

Report 112/2/88

ANNUAL REPORT FOR THE YEAR
ENDING 12TH AUGUST 1988

EXPLORATION LICENCE 5312
FISHER ROAD
NORTHERN TERRITORY

Golden Plateau N.L.
Mt. Bunday Joint Venture

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Darwin
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1. INTRODUCTION

Exploration Licence 5312 was granted to Robert Johnston on 13th August 1987 for a period of three years. The tenement is subject to an agreement between Robert Johnston and Oceania Exploration and Mining N.L. Under the terms of a farm-in and joint venture agreement GPN Pty Ltd, a wholly owned subsidiary of Golden Plateau N.L., has the right to earn a 51% interest in the tenement. Exploration activities were conducted by Golden Plateau N.L. as managers of the joint venture.

EL 5312 comprises 13 square kilometres, four one minute square blocks, located on the boundary between Mt Keplar and Mt. Ringwood Pastoral Leases some 17 kilometres due east of Adelaide River (Figure 1). The area is located on Batchelor 1:100,000 topographic map. Access is gained via Fisher Road, the access road to Goodall Goldmine, and then via station tracks which cross the tenement.

Exploration during the first year of title was directed at gold and included geological mapping, rock chip sampling and drainage sampling. The tenement also falls within a regional airmagnetic and radiometric survey completed for Golden Plateau N.L.

2. CONCLUSIONS AND RECOMMENDATIONS

No significant gold values were returned from investigations completed during the first year of tenure. Geological mapping indicated the following targets:

- * Mount Shoobridge Fault in the east of the tenement,
- * a sandstone dominated sequence in the west of the tenement.

It is recommended these two areas are tested by rock chip sampling during the second year of tenure.

3. GEOLOGY

EL 5312 is located in the central part of the lower Proterozoic Pine Creek Geosyncline. All rocks within the tenement form part of the

Burrell Creek Formation, a turbidite sequence of mudstones, siltstones and greywackes, which EL 5312 is represented by;

- * massive graded sandstone with minor interbedded siltstone and mudstone,
- * interbedded mudstone, siltstone and turbidite sandstone,
- * mudstone and siltstone with minor turbidite sandstone.

This sequence youngs to the west and coarsens upwards (Figure 2). This structure is dominated by a north plunging syncline folded about a north-trending axis near the centre of the lease. The eastern lease block covers a section of the Mount Shoobridge Fault.

Quartz veins were rarely observed during mapping of the area although veinlets up to 1 centimetre wide form stockworks in some sandstone units in the western lease block.

The tenement secures an area immediately west of the Howley Creek flood plain. A tributary of the Howley Creek flows through the lease and occupies a minor floodplain.

4. GEOPHYSICS

The tenement falls within a regional airmagnetic and radiometric survey commissioned by Golden Plateau N.L.

The data for EL 5312 are presented as contours (Figure 3). These data are currently being processed using image enhancement techniques.

No significant features are apparent from the contour data. The Mt. Shoobridge Fault does not have a magnetic signature within EL 5312.

5. GEOCHEMISTRY

Geochemical exploration within the lease included collection of 7 rock chip samples, six 5kg stream sediments screened to nominal minus 10 mesh along with six 1kg minus 30 mesh sediment samples from the same sites (Figure 4).

All samples were assayed for gold by Amdel Laboratories in Darwin. Rock chips were analysed to 1 ppb Au detection using a 50g charge, acid digest, solvent extraction and graphite furnace AAS techniques. Gold content of the 5kg stream sediments was determined using BLEG (bulk leach cyanide extractable gold) techniques and the 1kg stream sediments were further screened to minus 80 mesh and a 50g charge analysed for gold using graphite furnace AAS techniques to 1 ppb Au detection limit.

Gold values in rock chips were uniformly low (maximum value 0.0006 ppm Au).

Drainage samples returned low gold values. Two BLEG samples returned slightly elevated values (0.43, 0.99 ppb Au) but these are not considered to indicate significant gold mineralisation within EL 5312.

