

EXPLORATION LICENCE 8303

KURUNDI

REDUCTION REPORT

MARCH 1996

CR06/409.

J.F. McDonnell
T.R. Hall

INTRODUCTION

Exploration Licence 8303 consists of 40 blocks, granted to John F McDonnell (50%) and Thomas R Hall (50%) on 20 December 1993 for a period of 6 years.

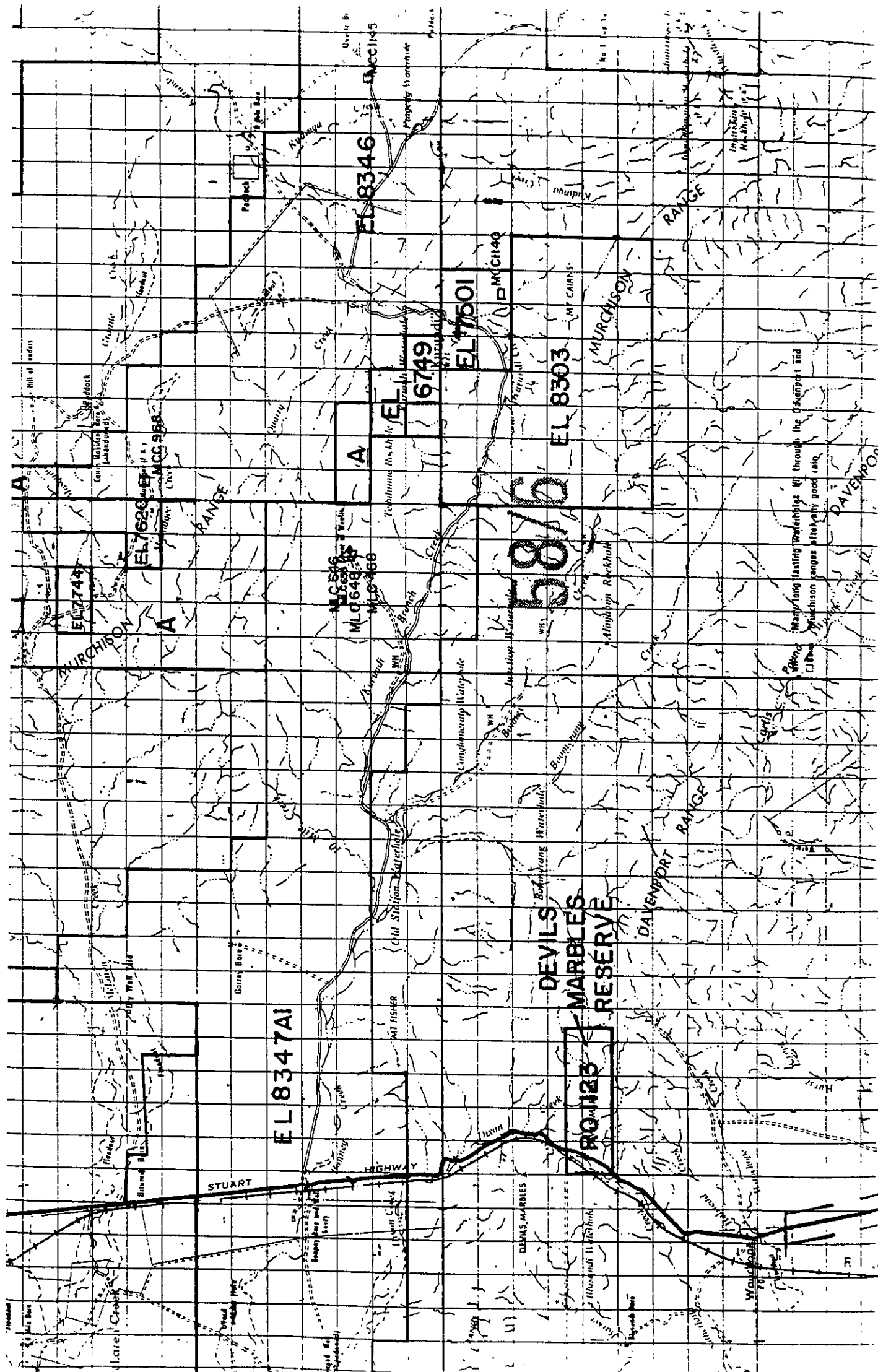
EL 8303 is located in the Kurundi area, approximately 110 kms south-south-east of Tennant Creek. The northern boundary of the licence is approx 3 kms south and west of Kurundi Station homestead. Access is via the sealed Stuart Highway and gravel roads and tracks on McLaren Creek, Singleton and Kurundi Stations (Map 1).

