ANNUAL REPORT
FOR THE PERIOD ENDED 31.12.87

MLC508
HIDDEN MYSTERY
TEENANT CREEK
NORTHERN TERRITORY

TOPEND RESOURCES NL
GPO BOX T1725
PERTH WA

C.C. J.D. Carter (G. Carter)
J. Pearson
HIDDEN MYSTERY

1. INTRODUCTION

The Hidden Mystery gold prospect is located six kilometres north-north-west of Tennant Creek in the Northern Territory and consists of a series of abandoned shafts and workings in and around outcropping ironstone. The area is held under option from J.D. Carter by P.G. Naughton and D.B. Clarke.

2. TITLE/LOCATION/ACCESS

Title to the Hidden Mystery prospect is held by J.D. Carter with Mineral Lease C508 of 4 hectares which was granted as GML254 on 2nd March 1949 and expires on 31st December 1990.

MLC508 is accessible via the Tennant Creek – Warrego paved road for six kilometres from the Stuart Highway then west along the graded power line access track for 3 kilometres. Topography at the prospect locality is predominantly gently undulating with steep sided mesas in outcrop areas. Vegetation is limited and consists of spinifex and minor scrubland.

3. GEOLOGY/STRUCTURAL SETTING

The prospect area lies within Lower Proterozoic aged Warramunga Group sediments consisting of shales, sandstones and minor conglomerate beds. The existing shafts and costeans occur along a ridge of quartz-hematite rock (ironstone), which was worked for gold but the production figures are unknown. Grades were reported to be 15 grams gold per tonne.

This former mine, and several other workings in the area, occur along a major regional-scale east-west striking structural feature about 10 km long, named the Mary Lane shear. The feature is aligned with aerial magnetic contour data where a ridge of high values extends from the Lone Star mine east of Tennant Creek striking west-north-west.

Geological reconnaissance of the prospect and surrounding outcrops indicates that magnetite-rich ironstones occur, which warrant further assessment by ground magnetometer surveys and drill testing. This work would be directed towards identifying magnetite bearing ironstones at depth which may contain economic gold deposits.