CARBON MINERALS N.L.

EXPLORATION LICENCE 4837, RINGWOOD AREA, NORTHERN TERRITORY,

REPORT ON PART RELINQUISHED ON 28th FEBRUARY, 1988.

PREPARED BY:

I. Milligan
Earth Resources Australia Pty. Limited
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MAPS

McKinlay River	1:100,000 sheet	5271
Pine Creek	1:250,000 sheet	SD52-8

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1. Location Map

2. Geology and Sample Locations

1.0 SUMMARY

Exploration for gold mineralization has concentrated on the central two blocks of exploration licence 4837. This area lies on the trend of old gold workings of the Ringwood and South Ringwood line and is retained by Carbon Minerals.

Work on the two relinquished blocks has been limited to reconnaissance mapping and minor outcrop sampling. The only features of significance located in the relinquished areas are ferruginous horizons with slightly elevated gold and arsenic content. These are considered to be of primary origin and related to chemical sediment input during periods of reduced clastic sedimentation.

EARTH RESOURCES AUSTRALIA PTY. LIMITED

I.M.Milligan B.Sc.(Hons.)
June, 1988

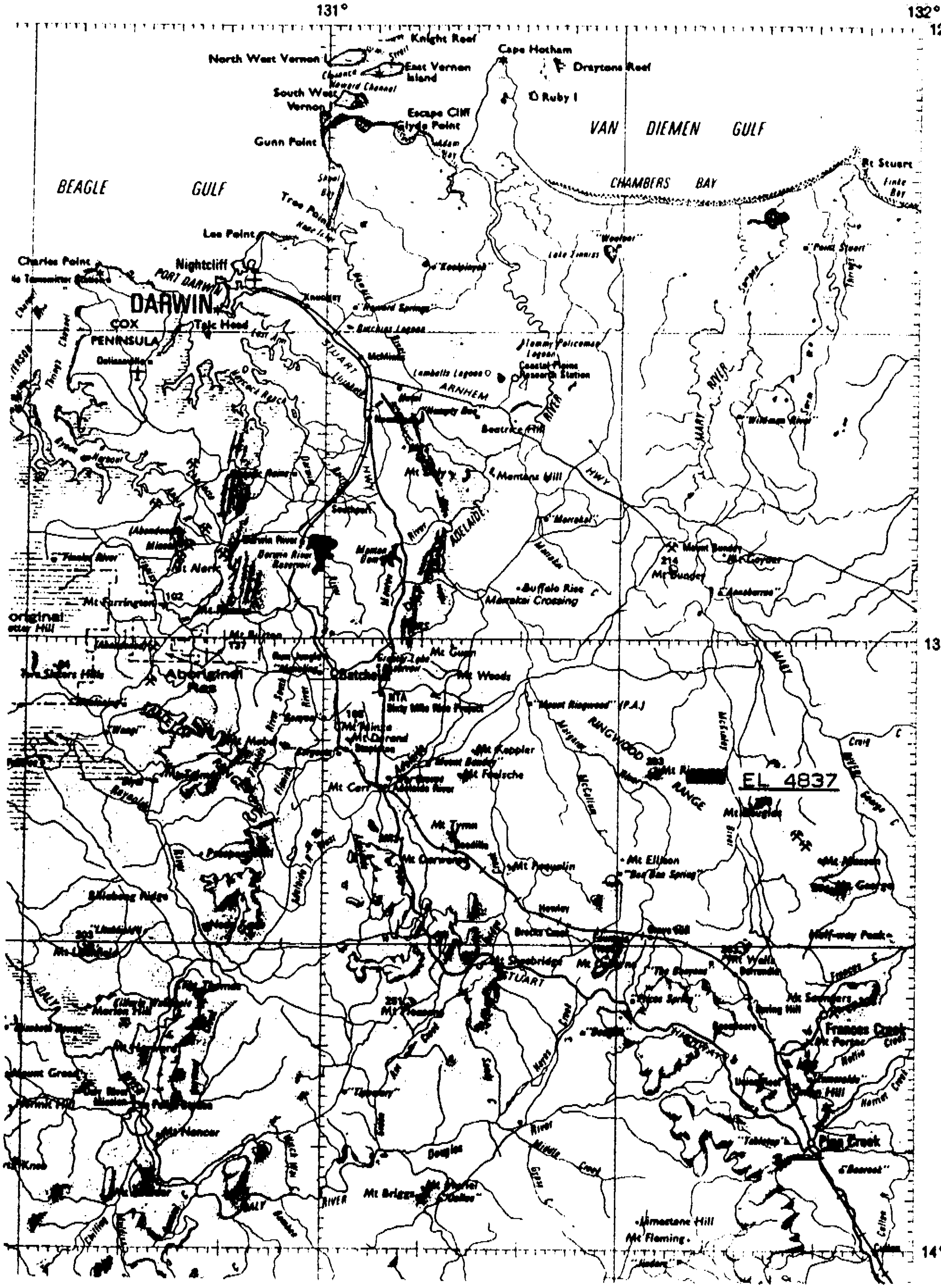

FIGURE 1 LOCATION MAP

0 10 20 30 40 50 Km

Scale 1:1,000,000

2.0 INTRODUCTION

Exploration Licence 4837 was granted to Carbon Minerals N.L. on 28th February, 1986 over an area of four graticular blocks located approximately 125 kilometres south-east of Darwin (Figure 1). The original area was bound by latitudes $13^{0}37'S$ and $13^{0}14'S$ (1.84 kilometres) longitudes $131^{0}37'E$ and $131^{0}41'E$ (7.23 kilometres) and covered 13.30 square kilometres.

Application was made on the basis of possible southern extensions of a north-west trending line of old gold workings known as the Ringwood Mines. Work has concentrated on the central two graticular blocks which lie on this trend.

At the end of the second year of tenure the area was halved with the relinquishment of a single block on either side of the central pair.

Earth Resources Australia Pty. Limited, consulting geologists, are project managers for Carbon Minerals N.L. and have carried out all work on the licence area.

3.0 GEOLOGY

Siltstone and greywacke of the Burrell Creek Formation (Finniss River Group) occurs throughout the licence area. Greywacke rarely forms units greater than one metre in thickness and is overall subordinate to siltstone. Siltstones are generally moderately to well cleaved forming "porcupine" outcrops which, together with poor definition of bedding planes, present problems in obtaining conclusive bedding measurements. Regional strike is north-south and dips are steep to vertical with occasional evidence of overturning. Facing is predominantly eastward.