VEGETATION

Vegetation is typical of Hummock grasslands with scattered trees and shrubs. Grasses include varieties of spinifex, woollybut (*Eragrostis eriopoda*) and kerosene grass (*Aristidis browniana*). Shrubs and trees include acacias, notably mulga (*Acacia aneura*), turpentine (*Acacia lysiophloia*) and gidgee (*Acacia georginae*), and some eucalyptus, notably snappy gum (*Eucalyptus brevifolia*) on rocky slopes, ghost gums (*Eucalyptus papuana*) on slopes and alluvial flats and River Red gums (*Eucalyptus camaldulensis*) on the larger water courses and permanent water holes.

TOPOGRAPHY

The Murchinson Range is the predominant topographic feature within the Exploration Licence, extending from the northwest to the southeast of the licence area. Mount Cairns, the highest topographic feature in the region, is located within the eastern portion of the Licence. A large portion of the licence area is compromised of rugged terrain that is heavily incised and difficult to access.



Drainage in the northern portion of the Exploration Licence is controlled by Kurundi Creek which flows to the east and then northeast. On the other side of the Murchinson Range, the southern portion of the Exploration Licence is controlled by Bonney Creek which flows to the west.

GEOLOGY

The oldest exposed rocks in the Exploration Licence area consist of the Hatches Creek Group which are folded into several synclines, anticlines, domes and basins. They are displaced by numerous faults, which are commonly marked by reefs of quartz veins. Weathering has exposed sections of Kurinellie Sandstone and Edmirringee Volcanics which are predominantly overlain by Unimbra Sandstone, Yeeradge Sandstone and Kudinga Basalt of the Wauchope Subgroup.

The Kurundi Anticline passes through the northern portion of the Exploration Licence and the Bonney Syncline through the southeastern section. A number of minor faults cut perpendicular to the Murchinson Range.

Approximately 20% of the licence area has surficial Cainozoic sediments (gravel, sand and silt colluvium).

MINERALISATION

Minor mineralisation occurs throughout the region, including gold, tungsten, copper and bismuth minerals in quartz veins; traces of copper and lead minerals in basalts of the Hatches Creek Group; uranium in the altered quartz-feldspar porphyry intruding the Warramunga Group; and gold and sulphides in the altered volcanic-sedimentary sequences within the Warramunga Group.

Gold was first discovered in the Kurundi area by Davidson in 1898. It was found to be associated with the fault related quartz veins and also found to be highly irregular and unpredictable.

To date no significant mineral deposits have been identified in the area. The Power of Wealth Mine is approximately 6 kms to the northwest of the northwest corner of the Licence and the old Kurundi Gold Prospect is approximately 1 km north of the northern boundary.

