

MAGNUM RESOURCES LIMITED

EXPLORATION LICENCE 4810  
GLENCOE PROSPECT  
NORTHERN TERRITORY

REPORT ON EXPLORATION FOR FIRST YEAR OF TENURE  
20 NOVEMBER 1985 TO 19 NOVEMBER 1986

MAPS

Batchelor	1:100,000 sheet	5171
Pine Creek	1:250,000 sheet	SD52-8

PREPARED BY:

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## 1.0 SUMMARY

During the first year of Exploration Licence 4810 work has concentrated on an area adjacent to the eastern boundary where an anticlinal structure, hosting gold mineralization, extends into the licence area from the adjacent mineral claims (also held by Magnum Resources Limited). A substantial costeaning and diamond drilling programme has defined the continuity of the structure and resulted in several promising intersections of gold mineralization. Further drilling is planned to fully evaluate the economic potential of this zone.

As the mineralized zone extends across the boundary of the mineral claims and EL4810, exploration on both areas of tenure has been carried out as a single integrated programme. This report should be regarded as a preliminary report only and full details of all exploration, results, logs and sections and plans will be presented in the annual report on Mineral Claims N20 to N43 due on 31st January, 1987.

EARTH RESOURCES AUSTRALIA PTY. LIMITED

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December, 1986



## 2.0 INTRODUCTION

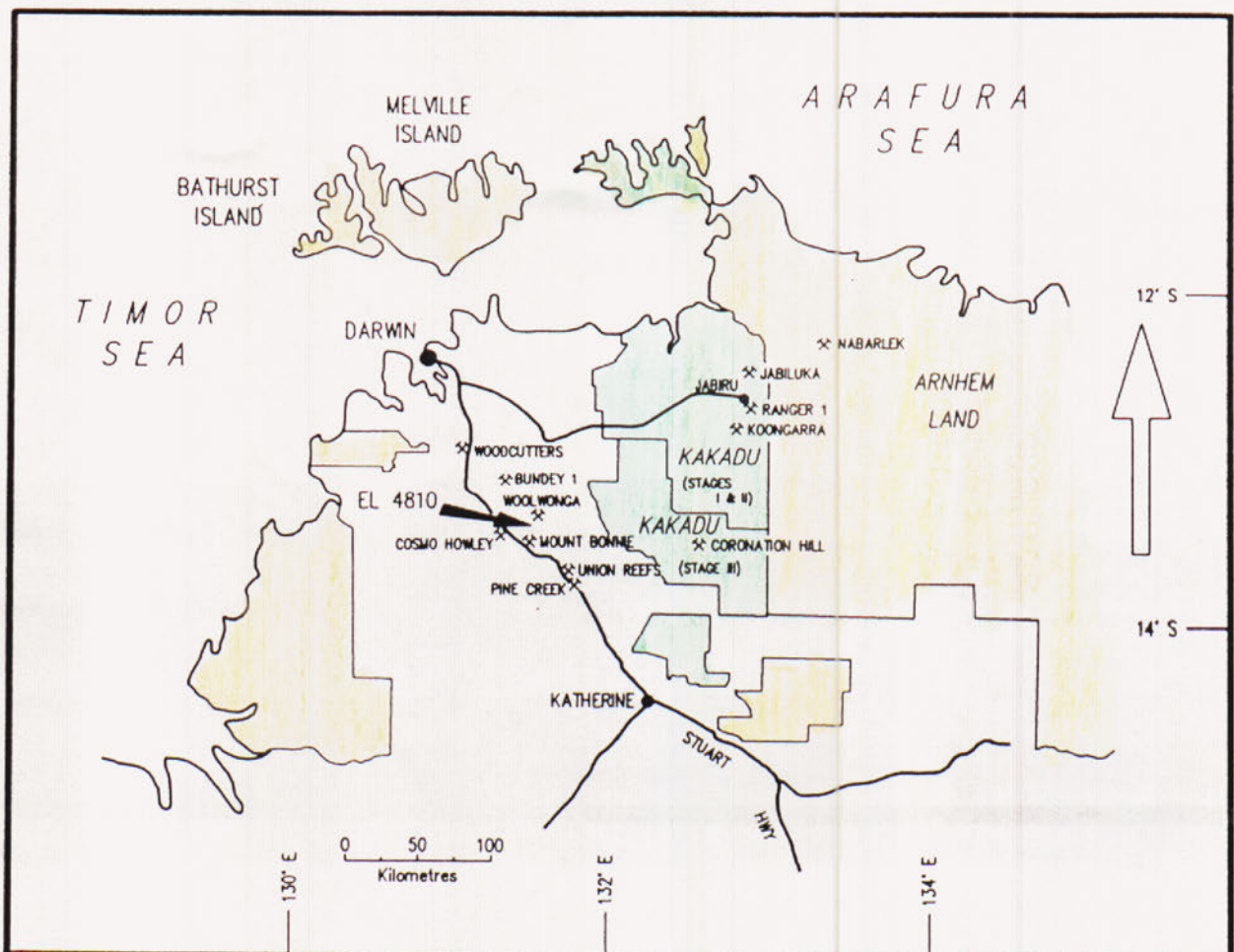
Exploration Licence 4810 was granted to Magnum Resources Limited on 20th November, 1985. The licence covers a single graticular block number 4067 of Map 14/2 (Batchelor 1:100,000 sheet), located some 130 kilometres southeast of Darwin as indicated on Figure 1.

