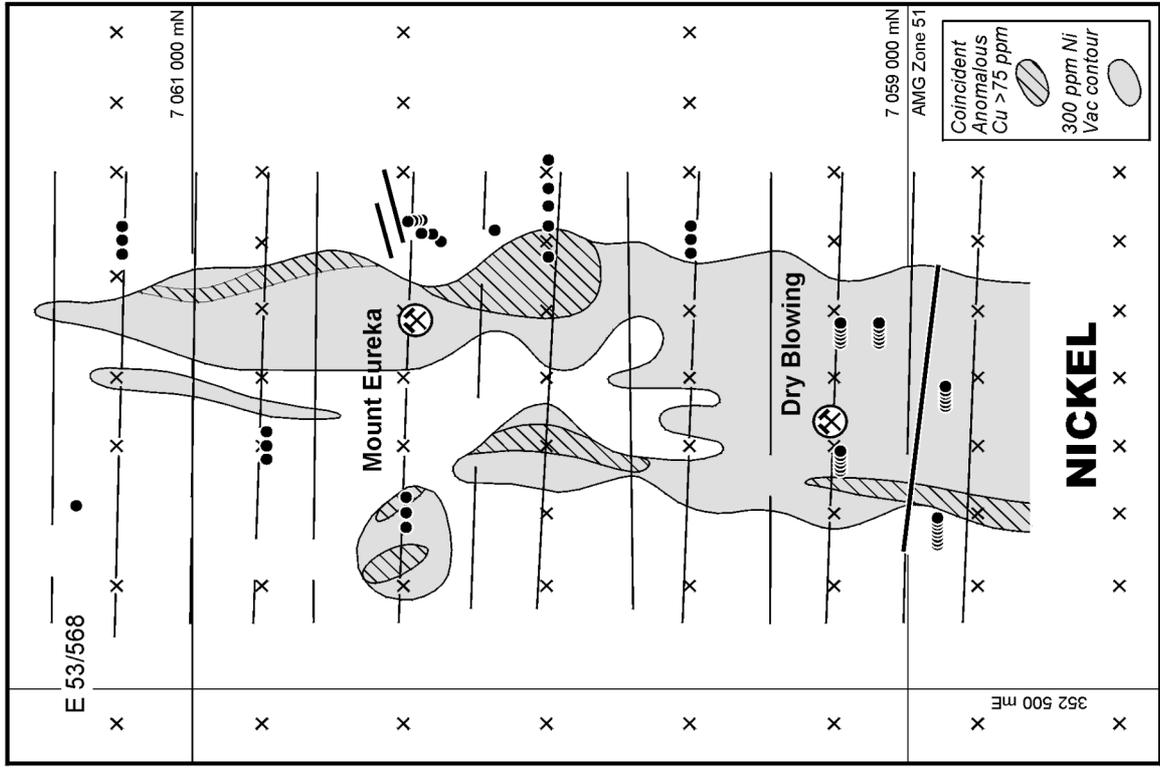
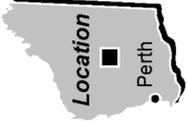
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EUREKA JV
E 53/535



