TITLE	FIRST AND FINAL REPORT EXPLORATION LICENCE 5887 EVA CREEK AREA NORTHERN TERRITORY
PERIOD	12 MAY 1988 TO 5 JULY 1989
TENEMENT HOLDERS & OPERATORS	AUSTRALIAN ENERGY & GOLD NL 11TH FLOOR 28 THE ESPLANADE PERTH
AUTHOR	M G MULRONEY
DATE	OCTOBER 1989

1:250,000 Katherine SF53-9
1:100,000 Eva Valley 5467

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1. Department of Mines & Energy, NT
2. Australian Energy and Gold NL - Darwin
3. Australian Energy and Gold NL - Perth

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LIST OF DRAWINGS

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SUMMARY

Exploration Licence 5887 was granted on 12 May 1988. Work completed during the first year of tenure involved a complete review of the previous production and exploration undertaken within the area. The results indicated that the area has a low prospectivity for significant gold mineralisation and the Exploration Licence was recommended for surrender. Exploration Licence 5887 was surrendered on 5 July 1989.

1. INTRODUCTION

Exploration Licence 5887 was granted to Wentwel Pty Ltd on 12 May 1988 and transferred to Australian Energy and Gold NL on 3 August 1988. This area was acquired to explore for gold mineralisation associated acid intrusives, quartz-tourmaline veins and greisens within a large granite complex. The base of the overlying Cretaceous sandstones and conglomerates was also considered to be prospective for placer deposits of tin and for gold. During the first year of tenure, a review of previous exploration and production was undertaken.

2. LOCATION AND ACCESS

The Exploration Licence is situated in the Eva Valley area, approximately 70 kilometres northeast of Katherine which is 302 kilometres by road southeast of Darwin. Access from Katherine is via the sealed Stuart Highway to the Maranboy turnoff and hence via sealed road to the Maranboy Police Station. Two kilometres from the Maranboy Police Station, a graded road heads north to the Eva Valley Homestead. Access to the tenement is via station tracks. The tenement is within the Eva Valley Pastoral Lease Land Claim.

3. TENURE

Tenement Number	Date Granted	Area	Period
EL5887	12-5-88	3.1km² (2 blocks)	2 years

4. REGIONAL GEOLOGY

The Exploration Licence covers a portion of the Maranboy Mineral Field from which tin and tungsten have been mined intermittently since 1913. The regional geology of the tenement is illustrated in Drawing AEG 211-1.

The Proterozoic Tollis Formation are the oldest rocks in the area and consist of metamorphosed interbedded greywacks, siltstone argillite and tuff. These metasediments are intruded by the Yeuralba Granite which consists of a medium to coarse grained tourmaline bearing leuco granite with extensive greisen zones along the contact with the Tollis Formation.

The tin-tungsten (± gold) mineralisation is contained in greisen and siliceous tourmaline-bearing rock that occurs in northwesterly and northeasterly trending shear zones. To the south, the granite is overlain by the flat lying Mullaman groups sandstones of Cretaceous age.

