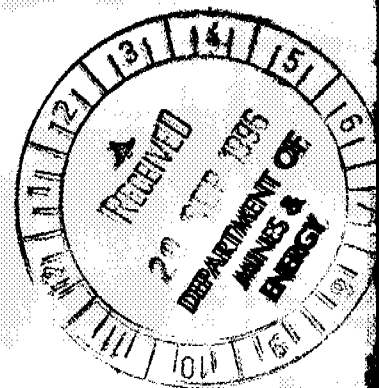


# PEGASUS GOLD AUSTRALIA PTY LTD

EL9093 - WILD BOAR  
MOUNT TODD DISTRICT, NT

ANNUAL REPORT FOR EXPLORATION  
YEAR ENDING 22 AUGUST 1996



Distribution:  
NTDME  
Pegasus Mt Todd  
Pegasus Perth

x 1  
x 1  
x 1

Author : Pat Manouge  
Date : September 1996  
Ref :

OPEN FILE  
CR96-778

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1. **INTRODUCTION**

Exploration Licence 9093 (Wild Boar) was granted to Pegasus Gold Australia Pty Ltd on 23 August 1995 for a period of three (3) years. The tenement comprises one full graticular block for a total area of 3.25km<sup>2</sup> (see *Figure 1*).

This report details all exploration carried out by Pegasus during Year 1 of the licence and also presents a forward programme and budget for exploration planned during Year 2.

2. **LOCATION AND ACCESS**

EL9093 (Wild Boar) is situated approximately 50km north of Katherine and 13km to the northeast of the Mt. Todd Gold Mine (*Figure 1*). Access is gained via gravel tracks north from the sealed Edith Falls Road.

Topography within EL9093 is generally of moderate to high relief, steeply incised by numerous creeks and drainages and lightly timbered.

The licence is located approximately 4km south of the abandoned Driffield Mining Centre which historically was intensely prospected for gold mineralisation. Small scale underground mining at Driffield produced 5,300oz of gold, and significant unrecorded gold production has been won from alluvial sources.