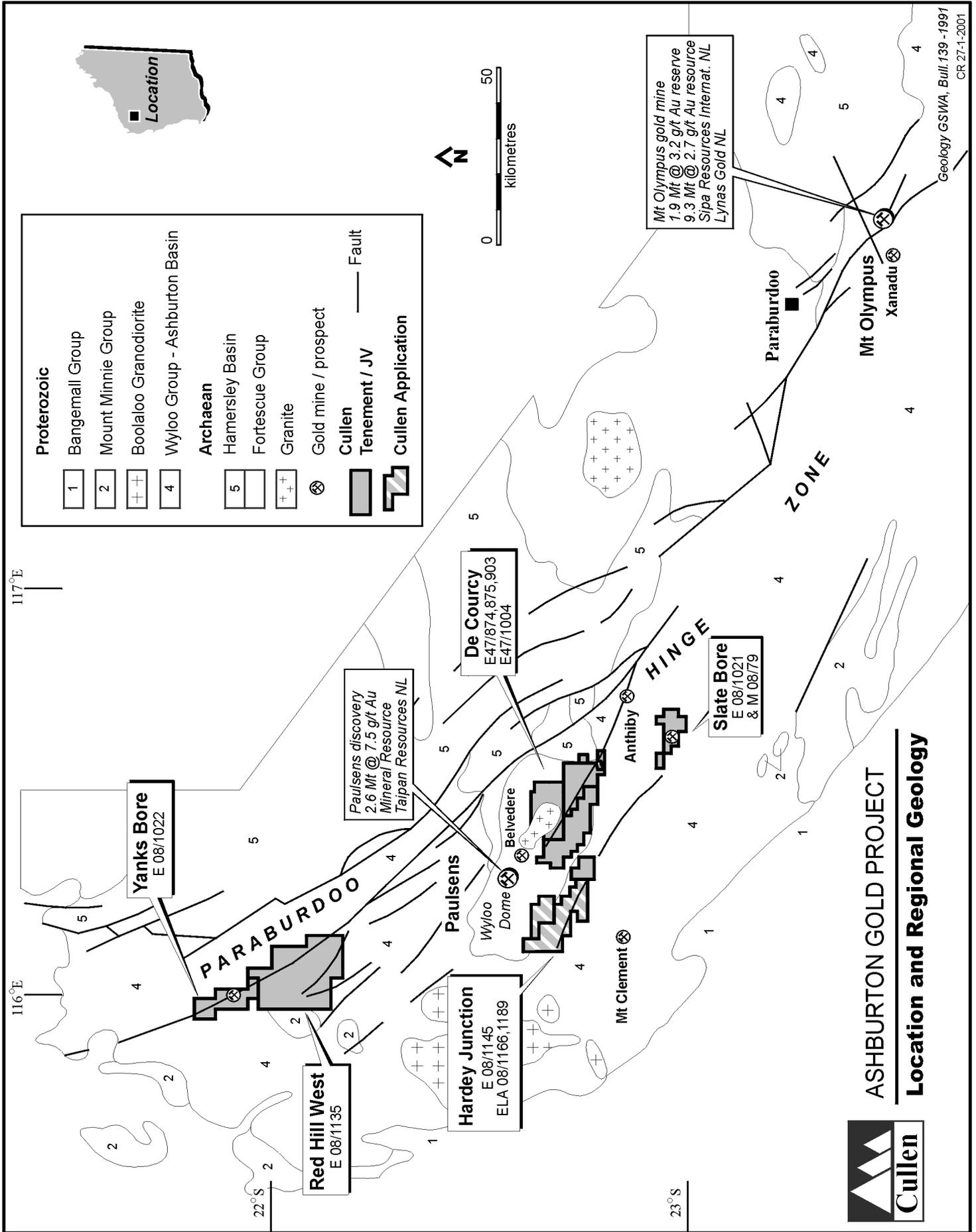
GUNBARREL PROJECT - Eureka JV
Drill hole Geochemistry

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GUNBARREL PROJECT - Eureka North
Drill hole Geochemistry