5. WORK COMPLETED

5.1 Previous Production

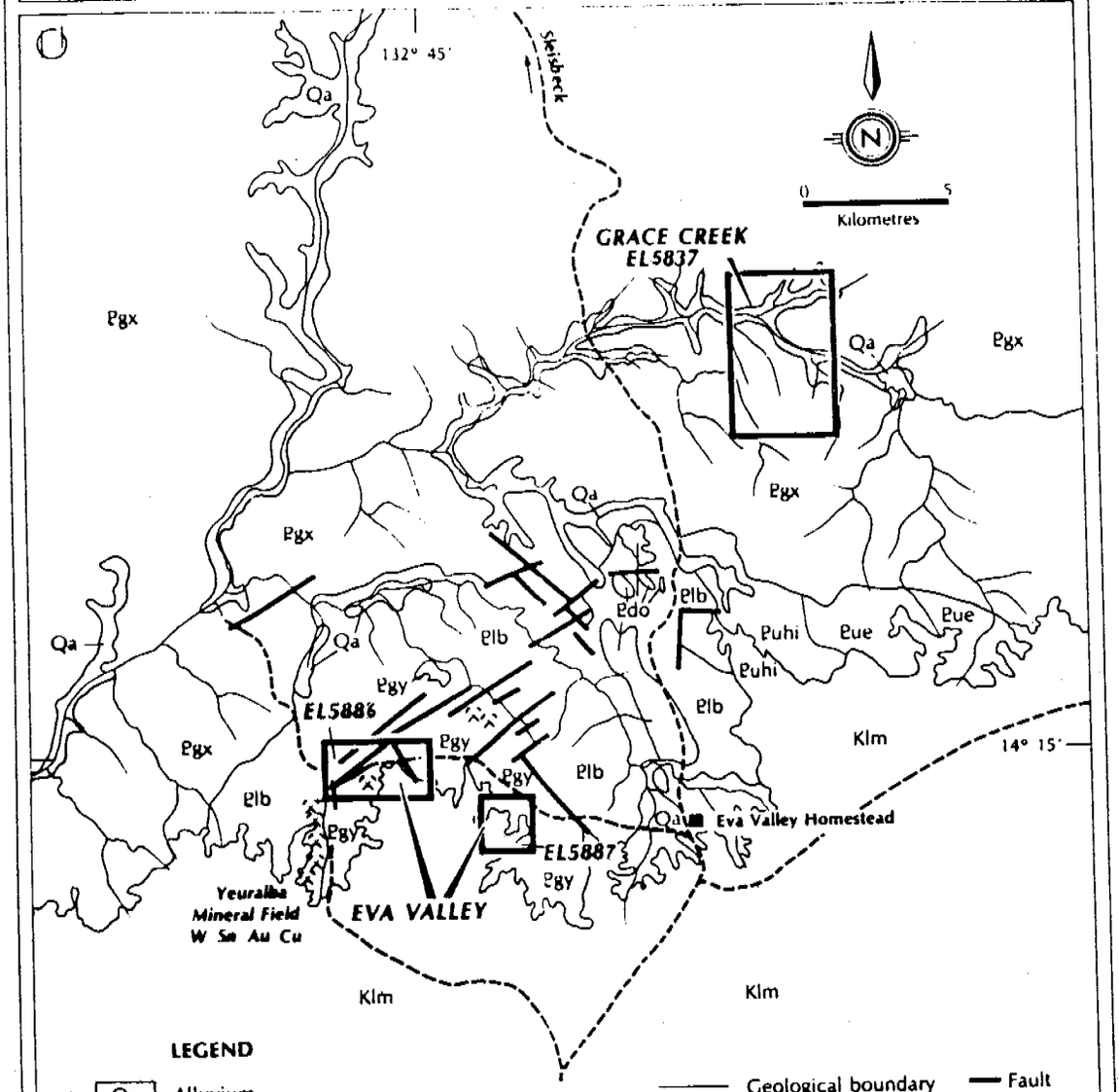
No old workings or prospects are known to exist within the tenement. There are no records of any previous production.

5.2 Previous Exploration

The general area of the Maranboy Mineral Field was extensively explored during the 1960s by several Government agencies and numerous exploration companies for tin-tungsten mineralisation. No exploration for gold was undertaken although indication of gold mineralisation was noted from the Lynas Claim area. The area of the Exploration Licence was held by Minscope Pty Ltd under Exploration Licence 4636 and was

EVA VALLEY and GRACE CREEK PROSPECTS

Tenement Location and Simplified Geology



LEGEND

Qa	Alluvium
Klm	Sandstone, siltstone
Pue	Acid to intermediate volcanics
Puhi	Purple tuffaceous sandstones
Pgy	Adamellite, biotite granite
Pgx	Quartz-feldspar-porphyry
Pdo	Basic sills and dykes
Plb	Medium to fine greywacke

Geological boundary — Fault

Gold workings

W Wolfram Sn Tin

Au Gold Cu Copper

Bi Bismuth

Track

Tenement boundary

After R. A. Ruker *et al.*, 1951-1959

Prepared by D. D. Middleton and Associates for inclusion in this Memorandum.

Drawing No AEG 211-1

relinquished in 1987 to meet the statutory requirements. Minscope Pty Ltd undertook reconnaissance stream sediment sampling and geological mapping within the area covered by EL 5886. Rockchip sampling of mineralised quartz vein and greisen outcrops was also undertaken to determine their potential to host significant gold deposits (Shield 1986, Cullen 1987).