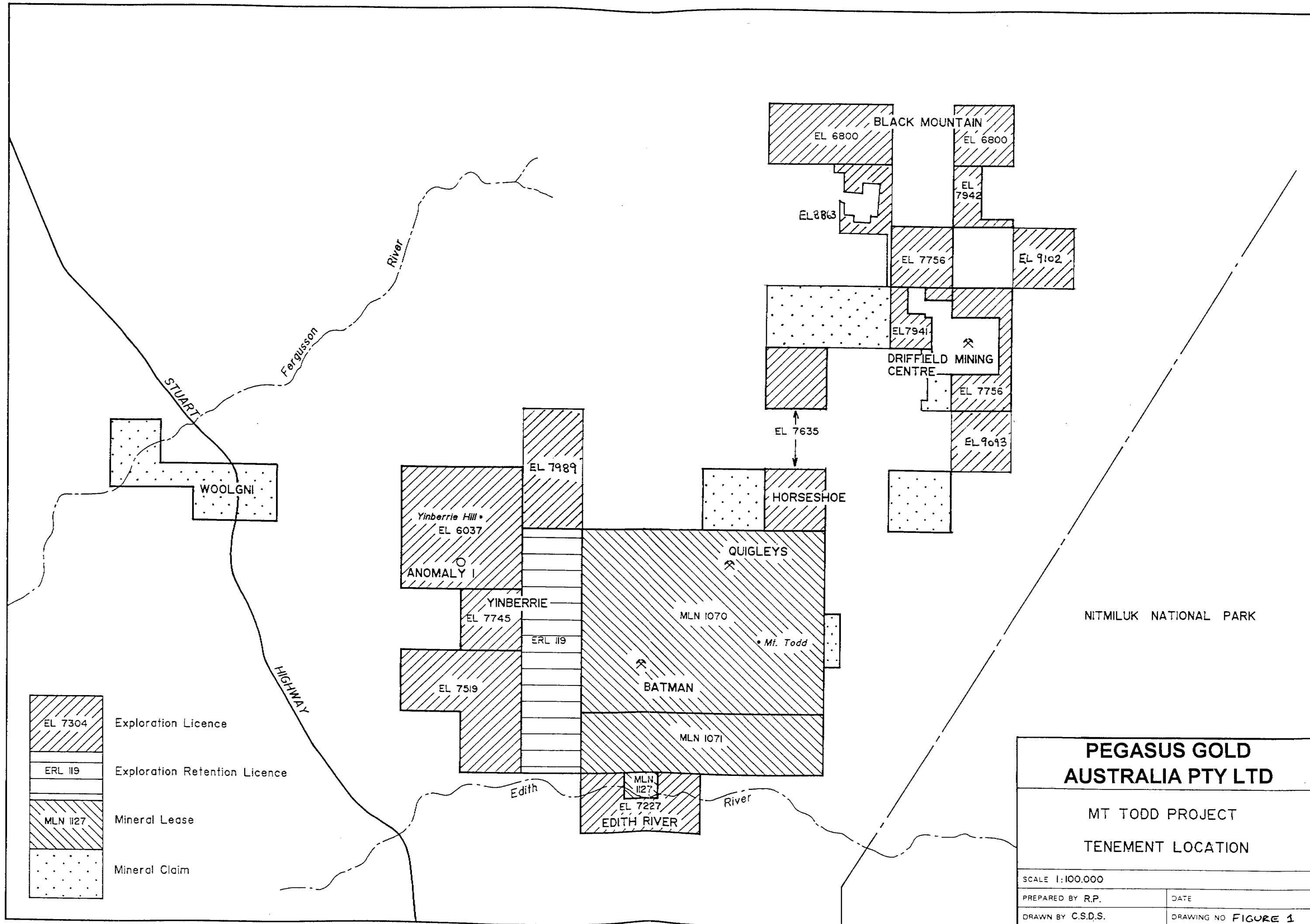
3. **REGIONAL GEOLOGY**

Wild Boar is located within the southeastern portion of the Early Proterozoic Pine Creek Geosyncline. Metasediments, granitoids, basic intrusives, acid and intermediate volcanic rocks occur within this geological province (*Figure 2*).

Within the Mt. Todd district, the oldest outcropping rocks are assigned to the Burrell Creek Formation. These rocks consist primarily of interbedded greywackes, siltstones and shales of turbidite affinity, which are interdispersed with minor volcanics.

Rocks of the Burrell Creek Formation have been folded about northerly trending F1 fold axes. The folds are open to closed style and have moderate to steep westerly dipping axial planes, with some rocks being overturned. A later north-south compression event resulted in east-west trending open style upright D2 folds.

Metasediments of the Burrell Creek Formation outcrop extensively throughout EL9093. Ridges and creeks host exposures of greywacke and siltstone, with lesser shale and minor felsic volcanics. These rocks have been folded into a series of south-plunging open folds with axial planes trending 350° - 020° magnetic.