The licence was applied for on 30th May, 1985 following indications that gold mineralization located on the Companies adjoining block of mineral claims (MCN20 to N43 - see Figure 2) extended into the application area (see Milligan, 1986). This zone of mineralization has been named the Glencoe\* Prospect and the Minister has been informed by letter dated 2nd June, 1986, of its possible economic potential.



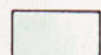
Exploration during the reporting period was carried out by geological consultants Earth Resources Australia Pty. Limited as part of an overall programme covering the Glencoe Prospect. Work has consisted primarily of costeaning and diamond drilling. As a yearly report on the adjacent mineral claims is due on 31st January, 1987, full details of the work on EL 4810 including details of all sampling, drill logs etc will be presented at that time as part of a combined report, however a summary of work and expenditure is presented herein.

\* After the site of Glencoe Station homestead (c.1880) some 3 kilometres to the southeast.





## REFERENCE

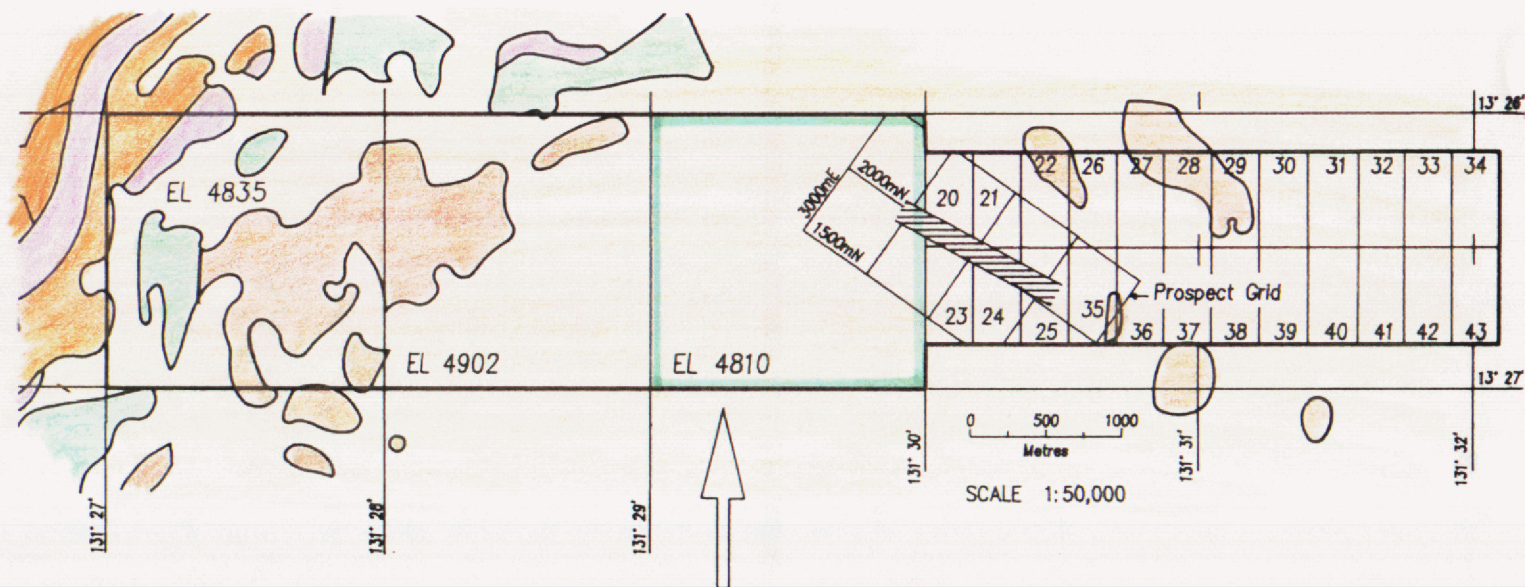
-  ROADS
-  ABORIGINAL FREEHOLD LAND
-  NATIONAL OR NATURE PARKS

# Figure 1 REGIONAL LOCALITY PLAN Northern Territory



EARTH RESOURCES AUSTRALIA PTY LIMITED





## REFERENCE

- |  |                         |
|--|-------------------------|