6. EXPENDITURE

Geology	7000
Geophysics	7500
Assays	300
Drafting, reporting	700
Administration	<u>2750</u>
	<u>\$18250</u>

The expenditure covenant for the first year of EL 5312 was \$10000

APPENDIX 1

EL 5312 Gold Assay Results 1987-88

1. Rock Chips

<u>Sample Number</u>	<u>Gold (ppm)</u>
30055	x
30056	0.003
36520	0.003
36521	0.001
36522	0.006
36523	x
36524	x

x = less than 0.001 ppm Au.

2. BLEG Stream Sediments

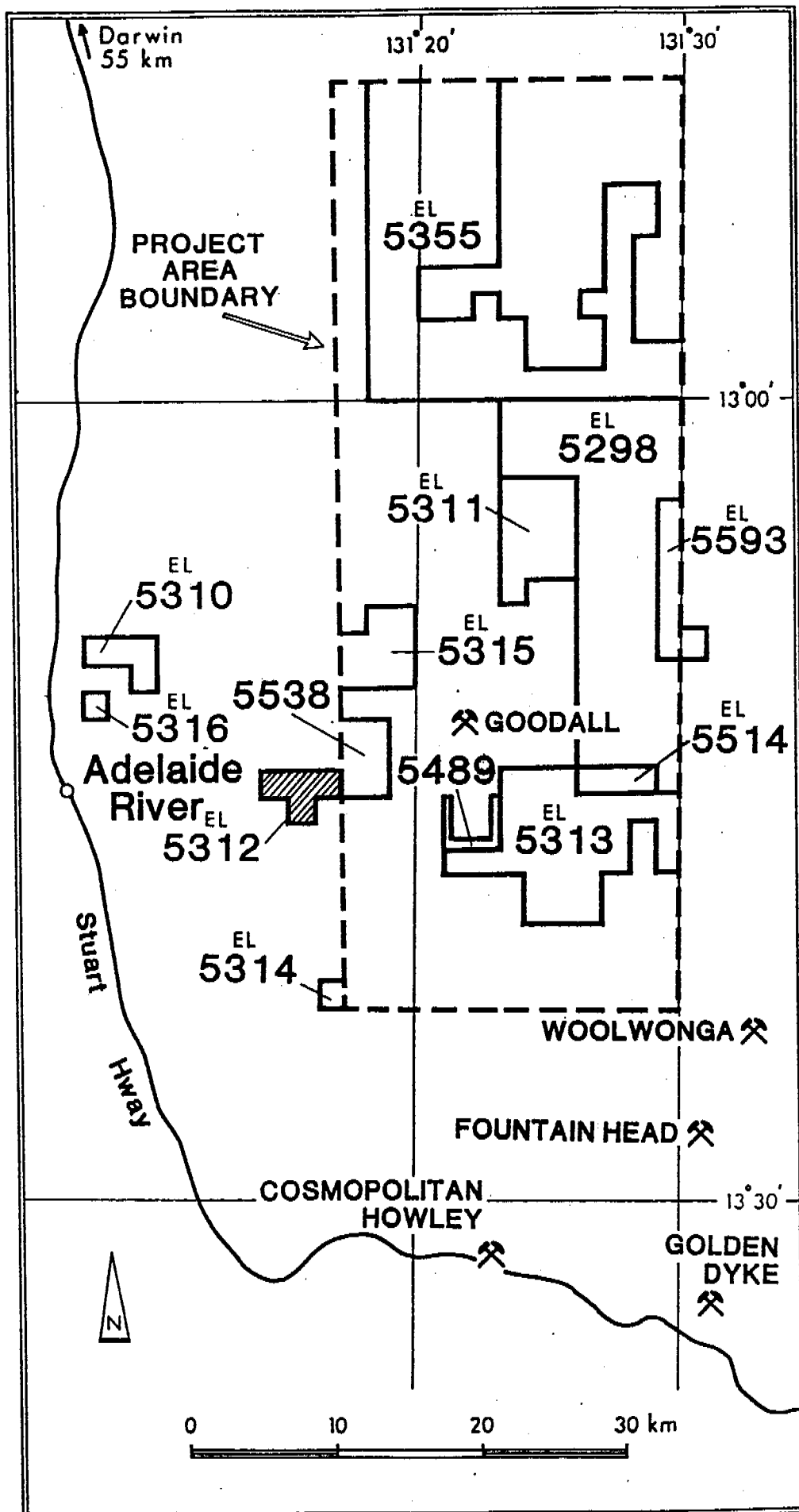
<u>Sample Number</u>	<u>Gold (ppb)</u>
29945	0.08
29946	0.07
29947	0.43
29948	0.09
29949	0.99
29950	x

