

DEPARTMENT OF MINES AND ENERGY  
SOUTH AUSTRALIA

Rept.Bk.No. 79/61

GEOCHEMICAL EXPLORATION FOR GOLD  
ORAMA HILL AREA

GEOLOGICAL SURVEY

BY

J.J. MARTINS

MINERAL RESOURCES DIVISION

G.S. No. 6179  
D.M. No. 263/77

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GEOCHEMICAL EXPLORATION FOR GOLD  
ORAMA HILL AREA

INTRODUCTION

Gold mineralisation occurs near Orama Hill, north of Koonamore Station and at Kirkeek's Treasure Gold Mine, Nillinghoo Goldfield. These two localities are about 25 km apart and lie along the axis of the Orama Hill Anticline.

In June 1978, W.P. Fradd and J.J. Martins carried out a stream sediment survey over the central part of this anticline to explore for fine grained gold mineralisation in the anticline between these two gold occurrences.

LOCATION

Orama Hill lies in the north eastern corner of ORROROO. It is about 80 km north north west of Yunta, which is 230 km north of Adelaide on the Barrier Highway, about half way to Broken Hill. The area lies on Koonamore Station, Lytton County and within the Far North Planning Area (Figure 1). Steep sided gullies make vehicular access within the area difficult.

PREVIOUS WORK

Gold was discovered near Orama Hill about 1935 by Messrs Butler and Donnallan (Pearson, 1935). The workings consist of a shallow trench about 75 km long, 3 m deep and 2 m wide. At either end of this trench are two shafts about 5-6 m deep. A few trial pits are located further west in the same line as the trench. Some of the north draining creeks were worked for alluvial gold.

In 1975, the area was held by F.W.C. Reick as Mineral Leases 4421-4424. It appears that no mining was done as no production is recorded during this period. In late 1975, B.J. Morris, (Geologist) and I.C. Grant (Supervising Geologist) visited the lease and collected six samples from the workings. Three of these samples assayed anomalous gold values of up to 83 gm/tonne gold (Morris, 1975).

#### GEOLOGICAL SETTING

The area investigated covers the northeastern corner of the ORROROO 1:250 000 map sheet (Binks, 1968). The rocks exposed which belong to the Wilyarpa Formation (Yudnamatana Sub-Group) comprise well bedded siltstone with interbeds of medium grained off-white felspathic sandstone which forms prominent ridges.

Erratics occur in thin bands interbedded occasionally in the siltstone. The interbedded sandstone-siltstone beds are tightly folded into the west south westerly plunging Orama Hill Anticline (Binks, 1971). Outcrop of an adamellite vein with gneissen type alteration was observed on the northern limb of the anticline north of Orama Hill (See Appendix I). Numerous east-west quartz veins outcrop around the anticline, and the sandstone beds adjacent to these veins are mottled due to iron oxide pseudomorphs after pyrite. A 3 km long shear zone, dipping steeply to the south, was located near the axis of the anticline. Quartz ironstone veins are associated with the shear zone and the Orama Hill gold occurrence.

#### SAMPLING AND RESULTS

One hundred and twenty nine stream sediment samples at an average density of 3.4 samples/km<sup>2</sup> were collected by W.P. Fradd and J. Martins in June 1978. The sample locations are shown on Figure 2. The samples were sieved in the field to -20# size fraction (850 microns) and submitted to Amdel for gold analysis

by the Amdel  $C_3$  method (detection limit 50 p.p.b.) and for copper, lead, zinc, silver, arsenic, cobalt, molybdenum, manganese, barium and nickel by emission spectrometry.

No gold was detected in the sample although pin-head size gold fragments were seen in the pan in samples from locations 32, 37, and 43. All results (see Appendix II), were placed on computer file. The statistical calculations listed in Table 1 show no significant anomalies.

### STATISTICAL DATA

Table 1

Elements	Cu	Pb	Zn	Co	Ni	Mo	Ag	Ba	Mn
Mean	87.97	84.49	51.41	29.06	93.83	0.92	0.19	323.30	735.70
Median	83.46	68.86	35.00	21.71	77.50	0.19	0.19	381.30	505.0
St. Dev.	29.44	65.27	63.54	22.41	54.50	2.90	0.10	242.06	604.67
Threshold (2.5 x mean)	219.90	211.20	128.50	72.65	234.60	2.30	0.50	833.0	1837.50
Range	200.00	300.00	400.00	200.00	300.00	20.0	0.80	800.00	2930.0

### CONCLUSION

The results indicate that there is no widespread fine grained gold mineralisation in the Orama Hill Area.

No gold was detected in samples taken less than 500 m downstream from an area of known gold mineralisation, despite gold being detected on panning.