| Mineral Claim (Granted)                                      | Recent & Cenozoic Cover |
| GLENCOE PROSPECT<br>Known Mineralised Zone<br>(See Figure 5) | Zamu Dolerite           |
| Boundary of Tenement Group                                   | Mount Bonnie Formation  |
| Fault  | Gerowie Tuff            |
| Geological Boundary  | Koolpin Formation       |

Figure 2

EL 4810 & Surrounding  
Magnum Resources Tenements



### 3.0 WORK PROGRAMME AND RESULTS

During the 1986 field season work within EL4810 was concentrated on the western end of the Glencoe Prospect (see Figure 3). Initial mapping and surface sampling was followed by an intensive costeaning programme. Promising results provided the impetus for follow-up diamond drilling.

#### 3.1 Surface Mapping and Sampling

The mineralized area forms a low hill upon which several quartz reefs are exposed. Other outcrop is limited to areas scraped for road material where weathered siltstone and greywacke are exposed.

Evidence of previous investigation included two small (<0.5 metre deep) pits and traces of two shallow trenches. These appear to be of considerable age.

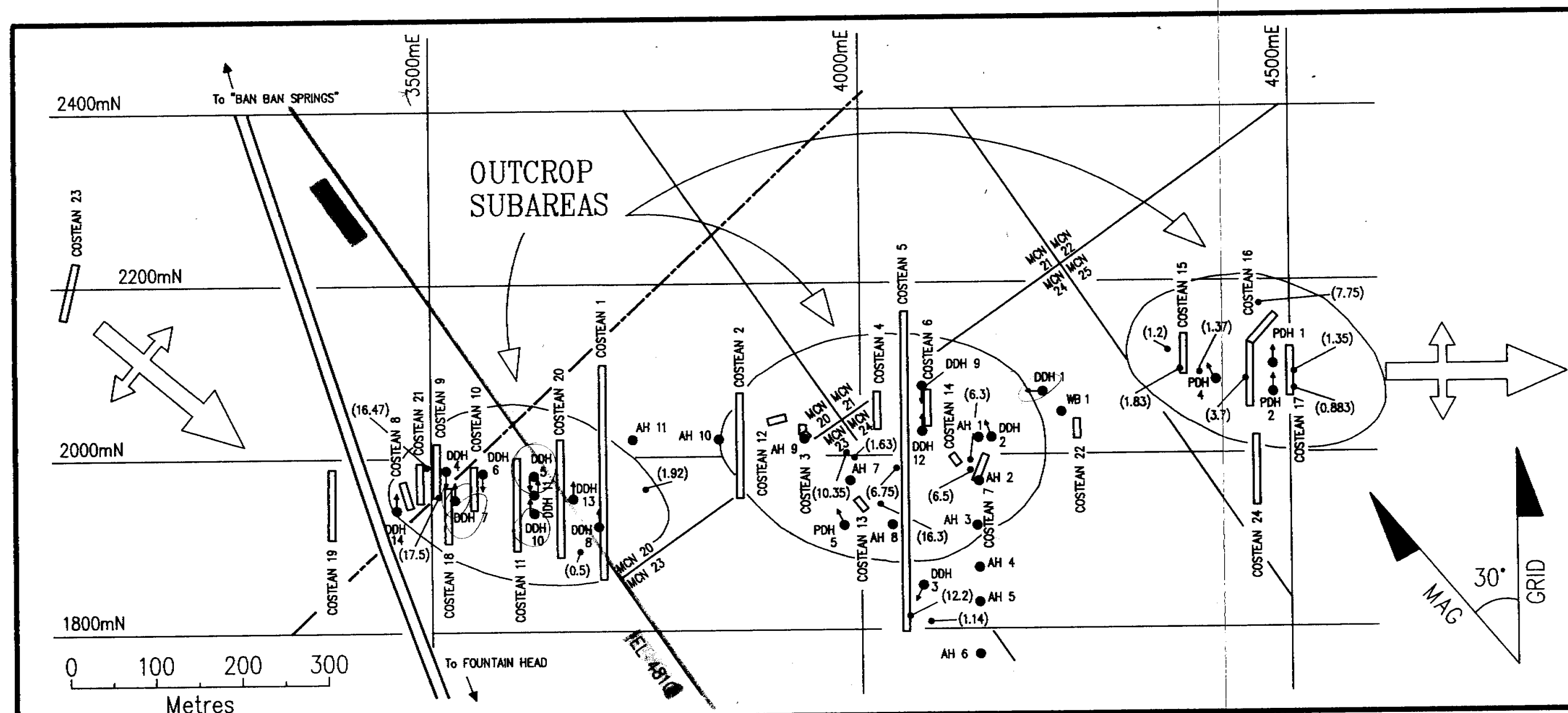
Gold values up to 16.47 ppm have been obtained from surface sampling in this area. Full details of surface sampling will be presented in the forthcoming report on adjacent mineral claims (see 2.0).