**PEGASUS GOLD  
AUSTRALIA PTY LTD**

**MT TODD PROJECT  
TENEMENT LOCATION**

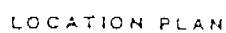
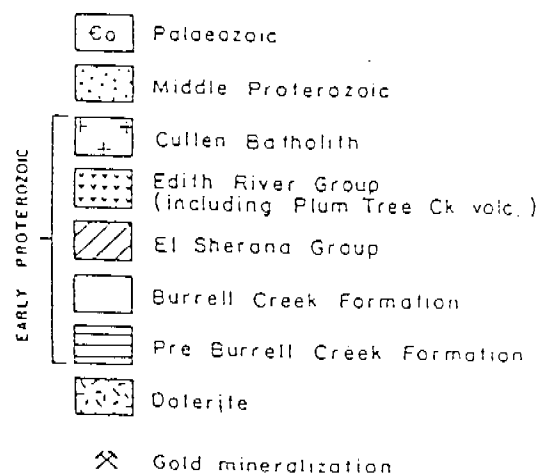
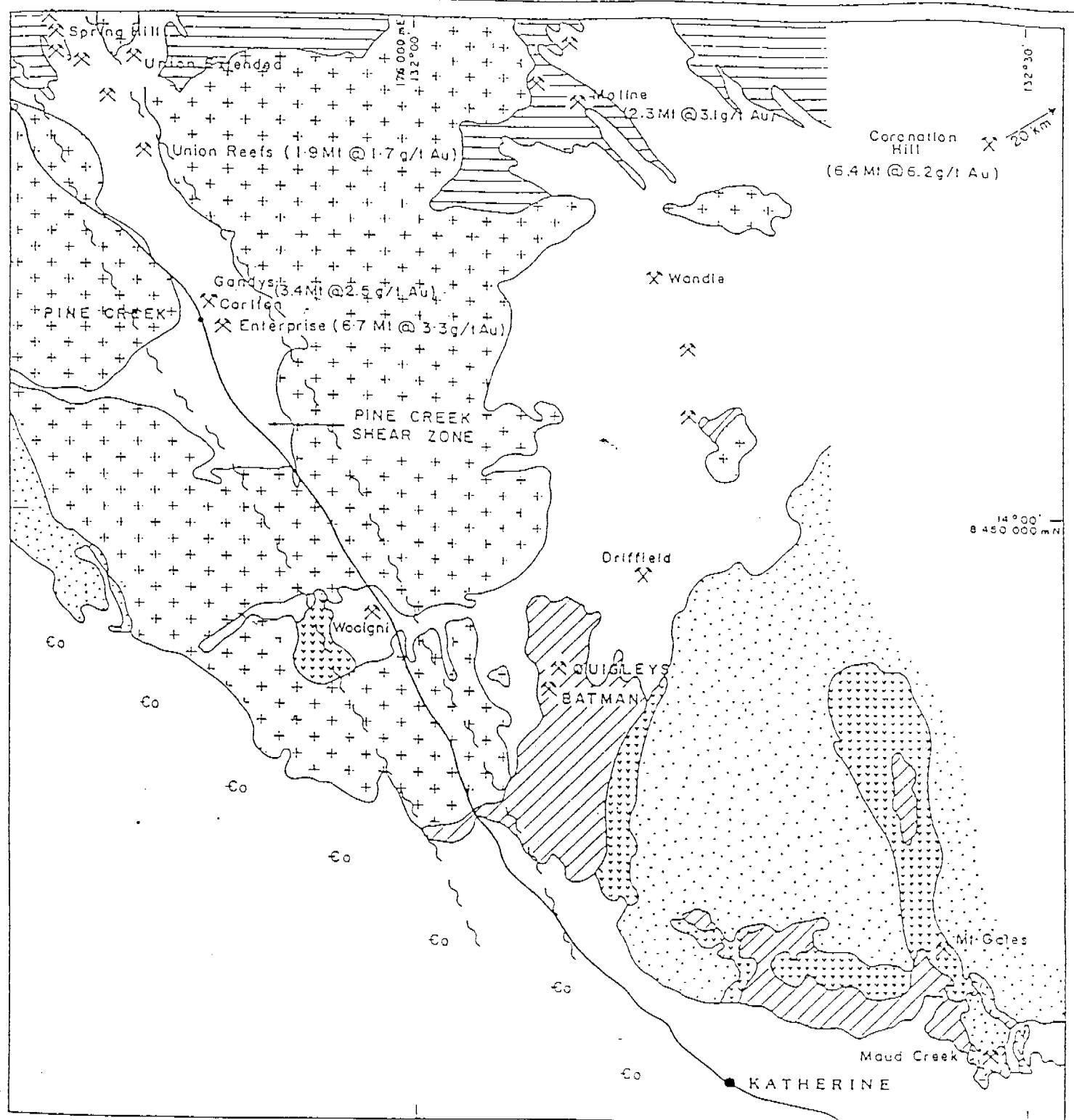
SCALE 1:100,000

PREPARED BY R.P.

DATE

DRAWN BY C.S.D.S.

DRAWING NO **FIGURE 1**



**PEGASUS GOLD  
AUSTRALIA PTY LTD**

Project MOUNT TODD

Title  
 MOUNT TODD  
 REGIONAL GEOLOGICAL  
 SETTING

Author	FF	Date	5-68	Scale	1:500,000
Drawn	JRB	Office	CNS	Revised	Date 4/90
Drawing No.					Fig No. 2

Abundant quartz veining is apparent, occurring often as massive white, poddy veins striking 330° - 030° magnetic; subparallel to the axial planes of the fold structures and the fold limbs. Minor, northerly trending breccia/shear zones often have associated thin stockworks or sheeted quartz veins, occasionally with limonite pseudomorphs.