Hence, there is a need to review the sampling procedure being used in stream sediment sampling for gold. Possibly a sample larger than 2.5 gms will have to be used for digestion or the sample will have to be gravity concentrated before submission for analysis.

## REFERENCES

- Binks, P.J., 1968. ORROROO map sheet Geological Atlas of South Australia. 1:250 000 series. Geol. Survey of South Australia.
- Binks, P.J., 1971. The Geology of the ORROROO 1:250 000 map area. Rep. Invest., Geol. Survey S. Aust. 36.
- Morris, B.J., 1975. Report on a visit to Mineral Leases 4421, 4422, 4423 and 4424 ORROROO 1:250 000 sheet. S. Aust. Dept. Mines report 75/144 (unpublished).

APPENDIX I      Petrological Report Amde1 No. GS 4439/78

## PETROGRAPHY OF ONE ROCK

Sample: P817/78; TS40427

### Location:

Orroroo, 1:250,000 sheet. 80 km NE of Yunta and 1 km SE of Orama Hill on Koonamore Station.

### Rock Name:

Leucocratic adamellite vein in conglomerate

### Hand Specimen:

The hand specimen contains a pale grey to dull white granitic band in a dark coloured conglomeratic sediment. The conglomeratic sediment contains large, angular fragments up to 1.5 cm in size and the granitic band is approximately 6 cm wide. A vague bedding is evident in the conglomeratic sediment and this is truncated by the band.

The band has a leucocratic character, but one corner contains a black, poikilitic-appearing mineral. This portion of the band was not included in the thin section but the black mineral was optically identified as tourmaline in temporary oil mount.

### Thin Section:

The thin section was cut along the contact of the leucocratic band with the enclosing conglomeratic sediment. This contact is very sharp and shows no evidence of either chilling or baking of the sediment. The bedding which was noted in hand specimen is also evident in thin section and is truncated by the band which is oriented perpendicular to this foliation direction.

The granitic band consists of a granular intergrowth of quartz, plagioclase and microcline and is probably best termed an adamellite. Traces of biotite and muscovite are present as small flakes up to 0.5 mm in size. The biotite has an oxidised, reddish-brown pleochroic character and finely divided phyllosilicates (biotite or partially chloritized biotite) also form narrow fracture fillings within the band. All of the feldspar has a very fresh character, only locally showing incipient alteration to finely divided sericite flakes.

The conglomerate has a siliceous matrix, consisting mainly of quartz grains up to 0.1 mm in size, intergrown with cherty quartz and smaller amounts of feldspar. Large cherty rock fragments and at least one basaltic rock fragment and a few schistose-appearing rock fragments are also present in this area. Calcite is locally present in the conglomerate as polycrystalline aggregates which are concentrated marginal to some fragments and also are locally concentrated along the contact with the granitic band.

This granitic band is considered to represent a vein which has intruded the conglomerate. The strongest evidence for such an origin is the orientation of the band across the general bedding direction and the sharp truncation of the bedding by the band. There is no evidence of marginal chilling of the vein, nor baking of the host sediment, but the narrowness of the vein as well as its relatively low temperature late magmatic to pneumatolytic or hydrothermal character as indicated by the presence of poikiloblastic tourmaline would mitigate against the development of such features.



APPENDIX II

Results of chemical Analysis  
Amdel Reports AC 4450/78 and AC 258/79



# The Australian Mineral Development Laboratories

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Associated with: Professional Consultants Australia Pty Ltd  
Please address all correspondence to Frewville.  
In reply quote: **ac 1/14/0 - 4450/78**

**NATA CERTIFICATE**

**25 July 1978**

The Director-General,  
Department of Mines & Energy,  
P O Box 151,  
EASTWOOD SA 5063

A3/78 & A5/78

## REPORT AC 4450/78

YOUR REFERENCE:

Application dated 14 June 1978

LOCATION:

Koonamore Area

IDENTIFICATION:

As listed

DATE RECEIVED:

14 June 1978

Enquiries quoting AC 4450/78 to the Manager please

D. K. Rowley  
Manager  
Analytical Chemistry Division

for Norton Jackson  
Managing Director

hjj



This laboratory is registered by the National Association of Testing Authorities, Australia. The test(s) reported herein have been performed in accordance with its terms of registration. This document shall not be reproduced except in full.

## REPORT AC 4450/78

x = not detected at the limits quoted

Results in ppm unless otherwise stated. Detection limits in brackets.

