NOBELEX N.L.

COMPLETION EXPLORATION REPORT

EXPLORATION LICENCE 96 - MOUNT RUGGED

TENNANT CREEK, NORTHERN TERRITORY

for the four years ending

29th May, 1976.

CONTENTS

Prepared for NOBELEX N.L.

By AUSTRALIAN DEVELOPMENT LIMITED

Managing Agents for NOBELEX N.L.

COMPLETION EXPLORATION REPORT

1. INTRODUCTION

Exploration Licence 96 - Mount Rugged covered an area of up to 695 square kilometres. The centre of the area is located 19 km east of Tennant Creek and one section extends north of the town into the Quartz Hill area (see Figure 1). This Completion Report should be read in conjunction with the Annual Reports for the years ending 29th May, 1973, 1974 and 1975.

Exploration work during the four years of tenure consists of coverage of the Airborne Geophysical Survey and location, gridding, magnetometry, sampling and geological mapping, shallow and diamond drilling of prospects generated.

This Completion Exploration Report may be released to the public without further reference to the Company.

2. EXPLORATION

Exploration was carried out on three types of prospects and areas during the period.

1) Prospects located on aeromagnetic anomalies which were defined by airborne geophysical surveys.

2) Prospects which had been examined prior to tenure of EL 96, and potentially favourable extensions of these prospects.

3) Prospects located in areas considered to be potentially favourable due to their geological and/or spatial relationship to producing mines.

For localities of the prospects see Figure 1 and for details see previous Annual Reports as indicated.

2.1 Magnetic Anomaly A2 (See 1975 Annual Report).

The magnetic anomaly A2 was located, gridded and covered with total force magnetometry and the data compiled onto a contour plan. The magnetic anomaly defined on the ground was an elongate anomly and had an amplitude of about 200 gammas (nT).

2.2 Brumby (See 1975 Annual Report)

The Brumby prospect covers an area of steep regional aeromagnetic gradient. The area was gridded and covered with total force magnetometry and the data compiled onto a contour plan. The ground magnetometry defined a steep irregular contact striking north west/southeast with the regional geology in the immediate area.

2.3 Craig Dhu (See 1974 Annual Report).

This prospect covers an area of outcropping acid volcanics and jasper hematite ironstones. The geochemical results from the shallow drilling completed on this prospect were disappointing.

2.4 Donkey (See 1975 Annual Report).

This prospect covers a section of steep magnetic gradient. The area was gridded and covered with total force ground magnetics and the results compiled onto a contour plan. The ground magnetics defined the strong regional gradient in the area with no major anomalies in the area.

2.5 Golden Dingo (See 1974 and 1975 Annual Reports)

The Golden Dingo prospect covers an elongate magnetic anomaly. The area was gridded, covered with vertical force magnetometry and the results compiled onto a contour plan. The geological mapping and sampling over the anomaly defined a small lenticular ironstone with one sample containing anomalous gold. Two diamond drill holes, DDH 425 and DDH 427 were completed to 404 and 240 feet respectively to test the prospect. The drill holes intersected a sequence of south dipping quartz porphyries and sediments with no significant mineralization.

2.6 Leichhardt Number One (See 1974 Annual Report)

The underground workings of Leichhardt Number One mine were surveyed, geologically mapped and sampled. Poor grades from the sampling and a restricted tonnage potential indicates that the mine is uneconomic.

The workings of the Leichhardt Number One were incorrectly identified as the Burnt Shirt. All former references to the Burnt Shirt Mine in the 1974 Annual Report should be read as the Leichhardt Number One.

2.7 Mount Rugged Area (See 1973, 1974 and 1975 Annual Reports)

The Mount Rugged Area covers the group of hills surrounding the Mount Rugged trig. In the Mount Rugged area are located four prospects covering the magnetic anomalies R17, R20, R22 and R24/25. The area was mapped and sampled and selected areas covered with ground magnetics. Prior to the tenure of EL 96 two magnetic anomalies, R17 and R20 were tested by three diamond drill holes but all failed to hit any economic mineralization.