#### 3.2 Costean Programme

Nine costeans with a total length of 611.6 metres were dug using a hydraulic excavator (Hitachi model UH121). Depth ranged up to 2 metres. The trenches were mapped and sampled in detail with a total of 212 samples being taken.

Significant assay intervals (viz higher than 0.5 ppm) are presented in Table 1.





## REFERENCE

- |         |  |     |   |
|---------|--|-----|---|
|         | Road   |     | Anticlinal Axis & Plunge                            |
|         | Fence  | AH  | Auger Hole  |
|         | Tenement Boundary  | DDH | Diamond Drill Hole                                  |
|         | Costeans   | PDH | Percussion Drill Hole                               |
|         | Outcrop Subareas   | WB  | Water Bore  |
| (16.47) | Surface Sample Values (g/t)<br>(Excluding Costean Samples) |     | Drillhole (Indicating Azimuth<br>When Not Vertical) |

## Figure 3

# GLENCOE PROSPECT

## SHOWING DRILLHOLE & COSTEAN LOCATIONS



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TABLE 1

GLENCOE PROSPECT EL4810  
1986 COSTEAN PROGRAMME

COSTEAN NO.	LENGTH (m)	NO. SAMPLES	SIGNIFICANT ASSAY INTERVALS
8	30.0	14	9.7m @ 1.22 ppm
9	60.0	23	17.25m @ 3.53 ppm includes 11.1m @ 5.06 ppm includes 2.3m @ 17.75 ppm
10	48.0	18	19.9m @ 1.42 ppm includes 14.9m @ 2.65 ppm
11	163.9	47	6.0m @ 2.53 ppm
18	64.2	24	1.4m @ 1.25 ppm 7.0m @ 1.18 ppm
19	80.5	29	4.0m @ 2.14 ppm 3.0m @ 0.77 ppm
20	70.0 continues into MCN20	27	
21	42.0	14	8.0m @ 1.95 ppm includes 2.0m @ 5.67 ppm
23	53.0	16	

Note: See Figure 3 for location



### 3.3 Diamond Drilling Programme

Seven diamond drill holes were drilled for a total 386.25 metres. Holes were fully cored (apart from the top 2.5 metres) using HQ sized triple tube to minimize core losses. Despite encountering highly weathered and broken ground average core recovery exceeded 95%.

A total of 419 samples (average length 0.92m) were assayed by Australian Assay Laboratories (Pine Creek) Pty. Ltd., using the fire assay method. Significant intervals (minimum 0.4m, 1.0 ppm) are indicated in Table 2.