Sample No.	Cu (1)	Pb (1)	Zn (20)	Ag (0.1)	As (50)	Mo (3)	Mn (10)	Ba (200)	Co (5)	Ni (5)
222/78	111010	111010	11510	101-13	111X	111X	181010	151010	11410	11510
3	11010	11710	111010	101-13	111X	111X	1151010	131010	11410	11710
4	121010	121010	141010	101-13	111X	111X	3101010	121010	11610	13010
5	121010	11810	11510	101-12	111X	11210	2101010	141010	11610	11010
6	11510	11810	111010	101-12	111X	111X	2101010	131010	11710	11510
7	11510	11610	111010	101-12	111X	111X	1101010	141010	11510	131010
8	11510	131010	111010	101-12	111X	111X	3101010	151010	11010	11510
9	111010	11710	11510	101-12	111X	111X	1101010	151010	11510	11010
230	111010	121010	11710	101-12	111X	111X	1101010	141010	11610	11010
352	11510	121010	11710	101-14	111X	111X	1101010	161010	11610	11010
3	11810	11410	11710	101-12	111X	111X	131010	141010	1115	11510
4	111010	11710	11310	101-12	111X	111X	1151010	141010	1115	11510
5	111010	111010	11310	101-12	111X	111X	1151010	151010	11310	11810
6	121010	11510	111010	101-13	111X	1115	3101010	181010	11610	12010
7	11510	11510	11310	101-12	111X	111X	117010	171010	11510	11810
8	11510	11710	11710	101-13	111X	111X	117010	141010	11410	11710
9	111010	11710	11710	101-13	111X	111X	1101010	151010	11610	11710
60	111010	11710	11710	101-13	111X	111X	2101010	151010	11510	11510
1	111010	11410	11510	101-13	111X	111X	141010	151010	1115	11710
2	11710	11610	11510	101-12	111X	111X	1101010	151010	11410	11510
3	11310	11310	11710	101-13	111X	1113	1101010	131010	11310	11510
4	11610	11410	111010	101-13	111X	111X	1101010	161010	11310	11010
5	11810	11810	111X	101-13	111X	111X	1151010	131010	11210	11710
6	11810	11610	11510	101-13	111X	111X	1101010	141010	11310	11810
7	111010	111010	111X	101-18	111X	111X	1101010	141010	11310	11810
8	11810	111010	11310	101-12	111X	111X	1161010	151010	11310	11010
369	111010	131010	121010	101-12	111X	111X	2101010	151010	11710	11510

Results are semi-quantitative. Elements apparently present in concentrations of economic interest should be re-determined by an appropriate accurate analytical technique.

x = not detected at the limits quoted  
Results in ppm unless otherwise stated. Detection limits in brackets.

Sample No.	Cu (1)	Pb (1)	Zn (20)	Ag (0.1)	As (50)	Mo (3)	Mn (10)	Ba (200)	Co (5)	Ni (5)
A370/78	11510	11710	11310	101.14	111x	111x	181010	13610	11510	11010
1	11310	11410	111x	101.12	111x	111x	131010	12010	1115	11010
2	11310	11510	111x	101.13	111x	111x	131010	12010	1115	11310
3	11310	11410	111x	101.12	111x	111x	161010	13010	11110	11810
4	11310	11610	111x	101.13	111x	1115	161010	14010	11310	11710
5	11810	11810	11510	101.13	111x	111x	1101010	14010	11410	11710
6	11510	11710	11310	101.12	111x	111x	17010	14010	11210	11810
7	11510	11510	11210	101.12	111x	111x	15010	121010	11110	11710
8	11810	11610	111x	101.13	111x	1113	13010	151210	11210	11010
9	11810	11710	111x	101.13	111x	111x	1101010	12010	11310	11710
80	11810	11710	11510	101.12	111x	111x	210010	14010	11610	11010
1	11610	11310	111x	101.12	111x	111x	17010	14010	11210	11610
2	11010	11610	11310	101.13	111x	111x	2101010	171010	11710	12010
3	11010	11510	11310	101.12	111x	111x	2101010	13010	11410	11010
4	11010	11010	11310	101.12	111x	111x	2101010	16010	11710	11510
5	11010	11810	11510	101.12	111x	111x	151010	171010	11410	11810
6	11810	11810	11510	101.11	111x	111x	1101010	151010	11310	11710
7	11010	11810	111x	101.11	111x	111x	1101010	14010	11410	113010
8	11810	11710	11510	101.13	111x	111x	151010	17010	1115	11710
9	11010	11010	11010	101.13	111x	111x	1101010	17010	11710	11010
90	11710	121010	11510	101.13	111x	111x	210010	14010	11610	11810
1	11010	11010	11510	101.12	111x	1113	2101010	13010	11610	112510
2	11010	11010	121010	101.11	111x	111x	1101010	161010	11510	11010
3	11010	11010	11310	101.12	111x	111x	110010	15010	11310	11010
4	11810	11410	111x	101.12	111x	111x	131010	14010	1115	11310
5	11010	11010	11510	101.12	111x	111x	15010	151010	11210	11510
396	11610	11510	111x	101.12	111x	1115	15010	111x	11210	11410

Results are semi-quantitative. Elements apparently present in concentrations of economic interest should be redetermined by an appropriate accurate analytical technique.

