EXPLORATION LICENCE 5315

REPORT ON AREAS RELINQUISHED 12TH AUGUST 1989

Prepared for OCEANIA EXPLORATION & MINING N.L.,
by
G.R. Orridge,
GEONORTH Pty. Ltd.,
Darwin, NT, Australia.

November 1989.

CONTENTS.

A. SUMMARY.

Exploration Licence 5315, originally comprising eight blocks (26 sq.km), is situated 25 kilometres east northeast of Adelaide River and 6 kilometres northwest of Goodall goldmine. In 1988, under a farm in agreement with GPN Pty Ltd, exploration work for gold was carried out including geological mapping, rock chip sampling, drainage sampling and airborne magnetic and radiometric surveys. During the second year work was conducted under a second joint venture with Pegasus Gold Australia Limited and comprised detailed interpretation of the aeromagnetics, field checks of magnetic anomalies and rock chip sampling. The geology consists of a turbidite sequence of the Early Proterozoic Burrell Creek Formation which dips west on the western limb of the regional Howley anticline. Exposure is limited since the area lies largely on the Howley Creek floodplain. Magnetics and geochemical results in the western parts of the area were not considered sufficiently promising to warrant follow up, and the four western blocks have accordingly been relinquished.

1 INTRODUCTION.

Exploration Licence 5315 was granted to Robert Johnston on 13th August 1987 for a three year term. It initially consisted of eight one minute square blocks, with a total area of 26 square kilometres, and is situated 80 kilometres southeast of Darwin and 25 kilometres east northeast of Adelaide River (Figure 1).

During the first year of title exploration for gold was conducted by GPN Pty Ltd (a wholly owned subsidiary of Golden Plateau N.L.) under a joint venture agreement with the titleholders; Golden Plateau withdrew at the end of the first year. During the second year exploration was carried out by Oceania Exploration & Mining N.L. in joint venture with Pegasus Gold Australia Limited.

Exploration during year one included airborne magnetics and radiometrics, geological mapping, drainage sampling and rock chip sampling. During year two activities comprised detailed interpretation of the aeromagnetics, ground checks of the magnetic anomalies and additional rock chip sampling.

This report describes exploration results obtained in the four western blocks which were surrendered at the end of the second year.

2. GEOLOGY.

The rocks in the area are part of the Early Proterozoic Burrell Creek Formation, a turbidite sequence of shales, siltstones and greywackes, which hosts a number of the most important gold deposits of the Pine Creek Geosyncline, including the Goodall orebody of Western Mining situated 6 kilometres to the southeast.

Within the Licence area the sequence is represented by ridges of interbedded siltstones and fine to medium grained greywackes which form low ridges in the floodplane of Howley Creek and outcrop intermittently along the river bed. The bedding dips are predominantly towards the west and northwest at moderate angles, and a SSE trending anticline is infirred in the southeastern part of the Licence. Narrow zones of quartz veins, generally concordant to the bedding, were noted during the mapping, as were some areas of quartz float (Figure 2).

3. GEOPHYSICS.

The airborne geophysical surveys were part of an extensive regional program conducted by Golden Plateau N.L. The magnetic contours for the area relinquished from EL5315 are shown in Figure 3. Several anomalous features are evident in this data. The source of the anomalies is not certain because of the lack of outcrop. Their general concordance with the regional structure suggests that they originate in variations in the stratigraphy.

4. GEOCHEMISTRY.

Geochemical samples taken within the relinquished area consisted of 28 rock chip samples, and stream sediment samples comprising 5kg of minus 10 mesh and 1kg of minus 30 mesh material from each of five sites. Sample locations are shown in Figure 4.

Rock samples were analysed for gold using acid digest and graphite furnace AAS techniques. The minus 10 mesh sediments were analysed for gold by cyanide leach, and the minus 30 mesh screened further to minus 80 mesh and analysed for gold by graphite furnace AAS. All analytical work was done by AMDEL Laboratories in Darwin. Results are given in Appendix I.

Gold values were low for all the rock and drainage samples, with maximum values of 0.011ppm Au for rock chips, 0.67ppb Au for cyanide leach and 0.013ppm Au for sediments by AAS.

5. CONCLUSIONS.

Geochemical sampling in the relinquished areas produced negative results. The aeromagnetics show a number of anomalies which have not been resolved; they are probably related to geological features rather than having significance for mineralisation. The potential for significant gold occurrence appears low in the surrendered ground, and further follow up is not justified on the available data.