No evidence of historical gold production or prospecting has been located within EL9093.

#### 4. **WORK COMPLETED**

Exploration during Year 1 of exploration on EL9093 has involved geological reconnaissance, rock chip sampling, stream sediment sampling and airborne geophysics.

##### 4.1 **Stream Sediment Sampling**

Twenty one (21) stream sediment samples were collected from small creeks and drainages within EL9093 as a first-pass test of the prospectivity of the licence for gold mineralisation. Material was sieved to -2mm (1/16") in the field for a 2-3kg sample and despatched to Assay Corp in Pine Creek for gold analysis by the BLEG technique (0.1ppb detection limit). A -80# fraction was produced by Assay Corp for analysis of Cu, Pb, Zn and As using the AAS technique for a 1-2ppm detection limit.

No significant results were returned from the stream sediment sampling; with the peak values being only 1.2ppb and 1.0ppb Au. The location and gold results of the stream sediment sampling are shown in *Figure 3*, with complete analytical results listed in Appendix 1.

##### 4.2 **Rock Chip Sampling**

During the stream sediment sampling programme 33 rock chip samples were collected from gossanous and brecciated quartz veining and sheared and altered metasediments and felsic volcanics. These samples were assayed for Au using low-level fire assay for a 0.01ppm detection limit. Assays for Cu, Pb, Zn and As were also carried out; using the AAS technique for a 1-2ppm detection limit.

Rock chip sample results were very disappointing, with only three results over the detection limit (0.03ppm, 0.02ppm and 0.05ppm). The location and gold results of the rock chip sampling are shown in *Figure 4*, with complete analytical results listed in Appendix 2.