## REPORT AC 4450/78

x = not detected at the limits quoted

Results in ppm unless otherwise stated. Detection limits in brackets.

Sample No.	Cu (1)	Pb (1)	Zn (20)	Ag (0.1)	As (50)	Mo (3)	Mn (10)	Ba (200)	Co (5)	Ni (5)
1397/78	11010	11010	1170	0111	111X	111X	11010	11010	1140	1100
8	11010	11810	11010	0111	111X	111X	11010	11010	1150	1100
9	11010	11710	11510	0112	111X	111X	117010	116010	11215	1180
400	11010	11710	11310	0111	111X	111X	115010	116010	11215	1180
231	11510	11510	1130	0112	111X	111X	113010	114010	1120	1180
2	11010	11710	1130	0112	111X	111X	11400	117010	1130	1100
3	11010	11710	1130	0112	111X	111X	115010	115010	1130	11710
4	11810	11710	1150	0112	111X	111X	115010	115010	11410	1100
5	11810	1160	1130	0111	111X	111X	11500	114010	11410	1150
6	11810	11610	11400	0111	111X	111X	117010	114010	1120	11710
7	11010	1100	111X	0111	111X	111X	11700	11400	1150	11510
8	11810	11710	111X	0112	111X	1115	11400	11300	11115	1100
9	11710	113010	111X	0112	111X	111X	11700	11300	1120	11010
40	11810	112010	1130	0111	111X	1113	11700	11600	1120	11710
241	11710	112010	11310	0112	111X	111X	11400	117010	1110	1150
5090	1100	1160	111X	0112	111X	111X	11400	11800	11215	11510
1	11010	1130	111X	0112	111X	1113	11300	118010	11215	11510
2	11010	11010	11510	0112	111X	1113	11300	118010	11215	1100
3	1100	1100	11310	0112	111X	111X	11400	11700	11115	11510
4	1100	1150	111X	0112	111X	111X	112010	11500	1130	1100
5	1100	1150	11010	0112	111X	111X	11010	118010	1130	11710
6	1111	115010	111X	0111	111X	11110	117010	116010	11215	11010
7	1111	11010	11310	0111	111X	111X	114010	112010	11115	11310
8	11010	1170	111X	0112	111X	11120	117010	11600	1120	1160
9	11010	11710	11310	0111	111X	111X	115010	11400	11115	1140
5100	11010	1160	11310	0111	111X	111X	11000	11500	11115	11010
A 5101/78	1120	1100	11510	0111	111X	111X	115010	11600	11115	1160

Results are semi-quantitative. Elements apparently present in concentrations of economic interest should be redetermined by an appropriate accurate analytical technique.

FORM 6

JOB 4450/78

Results in ppm unless otherwise stated

BATCH NO. 1/2

TT	Sample No.			Au					
1	A 222/78			< 0.05					
2	223			< 0.05					
3	224			< 0.05					
4	225			< 0.05					
5	STD								
6	226			< 0.05					
7	227			< 0.05					
8	228			< 0.05					
9	229			< 0.05					
10	230			< 0.05					
11	231			< 0.05					
12	232			< 0.05					
13	233			< 0.05					
14	234			< 0.05					
15	235 x			< 0.05					
16	A 236/78			< 0.05					
17	A 237/78			< 0.05					
18	238			< 0.05					
19	A 239/78			< 0.05					
20	235 x								

## AMDEL ANALYTICAL SERVICE

FORM 6

JOB 4450/78

Results in ppm unless otherwise stated

BATCH NO. 2

TT	Sample No.			Au					
1	A 240/78			< 0.05					
2	A 241/78			< 0.05					
3	A 5090/78			< 0.05					
4	5091			< 0.05					
5	5092 x			< 0.05					
6	5093			< 0.05					
7	5094			< 0.05					
8	5095			< 0.05					
9	5096			< 0.05					
10	5097			< 0.05					
11	5098			< 0.05					
12	5099			< 0.05					
13	5100			< 0.05					
14	A 5101/78			< 0.05					
15	A 352/78			< 0.05					
16	STD								
17	353			< 0.05					
18	354			< 0.05					
19	A 355/78			< 0.05					
20	5092 x								