APPENDIX 1

EL 5315 Gold Assay Results 1987-9188

1. Rock Chips

Sample Number	Gold (ppm)
36503	x
36504	0.002
36505	x
36506	0.002
36507	x
36508	0.021
36518	0.002
36575	0.002
36576	x
36577	x
36578	x
36579	x
36580	x
36581	x
36582	x
36583	0.001
36584	x
36585	x
36586	x
36587	x
36588	x
36589	0.002
36590	0.002
36594	0.011
36595	x
36596	x
36597	0.004
36598	x
30590	x

x = less than 0.001 ppm Au

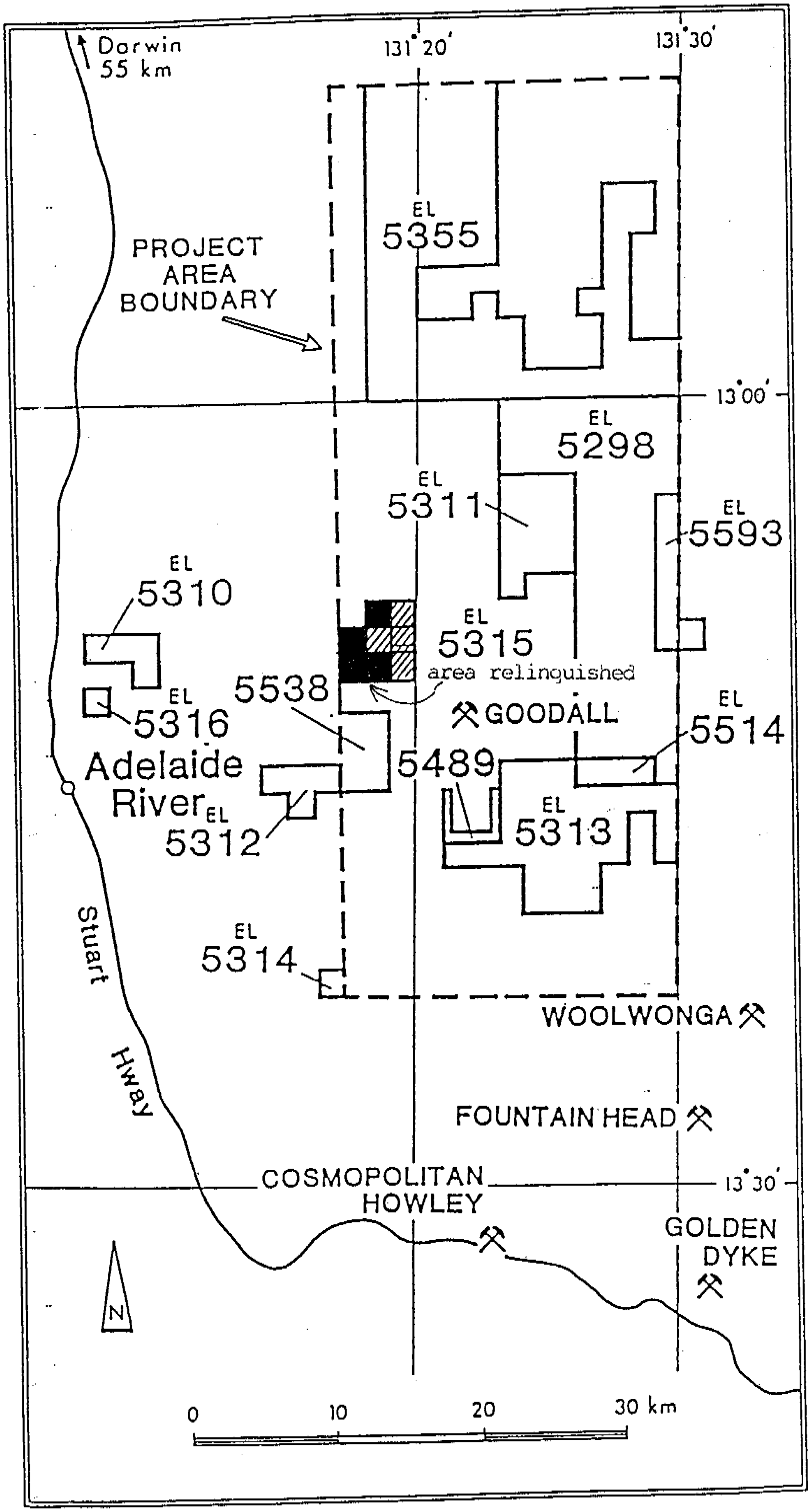
2. BLEG Stream Sediments

Sample Number	Gold (ppb)
29594	0.23
29595	0.67
29596	0.06
29597	0.22
29598	0.05

3. Low Level Gold Stream Sediments

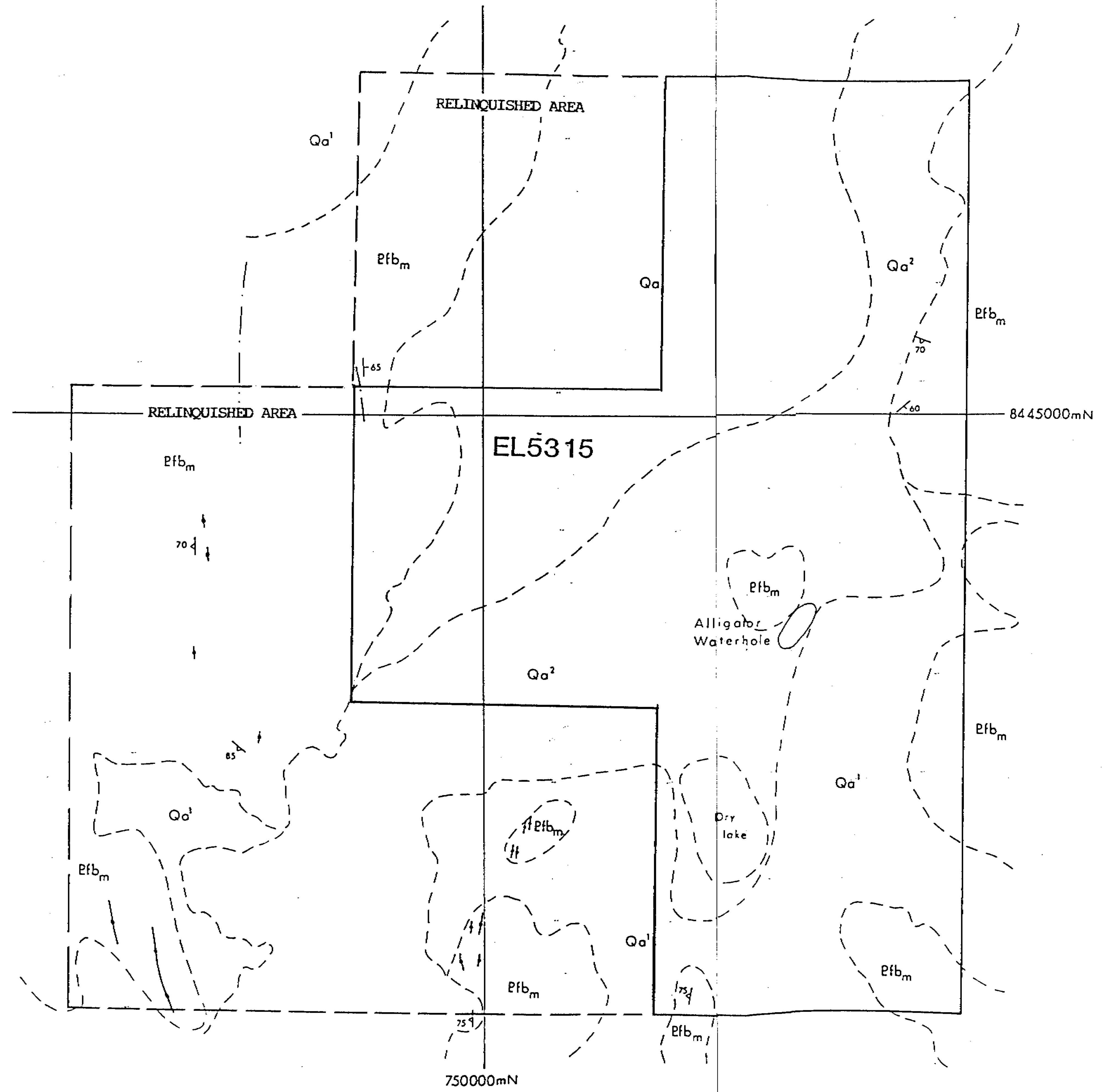
Sample Number	Gold (ppm)
29494	0.013
29495	x
29496	x
29497	x
29498	0.003

x = less than 0.001 ppm Au.