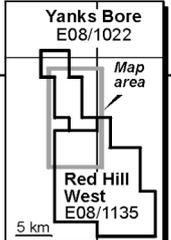
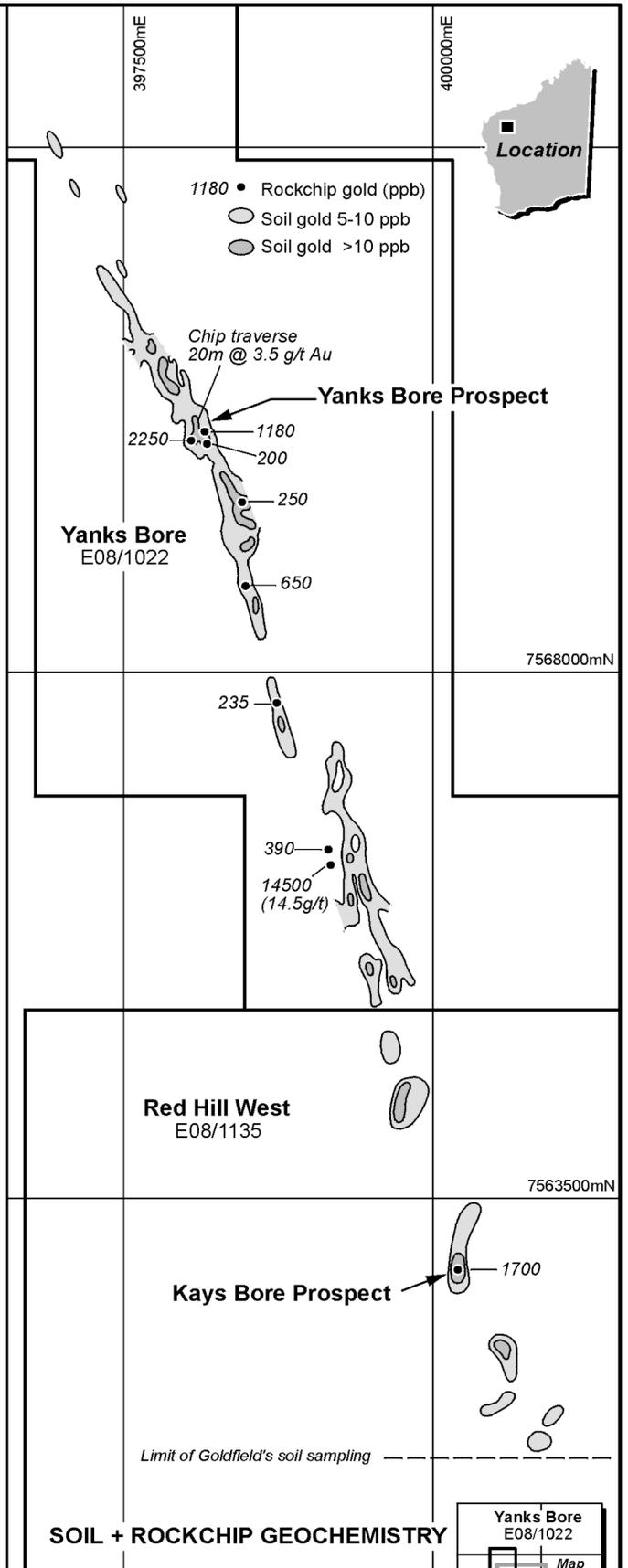
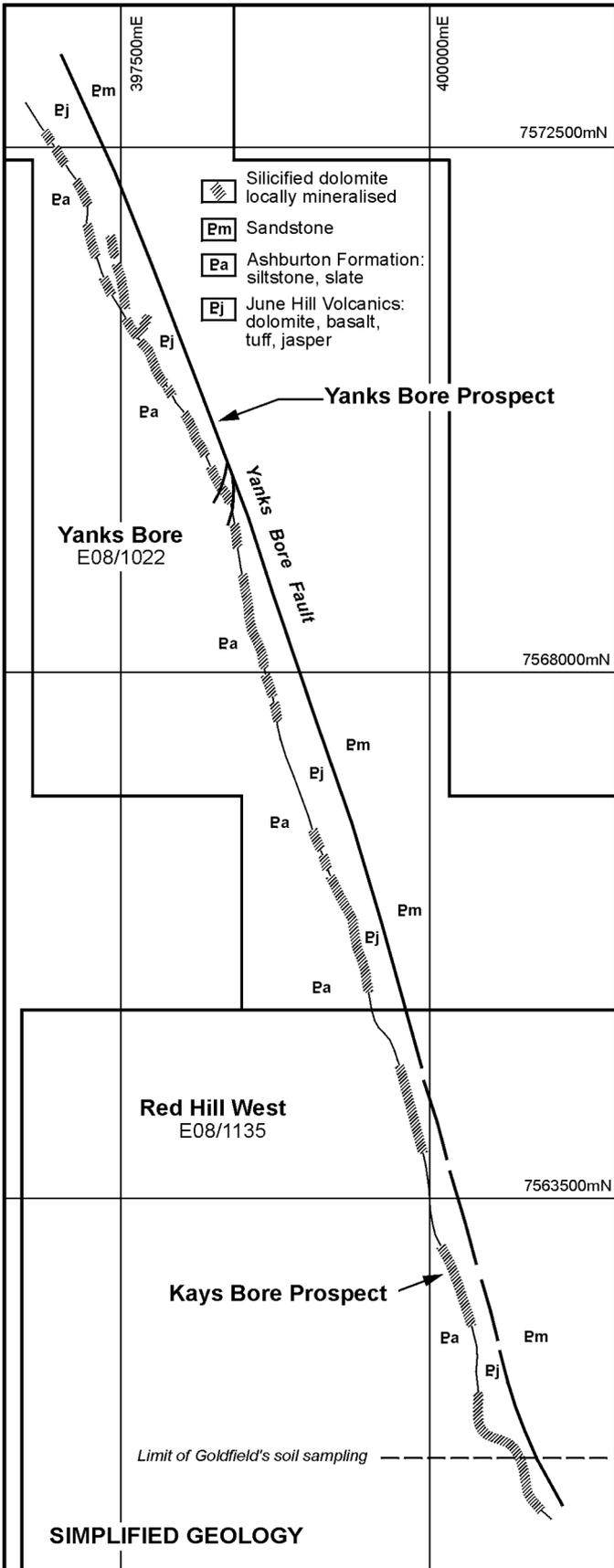
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Geology GSWA, Bull.139 -1991
CR 27-1-2001