FORM 6

JOB 4450/78

Results in ppm unless otherwise stated

BATCH NO. 3/4

TT	Sample No.			Au					
1	A 356/78			< 0.05					
2	357			< 0.05					
3	358			< 0.05					
4	359			< 0.05					
5	STD								
6	360			< 0.05					
7	361			< 0.05					
8	362			< 0.05					
9	363			< 0.05					
10	364			< 0.05					
11	365			< 0.05					
12	366			< 0.05					
13	367			< 0.05					
14	368			< 0.05					
15	369 x			< 0.05					
16	370			< 0.05					
17	371			< 0.05					
18	372			< 0.05					
19	A 373/78			< 0.05					
20	369 x								

FORM 6

JOB 4450/78

AMDEL ANALYTICAL SERVICE  
Results in ppm unless otherwise stated

BATCH NO. 4

TT	Sample No.			Au					
1	A 374/78			< 0.05					
2	375			< 0.05					
3	376			< 0.05					
4	377			< 0.05					
5	378 x			< 0.05					
6	379			< 0.05					
7	380			< 0.05					
8	381			< 0.05					
9	382			< 0.05					
10	383			< 0.05					
11	384			< 0.05					
12	385			< 0.05					
13	386			< 0.05					
14	STD								
15	387			< 0.05					
16	388			< 0.05					
17	389			< 0.05					
18	390			< 0.05					
19	A 391/78			< 0.05					
20	378 x								

TT	Sample No.			Au					
1	A 392 / 78			< 0.05					
2	393			< 0.05					
3	394 x			< 0.05					
4	395			< 0.05					
5	396			< 0.05					
6	STD								
7	397			< 0.05					
8	398			< 0.05					
9	399			< 0.05					
10	A 400 / 78			< 0.05					
11	394 x								
12	BLNK			—					
13	CODE			C3					
14									
15									
16									
17									
18									
19									
20									

129  
48  
181

81  
48





## The Australian Mineral Development Laboratories

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Please address all correspondence to Frewville.  
In reply quote: AC 1/15/0 - 258/79  
-12/05/0087

### NATA CERTIFICATE

19 September 1978

A3/78

The Director-General,  
Department of Mines & Energy,  
P O Box 151,  
EASTWOOD SA 5063

### REPORT AC 258/79

YOUR REFERENCE: Application dated 13 July 1978  
LOCATION: Orana Hill area  
IDENTIFICATION: As listed  
DATE RECEIVED: 18 July 1978

Enquiries quoting AC 258/79 to the Manager please

D. K. Rowley  
Manager  
Analytical Chemistry Division

for Norton Jackson  
Managing Director



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hjj

## REPORT AC 258/78

x = not detected at the limits quoted

Results in ppm unless otherwise stated. Detection limits in brackets.

Sample No.	Cu (1)	Pb. (1)	Zn (20)	Ag (0.1)	As (50)	Mo (3)	Mn (10)	Ni (5)	Co (5)	Ba (200)
A 305 <sup>178</sup>	11710	11510	11610	10113	1111X	1111X	131010	11810	11210	1111X
6	111010	11610	11710	10113	1111X	1111X	131010	11810	11210	12010
7	11810	11510	111010	10112	1111X	1111X	14010	11010	11115	1111X
8	11510	11215	11210	10112	1111X	1111X	12510	11410	11110	1111X
9	11710	11510	11310	10112	1111X	1111X	12510	11310	11115	1111X
10	11810	11510	11510	10113	1111X	1111X	12510	11510	11110	1111X
1	111010	11710	11510	10112	1111X	1111X	15010	11610	11115	1111X
2	11810	11510	11510	10112	1111X	1111X	13010	11010	11110	1111X
3	11810	11510	11510	10112	1111X	1111X	12010	11510	11110	1111X
4	11810	11510	11310	10112	1111X	1111X	12010	11410	11115	1111X
5	11810	11710	11510	10111	1111X	1111X	13010	11410	11115	1111X
6	11710	11310	11710	10112	1111X	1111X	13010	11410	11110	1111X
7	11710	11510	11310	10112	1111X	11113	12510	11310	11110	1111X
8	11810	11010	1111X	10113	1111X	11115	13010	11610	11115	12010
9	111010	11510	11510	10112	1111X	11113	15010	11810	11210	1111X
20	11710	11215	11310	10112	1111X	1111X	12510	11510	11110	1111X
1	11810	11010	11210	10112	1111X	11115	12510	11610	11210	13010
2	11810	11510	11510	10112	1111X	1111X	13010	11010	11115	1111X
3	11810	11510	1111X	10112	1111X	11113	14010	11610	11210	1111X
4	11810	11510	11310	10113	1111X	1111X	13010	11610	11210	1111X
5	11810	11810	1111X	10113	1111X	1111X	12510	11310	11110	1111X
6	11510	11510	11210	10111	1111X	1111X	12010	11115	11115	12010
7	11010	11410	1111X	10112	1111X	1111X	14010	11610	11110	12010
8	11710	11410	11510	10111	1111X	1111X	12510	11410	11110	1111X
9	11710	11410	11310	10111	1111X	1111X	12510	11510	11115	1111X
30	11510	11310	11710	10112	1111X	1111X	12010	11410	11110	12010
A331	11810	11510	11210	10111	1111X	1111X	12510	11510	11110	1111X

Results are semi-quantitative. Elements apparently present in concentrations of economic interest should be redetermined by an appropriate accurate analytical technique.