FIGURE 3



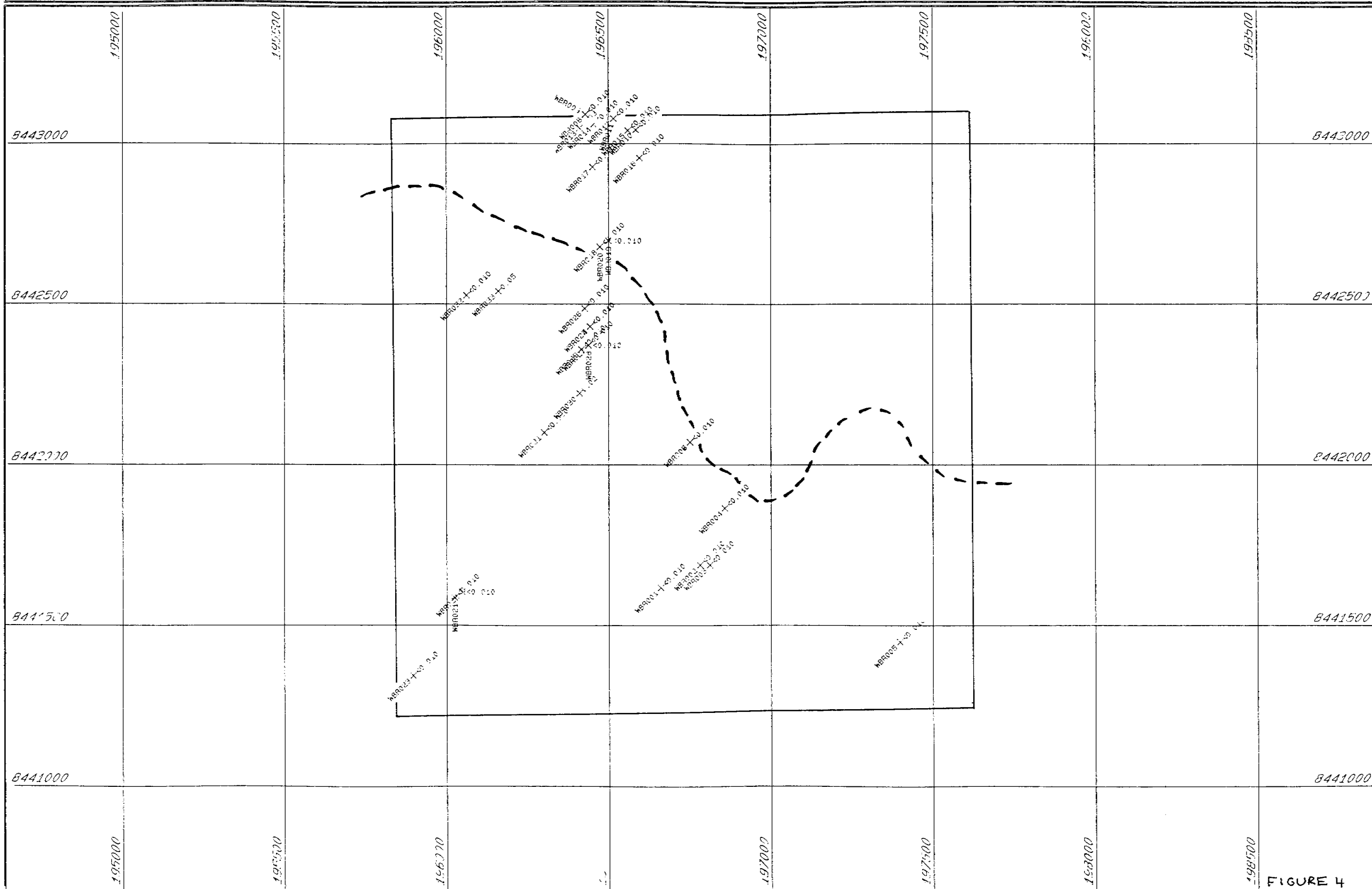


FIGURE 4

#### 4.3 **Airborne Geophysics**

A regional airborne geophysical survey, including coverage of EL9093, was completed for Zapopan NL (now Pegasus Gold Australia Pty Ltd) by World Geoscience during June 1995 at 50m flight line spacing. Specifications of the survey are detailed below:

Aircraft	VH-ADH C206
Magnetometer	Split beam cesium scintrex VIW2321-CS2 Resolution : 0.001 nano Tesla Cycle Rate : 0.1 seconds Sample interval : 6.0 metres
Spectrometer	Packets Perm. 1000 256 Channel Volume : 16.56 litres Cycle Rate : 1.0 seconds Sample interval : 60 metres
Data Acquisition	Packets Pads 1000 digital acquisition system 11 Channel RMS GR33A Chart Recorder
Flight Line Spacing	Traverse Lines : 50 metres Tie Lines : 984 metres
Flight Line Direction	Transverse Lines : 270 - 090 degrees Tie Lines : 000 - 180 degrees
Survey Height	60 metres - mean terrain clearance
Navigation	GPS satellite positioning system

See *Figure 5* for total field magnetic contours.

#### 5. **REHABILITATION**

During the first year of exploration on EL9093 no significant ground disturbance occurred and therefore no rehabilitation is required at this stage.

#### 6. **CONCLUSIONS AND RECOMMENDATIONS**

Results from both the stream sediment sampling and rock chip sampling programmes were disappointing. No geochemical anomalies were defined from the first-pass exploration on EL9093. The existence of favourable northerly trending shear/breccia zones in the north of the licence, similar to the structures that host the majority of hard rock workings at the nearby Driffield Mining Centre, suggest that the licence should be prospective for gold mineralisation. Stream sediment sampling needs to be expanded to ensure complete coverage of the drainage system. Further geological reconnaissance and systematic rock

132° 11'