REDUCTION OF EXPLORATION LICENCE

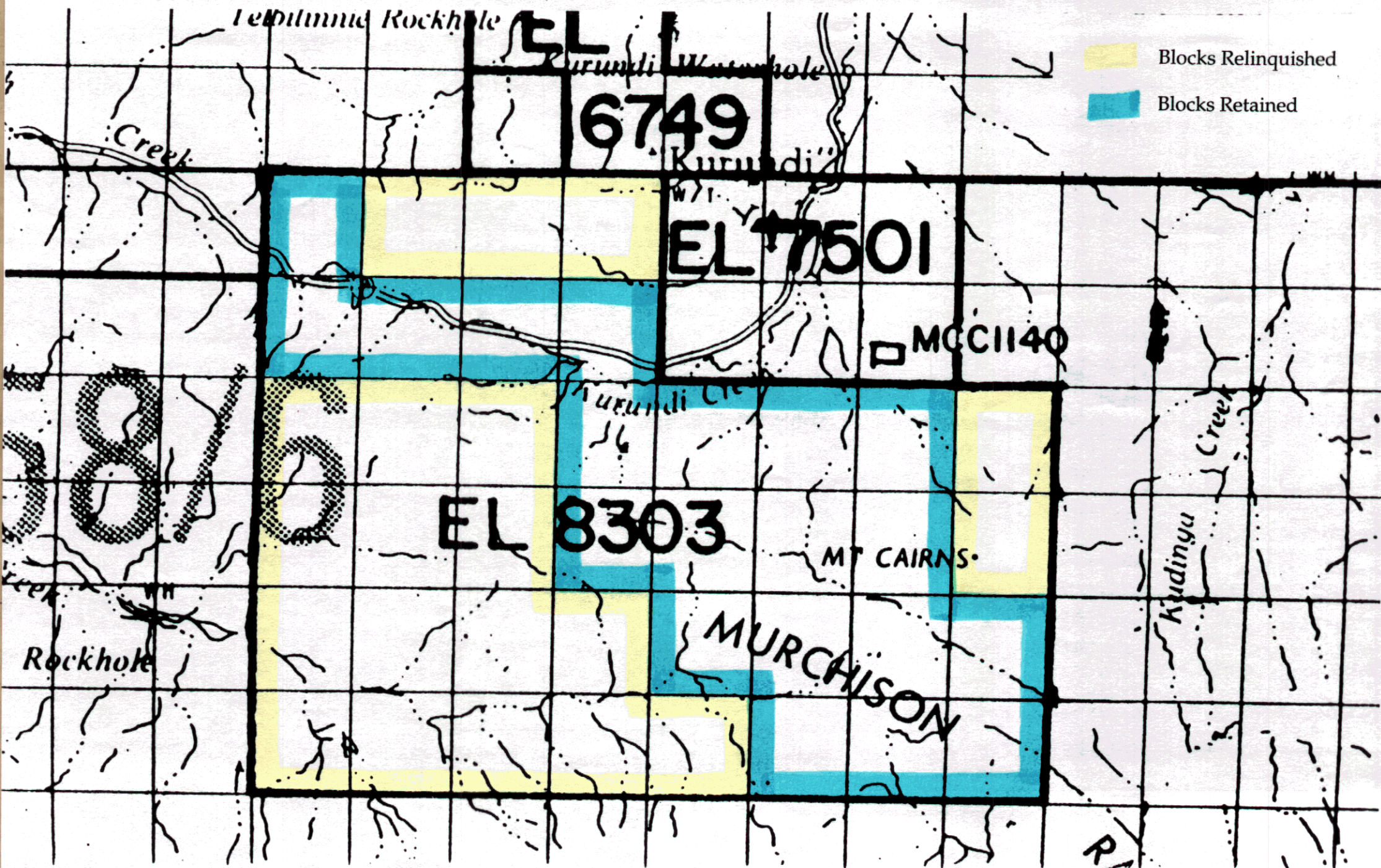
At the end of the second year of tenure EL8303 was reduced from 40 blocks to 20 blocks as per the requirements of the Mining Act. The blocks relinquished are shown on Map 2.

EXPLORATION WORKS CONDUCTED ON RELINQUISHED BLOCKS

Access to much of the Exploration Licence is extremely difficult due to the rugged terrain and the high incidence of incised drainage lines. Aerial reconnaissance identified a number of potential access routes to various sections of the Licence however most were abandoned when ground access by vehicle was attempted.

In the first year of tenure, due to access difficulties, the initial sampling program was restricted to the northern portion of the Licence. Twenty-one soil/sediment samples were collected and tested by panning in the field. These results simply identify the presence or absence of gold in the panned concentrate. Of the twenty-one samples collected only four occurred in the relinquished blocks. All four samples did not indicate the presence of gold.

MAP 2 - BLOCKS RELINQUISHED & RETAINED



The second year program involved two field trips to the Exploration Licence. The first trip was for the purpose of gaining access and sampling the southern portion of the Licence area. The second trip involved sampling of the eastern portion of the Licence and some additional sampling of the northern more accessible areas.

In the second year forty-six stream sediment or soil samples were collected and panned to assess for the presence of gold. Only five samples produced traces of gold. Of the forty-six samples collected, twenty-eight occurred within the relinquished blocks. None of these samples indicated the presence of gold.

Refer to Map 3 for the locations of the soil/stream sediment sample locations for years 1 and 2.