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x = not detected at the limits quoted  
Results in ppm unless otherwise stated. Detection limits in brackets.

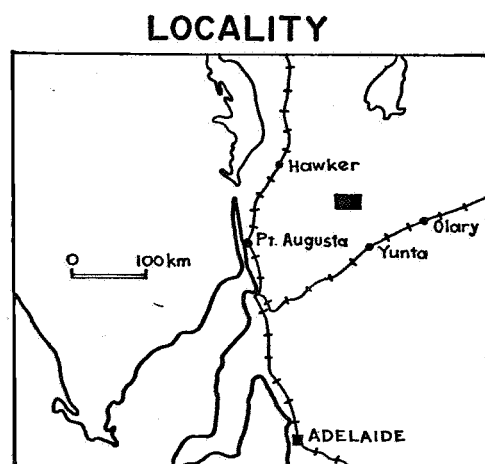
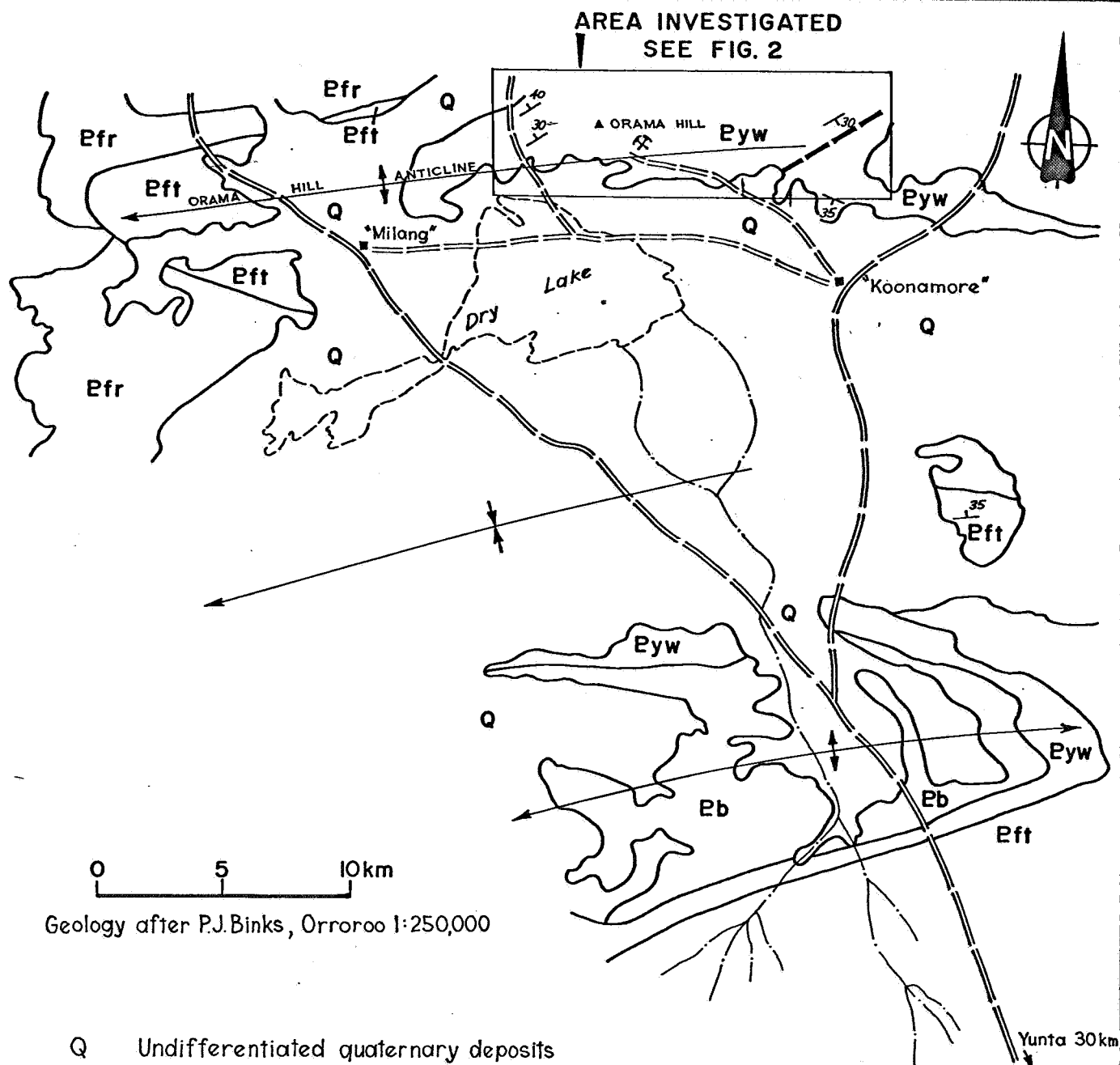
Sample No.	Cu (1)	Pb. (1)	Zn (20)	Ag (0.1)	As (50)	Mo (3)	Mn (10)	Ni (5)	Co (5)	Ba (200)
A332 <sup>78</sup>	11010	11610	11310	10.11	111x	111x	151010	11710	11210	1111
3	11510	11810	111x	10.11	111x	111x	121510	11510	11110	1111
4	11810	11010	121010	10.12	111x	111x	151010	11810	11310	1111
5	11810	11310	11310	10.11	111x	111x	161010	11710	11115	1111
6	11010	11510	11510	10.12	111x	111x	151010	11010	11410	121010
7	11010	11610	11410	10.11	111x	111x	141010	11010	11210	131010
8	11010	11810	11410	10.12	111x	1115	171010	11010	11410	121010
9	11010	11510	11310	10.11	111x	111x	151010	11710	11115	121010
40	11810	11510	11410	10.11	111x	111x	131010	11410	11110	1111
1	11010	11510	111x	10.11	111x	111x	181010	11510	11610	141010
2	11810	11010	11710	111x	111x	111x	151010	121010	11215	111x
3	11010	121510	111x	10.11	111x	111x	131010	11510	11115	121010
4	11810	11010	11010	111x	111x	111x	141010	11710	11115	1111
5	11510	11115	11510	10.11	111x	111x	1710	11115	1111x	111x
6	11010	11510	11310	10.11	111x	1113	131010	11010	11310	161010
7	11010	11010	11710	10.11	111x	111x	161010	11010	11310	111x
8	11810	121010	111x	10.11	111x	1113	141010	11710	11115	121010
9	11810	11710	11410	111x	111x	111x	141010	11610	11115	121010
50	11810	11710	11510	10.11	111x	111x	131010	11810	11115	121010
A 351	11710	11410	11710	10.11	111x	111x	151010	11610	11110	121010
Sum/acc	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111
	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111
	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111
	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111
	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111
	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111
	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111