6. DISCUSSION

The stream sediment samples and rockchip samples assayed as part of the exploration undertaken within EL4636, all returned low gold values for the area covered by EL5886. Assay results for tin-tungsten were weakly to moderately anomalous in the rockchip samples, whilst samples of the recent alluvial material did not have significant tin values. Samples collected from conglomerate beds at the base of the Cretaceous sediments all returned extremely low assay results for both tin and gold. Although bulk testing of the material would be required to fully define the potential for placer deposits, these initial results do not offer any encouragement.

On the basis of the geological mapping and the gold values achieved by Minscope Pty Ltd, the potential of the area to contain a significant body of gold mineralisation is considered to be low. There is some potential for the area to contain a small tin-tungsten deposit, however given the prevailing economic conditions, this is not considered a viable target.

No further work was warranted and the Exploration Licence was recommended for surrender.

REFERENCES

MacLEOD M
Memorandum for the Information of Shareholders, Java Black Mining NL
D D Middleton and Associates, June 1988

SHIELDS J
Annual Report for Exploration Licence 4636, Yeuralba Area, NT
October 1987, Minscope Pty Ltd

EL 5887

Major activity	Staff salaries	Staff wages	Consultants/ contractors' fees	Vehicles	Travel Other	Accom.	Field Accom.	Field Equip.	Office Equip.	Other	Sub-Totals
Geology	280		1500						58		1838
Geochemistry											
Geophysics											
Access											
Gridding											
Drilling:											
- diamond											
- other											
Drafting	35										35
Metallurgy											
Engineering											
Environmental											
Other			20								20
SUBTOTALS	315		1520						58		1893

TOTAL	1893
LOCAL OFFICE OVERHEADS	521
HEAD OFFICE OVERHEADS	382
G R A N D T O T A L	2776

AJH/MM:208

NORTHERN TERRITORY GEOLOGICAL SURVEY - GEOSYSTEM DATA SHEET

REPORT NO _____ SECURITY _____

REPORT TITLE FIRST AND FINAL REPORT EL 5887
EVA VALLEY

AUTHOR(S) M.G. MULRONEY

PUBLISHER _____

PLACE OF PUB'N _____ DATE OF PUB'N _____

DATA TYPE Unpublished PAGES OF TEXT 10

ACCOMPANIMENTS _____

DRILL CORE ? _____

LICENCE NO. EL 5887

PROJECT YEAR(S) 1

LICENSEE(S) AUSTRALIAN ENERGY AND GOLD NL

JOINT VENTURE(S) _____

OPERATOR(S) AUSTRALIAN ENERGY AND GOLD NL

1:1 000 000 _____

1: 250 000 KATHERINE

1: 100 000 EVA VALLEY

1: 50 000 _____

PROSPECT NAME(S) _____

SITE LOCATION LAT: 14° 15' LONG: 132° 48'

TECTONIC UNIT _____

MAJOR TERM
- ○ PETROLEUM GEOLOGY
- ✓ METALLIFEROUS MINERALS
- ○ NONMETALLIFEROUS MINERALS

MINOR TERMS

DRILLING
- ○ DIAMOND
- ○ PERCUSSION
- ○ AUGER
- ○ ROTARY

○ GEOPHYSICS

AERIAL SURVEYS
- ○ MAGNETIC
- ○ RADIOACTIVITY
- ○ EM SURVEYS

GROUND
- ○ EM SURVEY METHOD
- ○ IP SURVEY METHOD
- ○ SEISMIC SURVEYS
- ○ RESISTIVITY SVYS
- ○ GEOPHYSICAL ANOM
- ○ GRAVITY SURVEYS

○ GEOCHEMISTRY

SAMPLING
- ✓ STREAM SEDIMENT
- ○ SOIL
- ✓ ROCK CHIP
- ○ WATER

OTHER
- ○ DRAINAGE TESTING
- ○ DRILL CORE ANALYSIS
- ○ ASSAYING
- ○ GEOCHEMICAL ANOM

GENERAL
- ○ GEOL MAPPING
- ○ PHOTOGEOLOGY
- ○ GRIDDING
- ○ METHODS
- ✓ REGIONAL GEOLOGY
- ○ LOCAL GEOLOGY
- ○ STRATIGRAPHY
- ✓ RECONNAISSANCE
- ○ LOGGING

NOTES _____

ABSTRACT _____

INDEXED BY/DATE _____ CHECKED BY/DATE _____