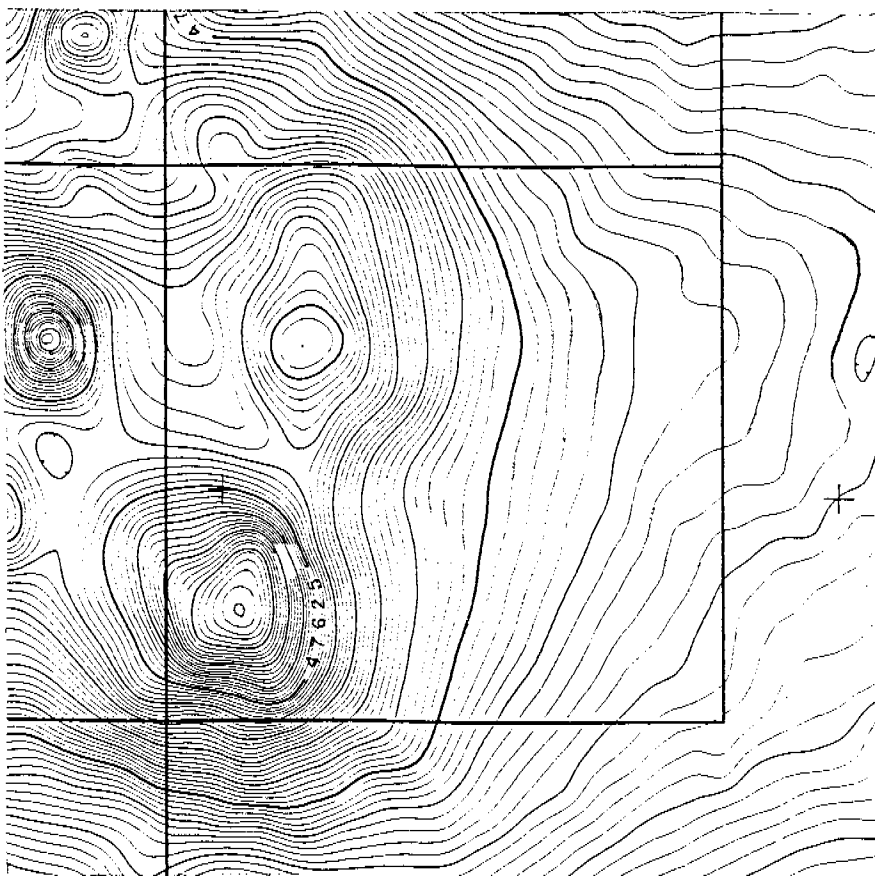
132° 12'

14° 04'

14° 04'

14° 05'

14° 05'



132° 12'

N  
↑

132° 11'

**PEGASUS GOLD  
AUSTRALIA PTY LTD**

Project **WILD BOAR**

Title **EL9093 TOTAL FIELD  
MAGNETIC CONTOURS**

Author	Date	Scale	1:25 000
Drawn	Office	Revised	Date

Drawing No.	Fig. No. <b>5</b>
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chip sampling of the favourable structures and aeromagnetic targets is also warranted. Any gold anomalies generated by the expanded stream sediment coverage and rock chip sampling may warrant a programme of soil sampling to further define exploration targets.

7. **FORWARD PROGRAMME**

Exploration proposed at EL9093 during the forthcoming year is as follows:

• Expanded stream sediment sampling	\$ 1000
• Geological reconnaissance and rock chip sampling	\$ 1500
• Gridding	\$ 1000
• Soil sampling of stream and rock chip anomalies	<u>\$ 1500</u>
<b>TOTAL</b>	<b>\$ 5000</b>

8. **EXPENDITURE STATEMENT**

**EL9093 - WILD BOAR**  
**Total Expenditure for period 23rd August 1995 - 22nd August 1996**

<b>COST DESCRIPTION</b>	<b>EXPENDITURE</b>
Salaries and Wages	\$ 3150
Consumables	\$ 15
Geophysics	\$ 1438
Assays	\$ 889
Fuel	\$ 256
Administration	\$ 575
<b>TOTAL EXPENDITURE</b>	<b>\$ 6323</b>

# **PEGASUS GOLD AUSTRALIA PTY LTD**

**EL9093 - WILD BOAR  
MOUNT TODD DISTRICT, NT**

## **APPENDIX 1**

### **STREAM SEDIMENT SAMPLING ASSAY RESULTS**

## ASSAYCORP FACSIMILE REPORT

ASSAY CODE: AC 30608

Pegasus Gold Exploration

21 Samples

Ref: 1876

Date: 25/07/96

Attn: Geology - Exploration

Time: 16:00

Authorisation: Ray Wooldridge

Analysis	Analytical Technique	Precision & Accuracy	Detection Limit	Data Units
Au	BLEG/2Kg	Prec. $\pm$ 15%	0.1	ppb
Cu	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
Pb	AAS/MA-3	Prec. $\pm$ 10%	2	ppm
Zn	AAS/MA-3	Prec. $\pm$ 10%	1	ppm
As	AAS/MA-3	Prec. $\pm$ 10%	1	ppm