Results are semi-quantitative. Elements apparently present in concentrations of economic interest should be redetermined by an appropriate accurate analytical method.

TT	Sample No.		Au					
1	A 305/78		<0.05					
2	306		<0.05					
3	307		<0.05					
4	308		<0.05					
5	STD		<0.05					
6	309		<0.05					
7	310		<0.05					
8	311		<0.05					
9	312		<0.05					
10	313		<0.05					
11	314		<0.05					
12	315		<0.05					
13	316		<0.05					
14	317		<0.05					
15	318 x		<0.05					
16	319		<0.05					
17	320		<0.05					
18	321		<0.05					
19	A 322/78		<0.05					
20	318 x							

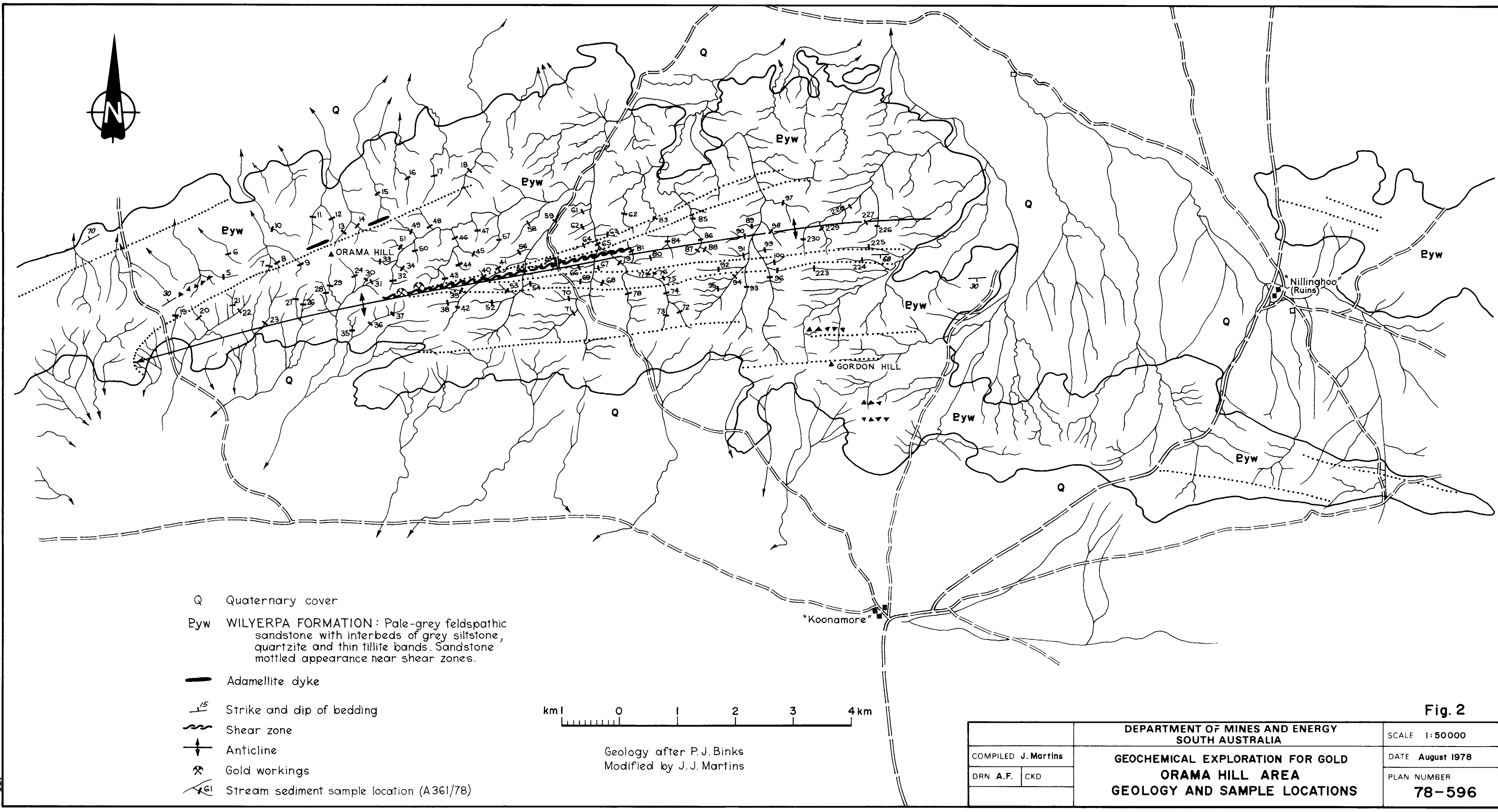
TT	Sample No.		Au					
1	A 323/78		<0.05					
2	324		<0.05					
3	325		<0.05					
4	326 x		<0.05					
5	327		<0.05					
6	328		<0.05					
7	329		<0.05					
8	330		<0.05					
9	331		<0.05					
10	332		<0.05					
11	333		<0.05					
12	334		<0.05					
13	335		<0.05					
14	STD							
15	336		<0.05					
16	337		<0.05					
17	338		<0.05					
18	339		<0.05					
19	A 340/78		<0.05					
20	326 x							

TT	Sample No.			Au					
1	A 341/78			<0.05					
2	342			<0.05					
3	343			<0.05					
4	344			<0.05					