x = less than 0.05 ppb Au

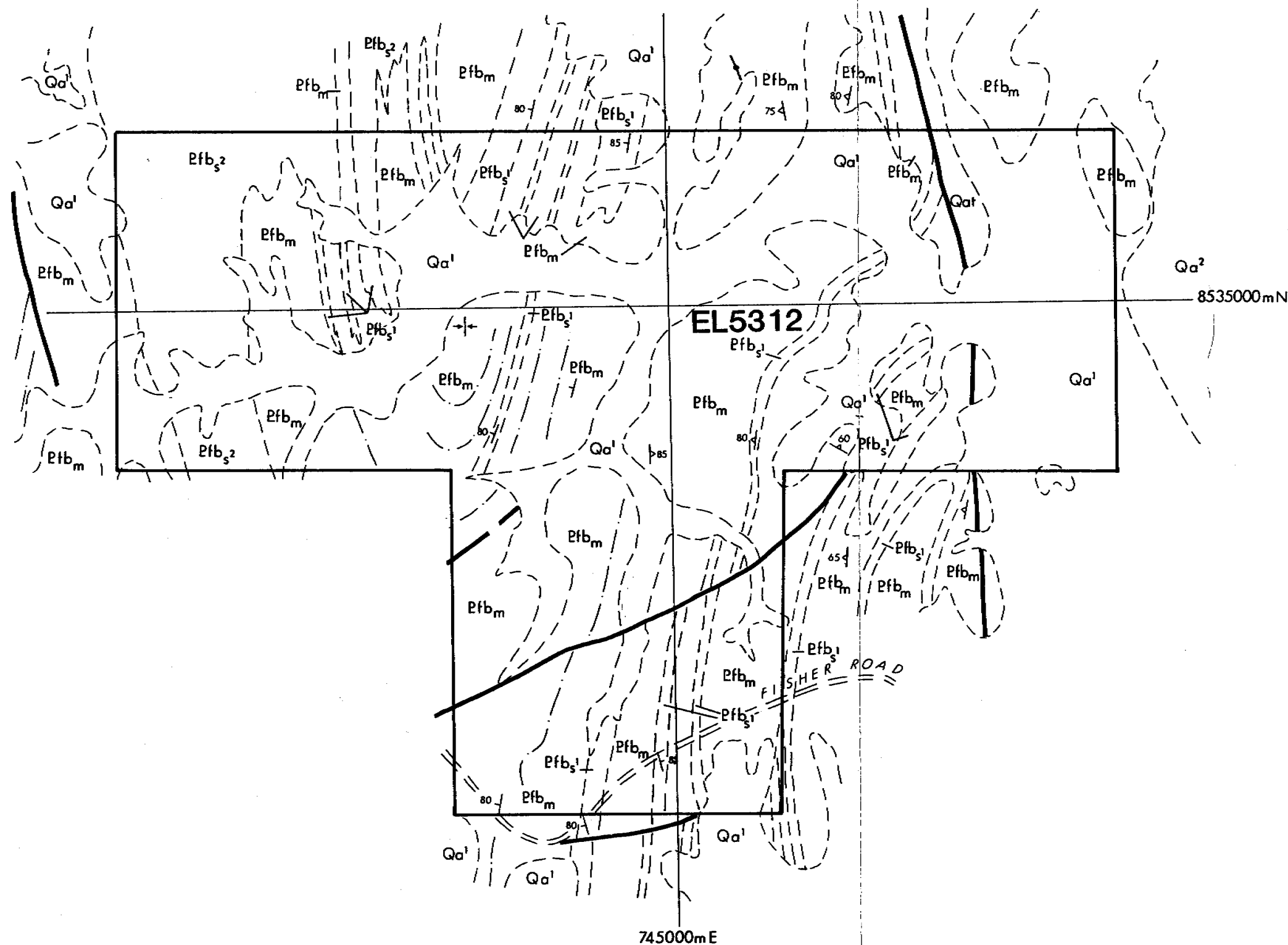
3. Low level gold Stream Sediments

<u>Sample Number</u>	<u>Gold (ppm)</u>
29845	x
29846	0.001
29847	0.002
29848	x
29849	0.003
29850	x

x = less than 0.001 pm Au.



LOCALITY MAP EL 5312
Mt. Bunday Joint Venture
Northern Territory



LEGEND

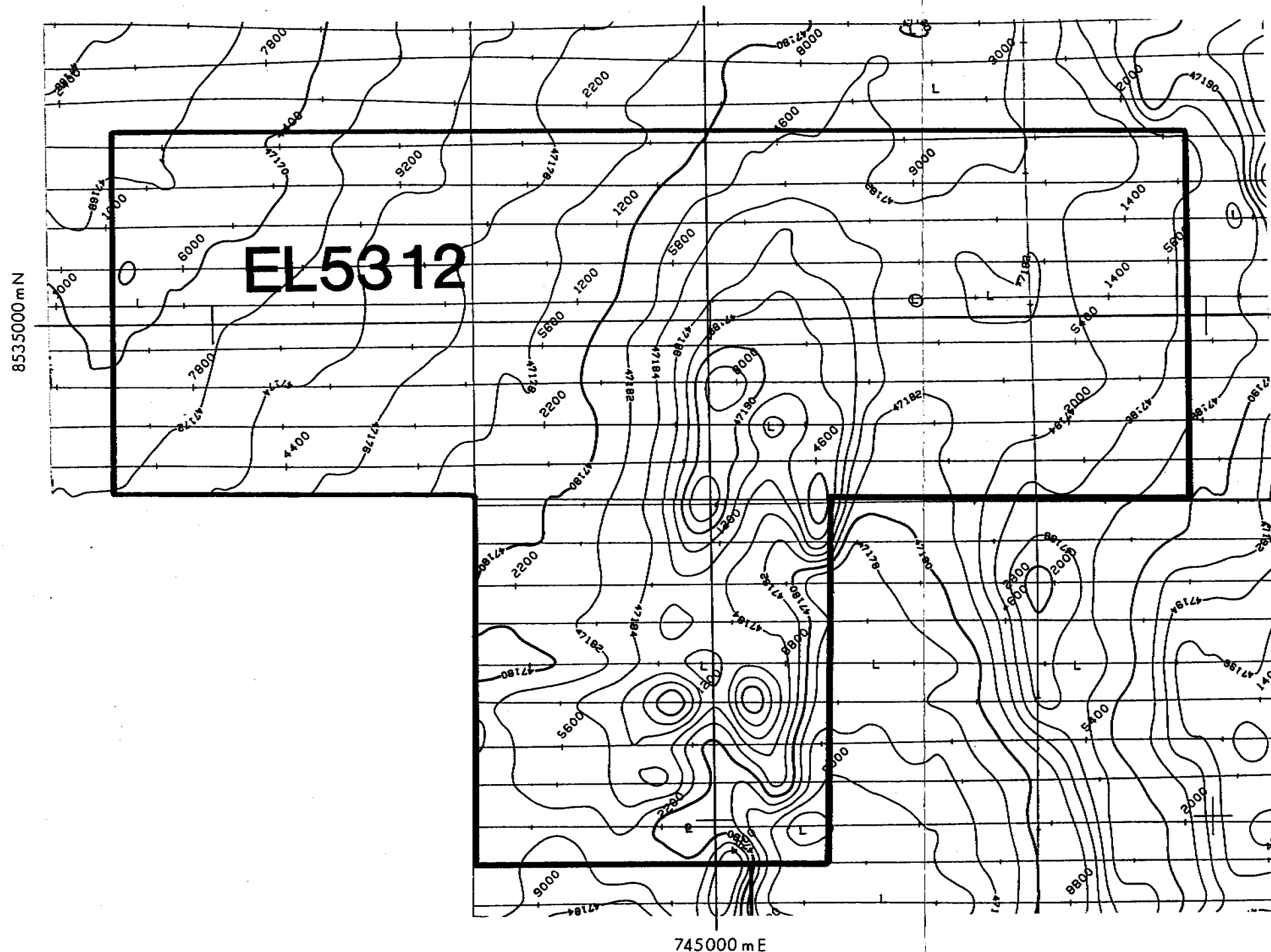
- Qa¹ Flood plain black soil.
- Qa² Meander plain black soil.
- Qat Talus slope of vein quartz and silicified wallrock of Mt. Shoobridge fault.
- Pfb_m Siltstone, mudstone and minor sandstone.
- Pfb_{s1} Interbedded mudstone, siltstone and turbidite sandstone.
- Pfb_{s2} Massive or graded sandstone with minor interbedded siltstone and mudstone.
- Concordant quartz veins sub parallel to bedding or cleavage, sheared contact with host rock.
- Inferred geological contact.
- Strike and dip of bedding.
- Trace of bedding.
- Strike and dip of slaty/spaced cleavage.
- Fault.