2.8 New Hope West (See 1975 Annual Report).

The magnetic anomaly at New Hope West was located, gridded, covered with total force magnetometry and the data compiled onto contour plans. The magnetic anomaly produced on the ground was an elongate feature with a well defined peak. The shallow drilling programme completed over the prospect defined a volcanic sediment contact with four of the holes in the volcanics having up to 5% magnetite.

2.9 Nob West-Juno Area (See 1973 and 1974 Annual Reports).

The area between Noble's Nob and Juno Mines was gridded, covered with total force magnetometry and the data compiled onto contour plans. No significant magnetic anomalies were defined in the area.

A shallow drilling programme in the area was carried out to investigate the bedrock geology and to test an earlier regional geological interpretation by J. Elliston - Geopeko Ltd. The drilling in the Nob West-Juno intersected only sediments suggesting that the porphyritic acid tuff does not form an anticlinal nose in the Juno road area.

2.10 Magnetic Anomalies R14/15 (See 1975 Annual Report)

The magnetic anomaly R14/15 was located, gridded, covered with total force magnetometry and the data compiled onto contour plans. The ground magnetometry defined a long anomaly striking about 110^{o} T with the regional geology.

A shallow drilling programme was completed over the anomaly. All holes intersected a series of silts and shales.

2.11 Magnetic Anomaly R27 (See 1974 and 1975 Annual Reports)

The magnetic anomaly R27 was located, gridded, covered with total force magnetometry and the data compiled onto a contour plan. The magnetic anomaly defined on the ground was elongate striking 110° T with the regional geology with an amplitude of 400 gammas (nT). A shallow drilling programme was completed over the anomaly. All the drill holes intersected a sequence of oxidised shales and siltstones, some containing abundant fine magnetite.

2.12 Magnetic Anomaly R29 (See 1973, 1974 & 1975 Annual Reports)

The magnetic anomaly R29 was located, gridded, covered with total force magnetometry and the data compiled onto contour plans. The magnetic anomaly defined on the ground was a strong, narrow north-south trending anomaly with a probable complex source.

The shallow drilling programme was completed over the magnetic anomaly. The drilling defined a volcanic-sediment contact some 100 m west of the anomaly and a weak copper geochemical anomaly. Geological mapping and sampling over the area was carried out and plans compiled. A sequence of gently folded, west dipping rhyolitic tuffs and possible flows and well bedded greywacke-sandstone-siltstone units were mapped in the area.

Diamond drilling programme on two targets was completed and logs and sections compiled. DDH 466 and DDH 469 were completed to 200 m and 130.3 m in a sequence of altered tuffs, rhyolites and greywackes with some anomalous copper and minor gold values. DDH's 468, 479, 482 and SHDH's 169 and 170 were all drilled into the magnetic target. All drill holes intersected a massive sequence of altered rhyolite. The anomaly was drilled from both the east and west and all drill holes failed to intersect the source of the magnetic anomly.

2.13 Magnetic Anomaly R30 (See 1973 and 1974 Annual Reports).

The magnetic anomaly R30 was located, gridded, covered with total force magnetometry and the data compiled onto a contour plan. The magnetic anomaly defined on the ground was a discrete 320 gamma (nT) closure superimposed on an east-west trending ridge.

2.14 Magnetic Anomaly R31 (See 1974 Annual Report).

The magnetic anomaly R31 was located, gridded, covered with total force magnetometry and the data compiled onto a contour plan. The magnetic anomaly defined a narrow faulted anomaly striking about 45^{o} magnetic.

2.15 Red Terror - Blackboy (See 1974 and 1975 Annual Report).

The area around the Red Terror magnetic anomaly was gridded, geologically mapped, covered with total force magnetometry and the data compiled onto the appropriate plans. The sequence in the Red Terror area is well defined and lies on the southern limb of a major east west anticline. Three diamond drill holes were completed into a geological target, DDH 462 to 1100 feet, DDH 472 to 1150 feet and DDH 477 to 900 feet. No significant mineralization was intersected in any of the drill holes.