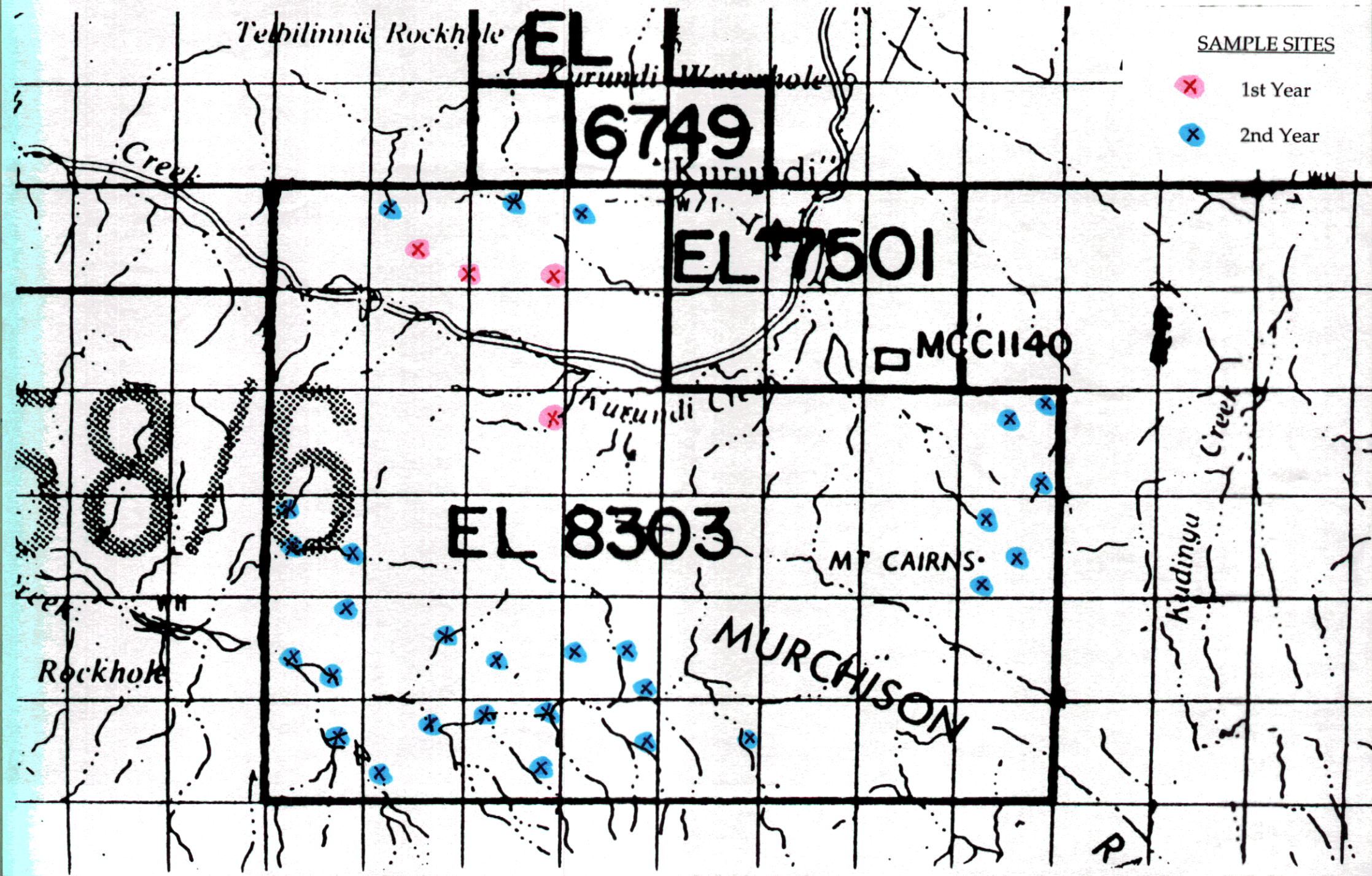
Twenty-nine rock chip samples were also collected. These samples were crushed, through a portable jaw crusher, dollied and panned to detect for gold. Four samples gave traces of gold. Of the twenty-nine samples collected, seventeen occurred within the relinquished blocks. None of these samples indicated the presence of gold.

Refer to Map 4 for the locations of the rock chip sample sites.

MAP 3 - SOIL & SEDIMENT SAMPLES

SAMPLE SITES

- ✕ 1st Year
- ✕ 2nd Year



MAP 4 - ROCK CHIP SAMPLES