ASHBURTON GOLD PROJECT
Location and Regional Geology



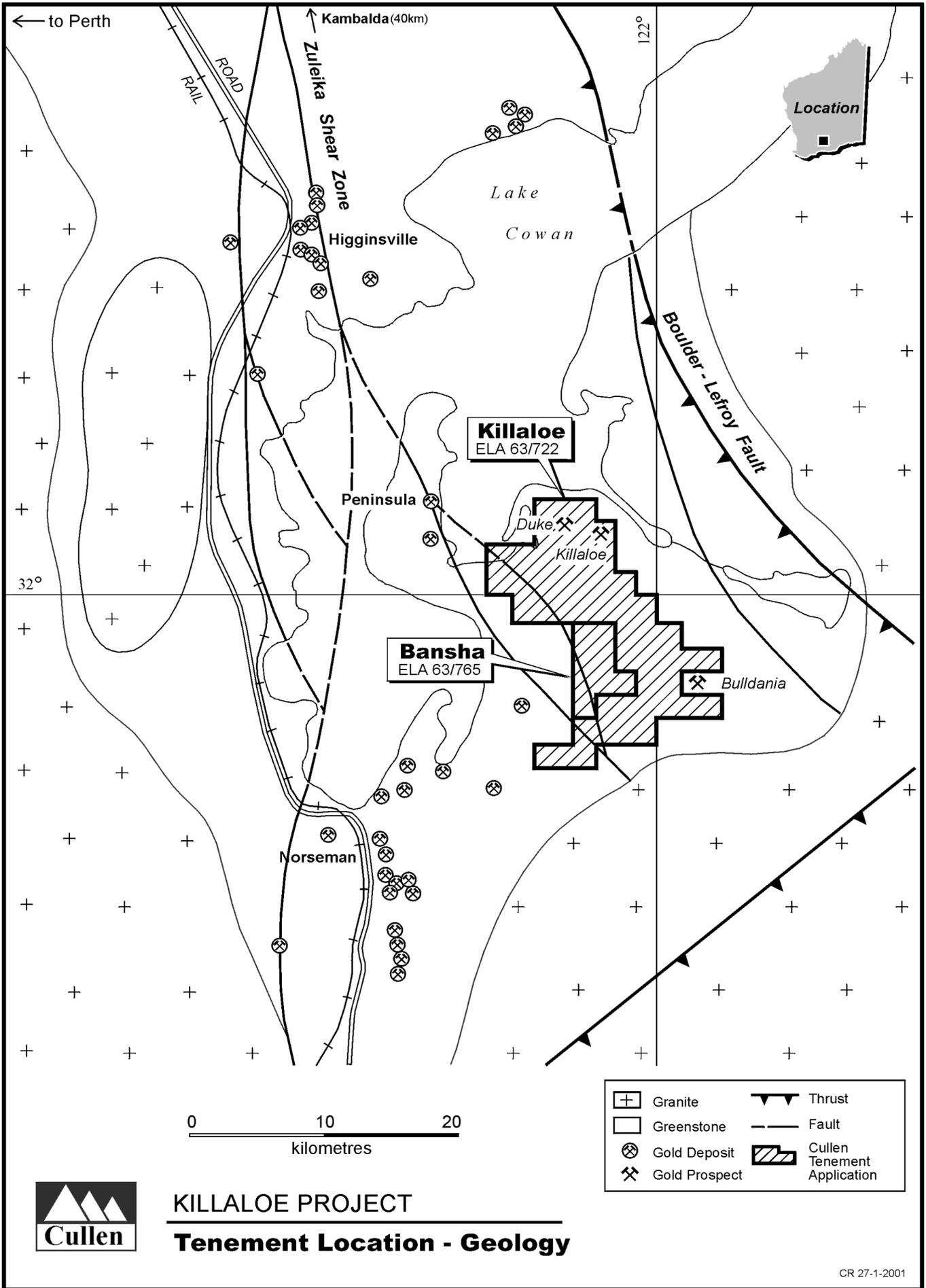


CR 27-1-2001

YANKS BORE - RED HILL WEST

Tenement Location-Geology-Geochemistry

0 1km



CR 27-1-2001