Geology by H.Wilhelmij, June 1988

Scale 1:25000

GOLDEN PLATEAU NL
MT BUNDEY JOINT VENTURE, NT

Geology, EL 5312



AIRCRAFT
VH-EXH ROCKWELL SHRIKE COMMANDER 500S

MAGNETOMETER
SPLIT BEAM CESIUM SCINTREX V201
RESOLUTION 0.01 nanoTesla
CYCLE RATE 0.2 seconds
SAMPLE INTERVAL 14 metres

SPECTROMETER
256 CHANNEL EXPLORANUM GR800B
VOLUME 33.56 litres
CYCLE RATE 1.0 seconds
SAMPLE INTERVAL 70 metres

DATA ACQUISITION
8 CHANNEL WATANABE MC 6700 CHART RECORDER
HEWLETT PACKARD 9000 SERIES COMPUTER
AERODATA DIGITAL ACQUISITION SYSTEM

FLIGHT LINE SPACING
TRAVERSE LINES 200 metres
TIE LINES 5000 metres

FLIGHT LINE DIRECTION
TRAVERSE LINES 090 - 270 degrees
TIE LINES 180 - 360 degrees

SURVEY HEIGHT
MEAN TERRAIN CLEARANCE - 70 metres

NAVIGATION AND RECOVERY
Using SYLEDIS UHF positioning system

DATA PROCESSING
REGIONAL FIELD IGRF MODEL 1985 REMOVED
BASE VALUE ADDED 46900 nanoTeslas
GRID CELL SIZE 70 metres
CONTOUR INTERVAL 2 nanoTeslas
PARALLAX CORRECTION 0.7 fiducials
→ 50 fiducial interval