5	345			<0.05					
6	STD								
7	346			<0.05					
8	347			<0.05					
9	348 x			<0.05					
10	349			<0.05					
11	350			<0.05					
12	A 351/78			<0.05					
13	348 x								
14	BLANK								
15	CODE			C3					
16									
17									
18									
19									
20									



**Fig. 1**

		DEPARTMENT OF MINES AND ENERGY SOUTH AUSTRALIA		SCALE: 1:250 000	
COMPILED: J.J. Martins		GEOCHEMICAL EXPLORATION FOR GOLD ORAMA HILL AREA LOCATION AND REGIONAL GEOLOGY		DATE: August 1978	
DRN A.F.	CKD			PLAN NUMBER	
				S13569	



- Q Quaternary cover
- Pyw WILYERPA FORMATION: Pale-grey feldspathic sandstone with interbeds of grey siltstone, quartzite and thin tillite bands. Sandstone mottled appearance near shear zones.
- Adamellite dyke
- Strike and dip of bedding
- Shear zone
- Anticline
- Gold workings
- Stream sediment sample location (A361/78)

km 0 1 2 3 4

Geology after P.J.Binks  
Modified by J.J.Martins

DEPARTMENT OF MINES AND ENERGY SOUTH AUSTRALIA		SCALE 1:50000
COMPILED J. Martins		DATE August 1978
DRN A.F.	CKD	PLAN NUMBER
GEOCHEMICAL EXPLORATION FOR GOLD ORAMA HILL AREA GEOLOGY AND SAMPLE LOCATIONS		78-596

Fig. 2