LOCALITY MAP EL 5315

FIGURE 1



LEGEND

Qa^1	Flood plain black soil.
Qa^2	Meander plain black soil.
Qat	Talus slope of vein quartz and silicified wallrock of Mt. Shoobridge fault.
Pfb_m	Siltstone, mudstone and minor sandstone.
	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.

Geology by H.Wilhelmij, June 1988

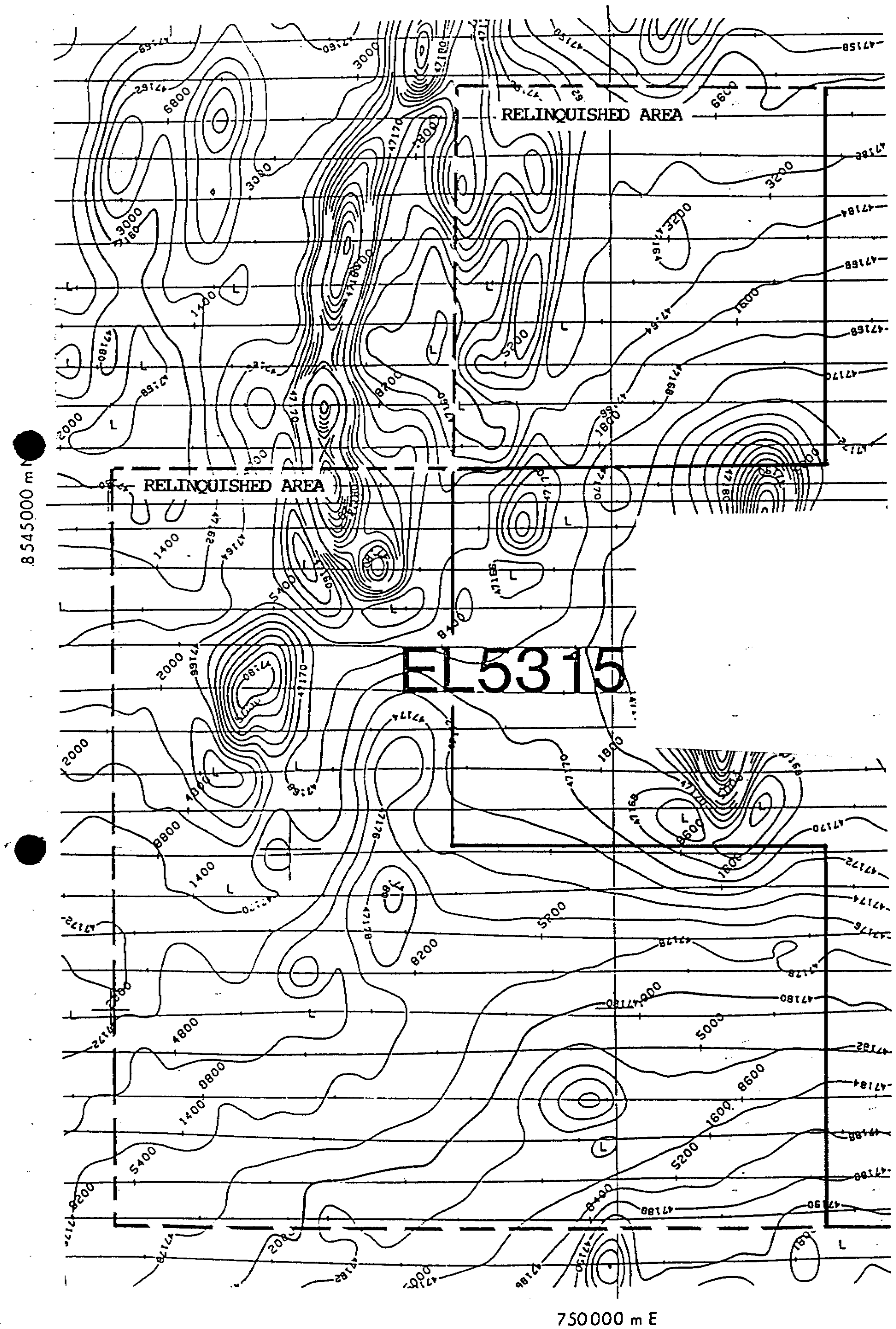
Scale 1:25000

GOLDEN PLATEAU NL

MT BUNDEY JOINT VENTURE, NT

Geology, EL 5315

FIGURE 2



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 EXPLORANIUM 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