Aerodata Survey No. 1096, Dec 1987 - May 1988

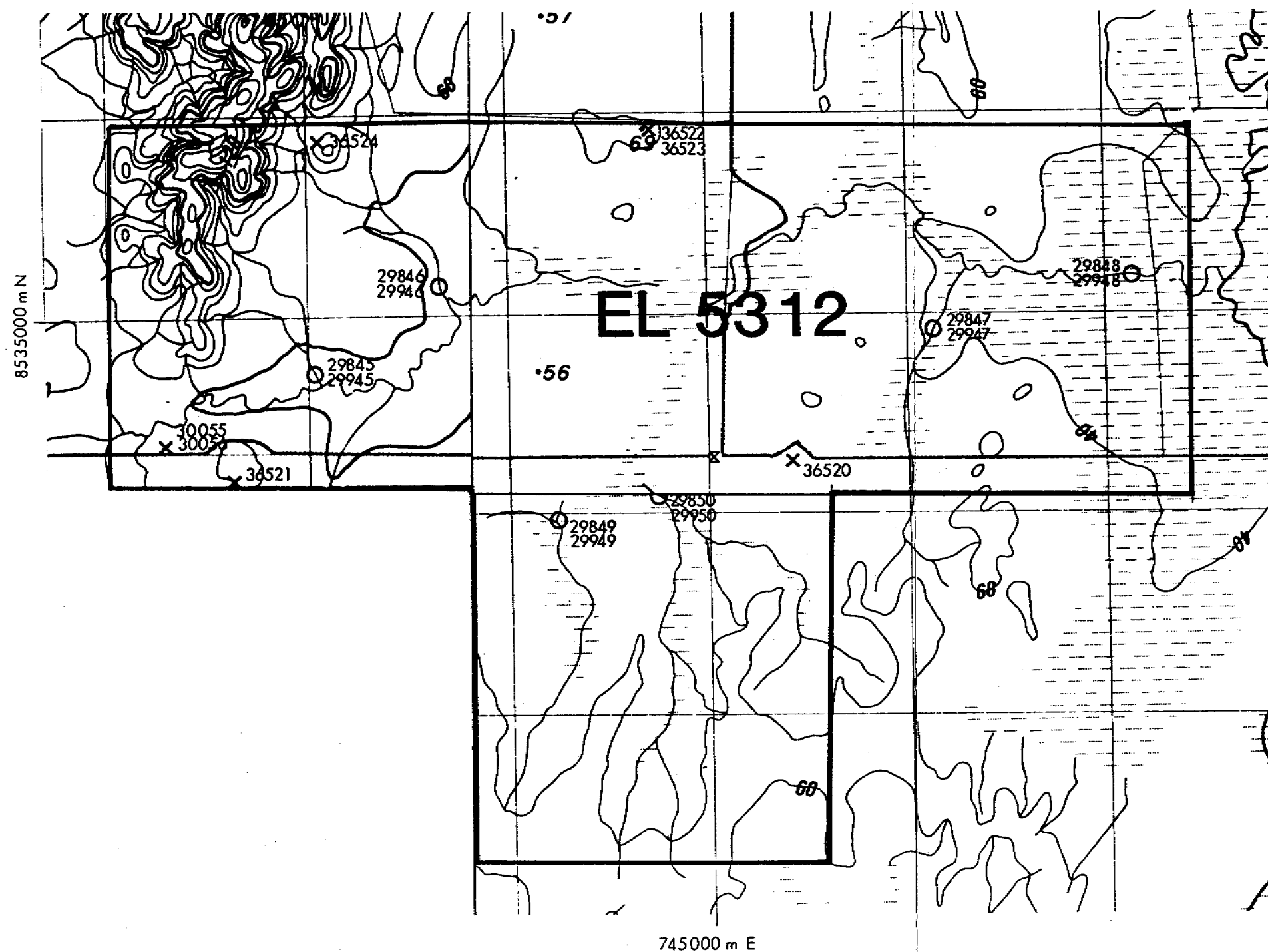
MAP REFERENCE : 1:25000 5171-1-SW
5171-11-NW
5171-IV-NE



Scale 1:25000

GOLDEN PLATEAU NL
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Magnetics, EL5312



- 29499 Stream sediment sample site & number.
- × 36595 Rock chip sample site & number

MAP REFERENCE : 1:100 000 BATCHELOR
1:50 000 BATCHELOR
1:50 000 MARGARET RIVER
1:50 000 BURNSIDE



Scale 1:25000

GOLDEN PLATEAU NL
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Sample Localities, EL5312