The largely siltstone sequence is punctuated by occasional highly ferruginous horizons. These are thin (less than one metre) and contain abundant ex-pyrite cavities in bedding parallel concentrations, occasional spongy gossanous lenses and quartzose (?ex-chert) boudins. Sampling of these units shows some elevation in gold and arsenic concentration (see Section 4.0 Outcrop Sampling).

Several small sills (less than one metre thick) of a dark coarsely micaceous igneous rock (?lamprophyre) were observed but were not traceable for any significant distance.

Quartz reefs occur sporadically throughout the area. These are generally parallel to regional bedding/cleavage, and consist of white quartz with minor chloritic growths and earthy iron and/or manganese oxide. No significant gold values were obtained from quartz in outcrop.

RELINQUISHED

RELINQUISHED

McKINLAY RIVER

830 mE
131° 37' E
840 mE
850 mE
860 mE
870 mE
880 mE
890 mE
900 000 mE
131° 41' E
910 mE

390 mN
380 mN
13° 13' S
370 mN
360 mN
13° 14' S
350 000 mN

GRID : 1,000m intervals of the Australian Map Grid, Zone 52 L GL

- Alluvium & flood plain deposits
- Skeletal soils & colluvium (over Pfb)
- Burrell Creek Formation
- Boundary of exposed Pfb
- Boundary of Cz
- Bedding trends
- Drainage
- Workings
- Outcrop sample point
- Drainage sample point

N

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CARBON MINERALS N.L.

GEOLOGY & SAMPLE LOCATIONS

EL 4837, RINGWOOD, N.T.

SCALE 1:25,000 — 0 500 1000 1500 METRES

FILE NAME: RWOOD
AUTHOR: L. MILLIGAN

FIGURE 2

4.0 OUTCROP SAMPLING

The majority of work on the licence has been carried out on the central two blocks and only reconnaissance mapping and minimal sampling was undertaken over the relinquished areas. This is indicated in Figure 2.

Outcrop samples taken from the relinquished areas are described below:

Sample No.	Location*	Description	Sample Type	Assay (ppm)	
				Au	As
3591	85303678	Siltstone with ex-pyrite cavities and lenses of spongy gossanous material	Sel. grab outcrop	0.18	1070
3592	85203694	Siltstone similar to 3591	Sel. grab outcrop	0.17	200
3593	83873650	Quartz, white, opaque	Rand. grab outcrop & rubble	0.02	15

* Location AMG coordinates to 10m.

Sample Type

sel. grab - selective grab sample

rand. grab - random grab sample

5.0 CONCLUSIONS

Reconnaissance work has indicated little potential for economic gold mineralization in the relinquished areas. Quartz outcrops are generally of massive opaque material with no indications of auriferous mineralization.

Slightly elevated gold and moderately high arsenic values were obtained from thin (to 10cm) gossanous lenses in ferruginous siltstone horizons. The elevated gold and arsenic contents are presumed to be a primary feature related to a greater chemical sediment input in these horizons.