EL9093

STREAM SED

ASSAY CODE: AC 30608

Page 1 of 1

Sample	Au (ppb)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
WBS001	0.1	17	11	22	11
WBS002	<0.1	17	6	24	14
WBS003	<0.1	14	6	17	10
WBS004	0.2	14	7	21	10
WBS005	<0.1	15	6	14	6
WBS006	<0.1	15	4	21	6
WBS007	1.0	18	8	19	8
WBS008	<0.1	14	10	19	6
WBS009	0.6	14	10	17	7
WBS010	<0.1	18	8	10	6
WBS011	0.5	17	11	15	8
WBS012	0.6	15	8	14	8
WBS013	0.3	12	7	10	8
WBS014	1.0	16	18	15	17
WBS015	0.2	16	13	15	11
WBS016	0.3	20	12	29	11
WBS017	0.8	25	20	45	17
WBS018	0.7	19	12	30	15
WBS019	1.2	15	8	23	18
WBS020	0.4	14	11	10	16
WBS021	0.3	14	9	17	9

# **PEGASUS GOLD AUSTRALIA PTY LTD**

**EL9093 - WILD BOAR  
MOUNT TODD DISTRICT, NT**

## **APPENDIX 2**

**ROCK CHIP SAMPLING  
ASSAY RESULTS**



## ASSAYCORP FACSIMILE REPORT

ASSAY CODE: AC 30609

Pegasus Gold Exploration

33 Samples

Ref: 1877

Date: 29/07/96

Attn: Geology - Exploration

Time: 07:27

Authorisation: Ray Wooldridge

Analysis	Analytical Technique	Precision & Accuracy	Detection Limit	Data Units
Au	FA50	Acc. $\pm$ 15%	0.01	ppm
Au(R)	FA50	Acc. $\pm$ 15%	0.01	ppm
Cu	ICP/MA-3	Prec. $\pm$ 10%	1	ppm
Pb	ICP/MA-3	Prec. $\pm$ 10%	5	ppm
Zn	ICP/MA-3	Prec. $\pm$ 10%	2	ppm
As	ICP/MA-3	Prec. $\pm$ 10%	1	ppm

WILD BOAR

EL 9093

ROCK CHIP

ASSAY CODE: AC 30609

Page 1 of 2

Sample	Au (ppm)	Au(R) (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
WBR001	<0.01		38	17	17	12
WBR002	<0.01		16	10	15	34
WBR003	<0.01		13	17	14	60
WBR004	<0.01	<0.01	5	16	11	3
WBR005	<0.01		14	9	33	5
WBR006	<0.01		21	30	5	6
WBR007	<0.01		15	30	11	11
WBR008	<0.01		30	10	15	10
WBR009	<0.01		51	<5	157	91
WBR010	<0.01		45	<5	140	55
WBR011	<0.01		67	14	105	62
WBR012	<0.01		61	<5	195	60
WBR013	0.03		53	6	82	40
WBR014	<0.01	<0.01	62	19	290	150
WBR015	<0.01		20	9	15	10
WBR016	<0.01		16	10	12	15
WBR017	<0.01		18	9	10	16
WBR018	<0.01		25	<5	21	18
WBR019	<0.01		24	<5	16	16
WBR020	<0.01		24	7	32	10
WBR021	<0.01		19	11	29	20
WBR022	<0.01		19	21	43	10
WBR023	<0.01		28	5	8	23
WBR024	<0.01		19	17	12	35
WBR025	<0.01		18	16	11	20

ASSAY CODE: AC 30609

Page 2 of 2

Sample	Au (ppm)	Au(R) (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
WBR026	<0.01		22	23	3	6
WBR027	<0.01		15	9	11	9
WBR028	<0.01		14	10	13	9
WBR029	<0.01		18	11	14	9
WBR030	0.02		12	17	14	33
WBR031	<0.01		23	8	26	28
WBR032	<0.01		20	11	32	12
WBR033	0.05	0.04	9	17	18	17