2.16 7300 West (See 1974 Annual Report)

The magnetic anomaly 7300W was re-evaluated and a shallow drilling programme completed over the prospect. All drill holes intersected argillaceous sediments and abundant fine disseminated magnetite in six holes.

2.17 Susan East (See 1974 Annual Report)

The Susan East prospect was generated from work being carried out on the Susan Mine some 400 feet west. The area was gridded, geologically mapped and covered with total force magnetometry and the data compiled onto contour plans. A 400 foot diamond hole, DDH 429 was drilled to test beneath a hematitic shear. DDH 429 intersected a well bedded sequence of greywackes and siltstones and a leached quartz hematite ironstone, which gave poor core recovery and only minor values.

2.18 TC36-TC39-Bishop Creek (See 1974 & 1975 Annual Reports).

Geological mapping and sampling between TC36 and TC39 showed the sequence to be the top of the Bernborough Formation (Dunnet & Harding, 1967). A shallow drilling programme of 222 drill holes was completed in the TC39 area. The geological mapping, sampling and drilling defined a gossanous outcrop and co-incident copper

geochemical anomaly. DDH 454 was drilled to test for mineralization below the gossanous outcrop. DDH 454 was completed to 450 feet after intersecting a sequence of sheared shales, rhyolitic tuffs and tuffaceous siltstones. No significant mineralization was intersected.

2.19 Magnetic Anomaly TC40 (See 1974 & 1975 Annual Reports)

The magnetic anomaly TC40 was located, gridded, covered by vertical force magnetometry and data compiled onto a contour plan. The ground magnetometry defined a small strong anomaly. Geological mapping around TC40 located a small ironstone outcrop 60 m east of the anomaly within a structurally complex sequence of greywackes, siltstones and shales.

A shallow drilling programme was completed over the anomaly. Three drill holes intersected a hematite-magnetite body with anomalous gold values.

A diamond drilling programme consisting of four holes was completed into the ironstone to test the body at depth. DDH 461 completed to 110 m after intersecting 13.6 m of ironstone above the water table. DDH 463 was completed to 154.5 m to intersect the ironstone below the water table. DDH 463 intersected a series of quartz chlorite veins and some mineralized shears. DDH's 473 and 474 were completed to 140 m and 150 m respectively to test the east and west extensions of the ironstone. Both holes intersected ironstone with low gold values throughout.

Diamond drilling on TC40 defined a small ironstone body with anomalous gold values but no ore-grade material was intersected.

2.20 The Mule (See Annual Report for 1973)

The magnetic anomaly The Mule was located, covered with vertical force magnetometry and the data compiled onto a contour plan. The ground magnetometry defined a small elongate anomaly with an amplitude of about 250 gammas (nT). Earlier mapping and sampling had defined a narrow ironstone horizon of ironstone with anomalous copper and bismuth in the immediate area. The magnetic anomaly is probably due to a thickening of the ironstone because of local folding or faulting of this bed.