TABLE 2

GLENCOE PROSPECT EL4810  
1986 DIAMOND DRILLING PROGRAMME

HOLE NO.	DEPTH	NO. SAMPLES	SIGNIFICANT INTERVALS			
			FROM	TO	THICK	ASSAY PPM AU
DDH4	51.40	58	21.04	25.47	4.43*	1.60
DDH5	50.95	52	27.18	30.50	3.32	2.60
			(INCL 28.01	30.20	2.19	3.55)
			33.08	33.48	0.40	0.99
			36.48	43.15	6.67	2.83
			(INCL 36.48	38.45	1.97	6.65)
DDH6	54.50	48	7.10	10.10	3.00	14.18
			18.50	18.90	0.40	11.60
			38.10	44.59	6.49	2.70
			51.11	53.85	2.84	1.08
DDH7	57.50	62	5.70	6.80	1.10	1.92
			17.80	27.20	9.40	2.76
			(INCL 17.80	23.90	6.10	4.00)
DDH10	75.50	95	15.80	16.30	0.50	3.63
			32.90	37.47	4.57	2.29
			(INCL 32.90	34.50	1.60	4.90)
			69.00	69.40	0.40	4.96
DDH11	30.70	34	9.50	10.30	0.80	1.61
DDH14	65.70	70	4.40	7.15	2.75	5.35
			(INCL 4.40	5.20	0.80	17.40



#### 4.0 GEOLOGY

Costean mapping and drilling have confirmed the continuation of an anticlinal structure, previously defined in the adjacent mineral claims, into EL4810. This anticline has a reasonably symmetrical upright form with an axial trend of  $120^{\circ}$  (true) and a low to moderate plunge to the southeast. Limbs dip at 50 to 60 degrees.

The sequence is dominated by siltstones and greywackes with minor carbonaceous mudstones. DDH 14 intersected a poorly bedded pale grey "chert" interval on the crest of the anticline but passed back up the sequence before reaching the base of the chert. Greywackes exposed in Costean 23 some 450 metres to the northwest probably underlie this unit.

Based on lithotypes and regional structure a stratigraphic position within the Mt Bonnie Formation is considered most likely.

Mineralization is concentrated along the anticlinal axis and associated with numerous quartz bodies forming both bedding conformable (saddle) veins and subvertical discordant veins parallel to the fold axis.



## 5.0 CONCLUSIONS AND RECOMMENDATIONS

Work during 1986 has confirmed the continuation into EL4810 of a major anticlinal structure related to gold mineralization at the Glencoe Prospect. Intersections of potential economic interest have been defined in both costeans and diamond drill holes.

A close spaced drilling programme will be undertaken to better define the structure and form of mineralization and to determine if an economic resource can be delineated. Such a programme will be carried out in conjunction with continued work on the adjacent Mineral Claims.



## 6.0 EXPENDITURE

Total expenditure on exploration within EL 4810 during the first year of tenure was \$106,117.75, far exceeding the required \$4,000. A breakdown of this expenditure is presented in the schedule on the following page. As the work programme was integrated with that for the adjoining mineral claims (MC N20 to N43) expenditure figures for EL 4810 were arrived at by taking, an average, 60% of the total programme expenditure.

Of the diamond drilling programme 61% of the total metreage was drilled in EL 4810 and in the costeaning programme 58% of metres excavated were in EL 4810. A breakdown of samples assayed indicates that 58% originated in EL 4810.





5

SCHEDULE OF EXPENDITURE BY MAGNUM RESOURCES LIMITED

EL 4810 20/11/865 to 19/11/86

Tenement rent	\$ 5
Geological consulting fees	
(field work, research and reporting)	38,960
Contract labour	1,480
Travel expenses	1,351
Accommodation (in N.T.)	1,474
Caravan hire	150
Meals & provisions	548
Vehicle hire	436
Vehicle transport (from Sydney)	231
Vehicle maintenance & repairs	554
Fuel & oils	1,029
Communications (telephone, mail, couriers)	230
Data processing	960
Computer drafting	598
Maps, plan printing, photocopying, stationery	163
Insurance	44
Field equipment (consumable)	2,619
Theodolite hire	45
<u>Contractors</u>	
Costeaning	5,954
Drilling	36,011.75
Laboratory assay charges	11,480
Head office (admisistration) charges	1,800
	-----
TOTAL	\$106,117.75
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7.0 REFERENCE

Milligan, I. M., 1986 Report and Exploration for the  
Twelve Months to 31 December, 1986, Grove Hill.  
Tenements, N.T. Magnum Resources Ltd.  
Earth Resources Australia Pty Limited.  
Report A/180 (unpublished) submitted to N.T. Dept.  
Mines & Energy.