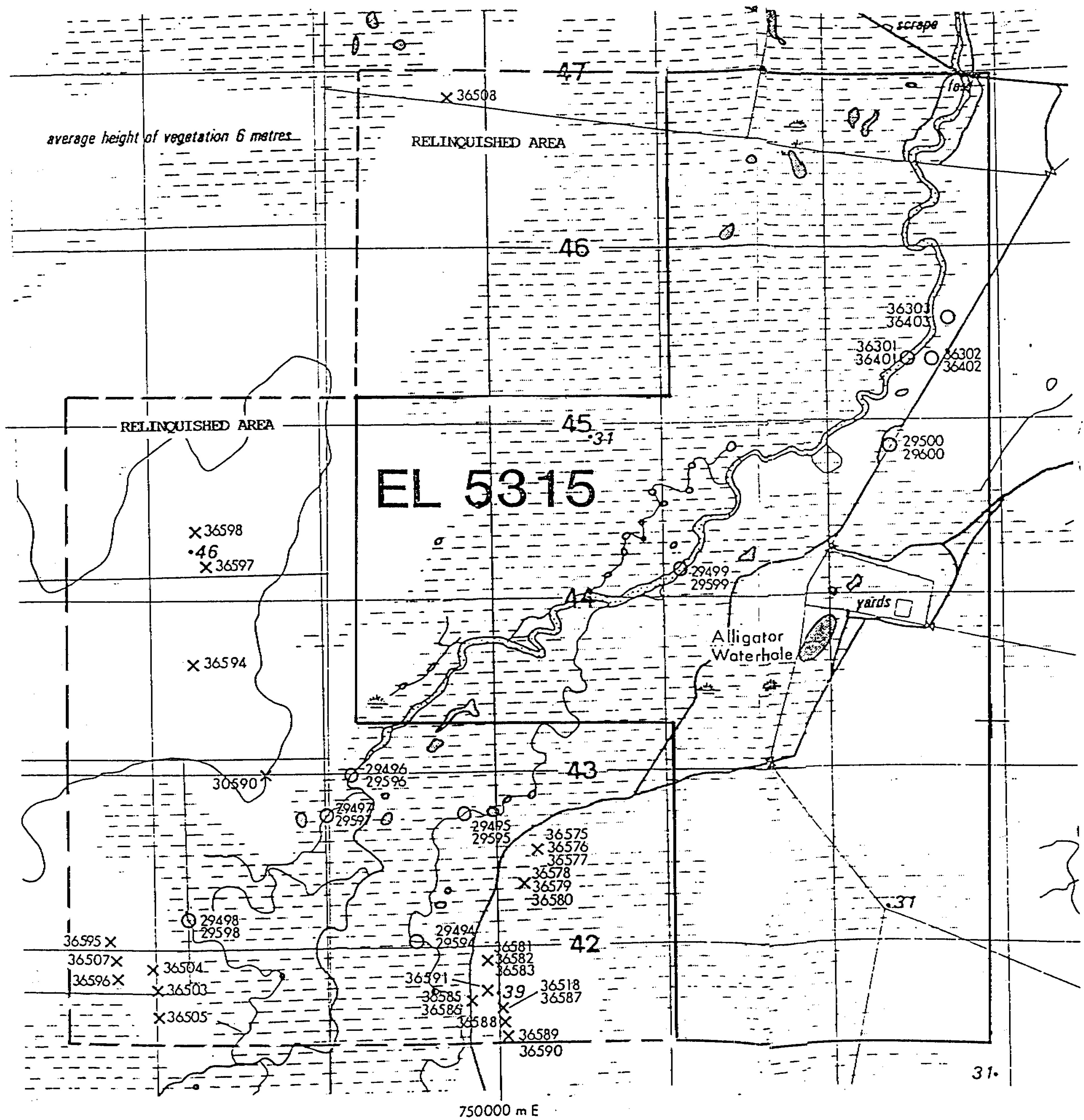
N

Scale 1:25000

GOLDEN PLATEAU NL
MT BUNDEY JOINT VENTURE, NT

Magnetics, EL5315

FIGURE 3



O 29499 Stream sediment sample site & number.

X 36595 Rock chip sample site & number

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

N

Scale 1:25000

GOLDEN PLATEAU NL
MT BUNDEY JOINT VENTURE, NT

Sample Localities, EL5315

FIGURE 4