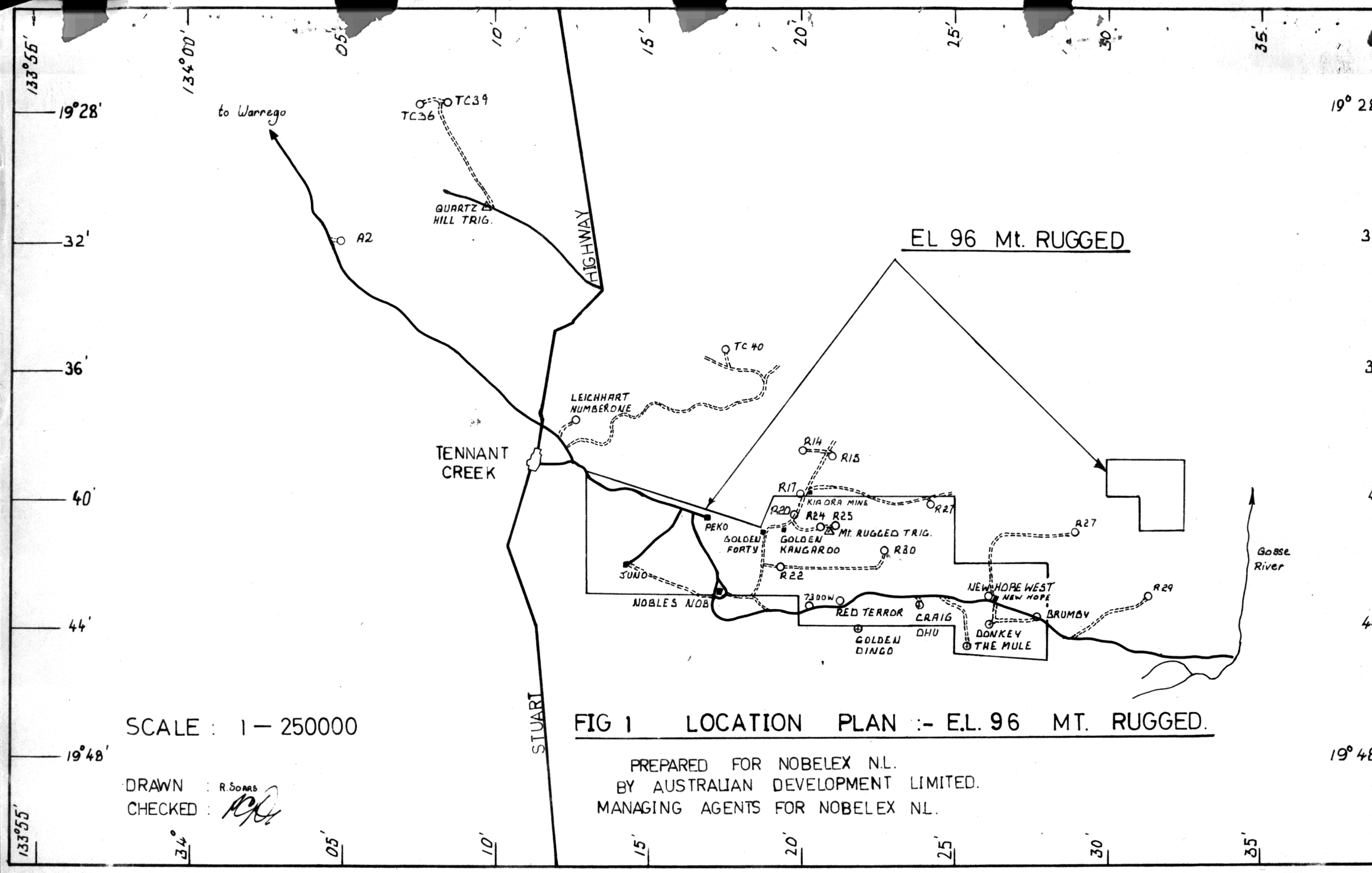
3. SUMMARY AND EXPENDITURE

A summary of exploration work on EL 96 - Mt. Rugged during the period is given below.

Anomalies located	10
Gridding (stations established)	17,485
Magnetometry (stations read)	25,710
Assays	15,618
Precision Survey (crew days)	21.5
Geological mapping (hectares)	5,184
Geological mapping "	71
Shallow drilling (m)	3,869.6
Dust drilling (m)	134.1
Diamond drilling (m)	2,700.2
Airborne Geophysics (sq. kms)	694.6

Total expenditure on EL 96 for the fourth year of tenure was $6,488.

Total expenditure on EL 96 to date is $313,087.



SCALE : 1 — 250000

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CHECKED :

FIG 1 LOCATION PLAN :- E.L. 96 MT. RUGGED.

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