



NICRON RESOURCES LIMITED

A.C.N. 000 828 535

A Member of the Normandy Poseidon Group

WOODCUTTERS MINE:

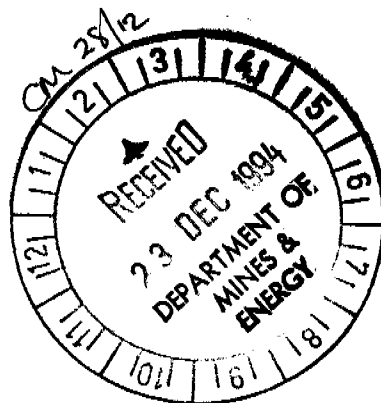
80km Stuart Highway, via Darwin
Northern Territory 0800

PMB 60, Winnellie, NT 0821

Telephone : (089) 76 0088
Facsimile : (089) 76 0108

Title:

**ANNUAL REPORT
AUTHORITY N 349
KYLIE AREA,
NORTHERN TERRITORY
26/11/1993 TO 25/11/1994**



Project Name:

KYLIE

Map Sheets:

PINE CREEK SD 52-8 1:250,000

Commodities:

COPPER, LEAD, ZINC, GOLD

Author:

I.K. BUTLER

Date:

21st December 1994

Volumes:

VOLUME 1 OF 1

Accepted by:

I.K. Butler

Distribution:

1. NT Department of Mines and Energy
2. Woodcutters Mine, NT
3. Posex, Adelaide

CR 95 / 19
VOL 1

The contents of this report remain the property of Poseidon Exploration Limited and may not be published in whole or in part nor used in a company prospectus without the written consent of the Company.

Report No. 14918

OPEN FILE

CR 95-19

TABLE OF CONTENTS

	SUMMARY
1.	INTRODUCTION
2.	CONCLUSIONS
3.	PREVIOUS EXPLORATION
4.	GEOLOGY AND MINERALISATION
5.	PRESENT EXPLORATION
6.	EXPENDITURE FOR YEAR TWO
7.	PROPOSED WORK PROGRAMME AND EXPENDITURE FOR YEAR THREE
8.	REFERENCES

LIST OF FIGURES

1.	Location Map
	1:100,000

LIST OF ENCLOSURES

1.	Geology and Anomaly Location Map
	1:10,000
2.	BLEG Soil Sample Location Map
	1:10,000

LIST OF APPENDICES

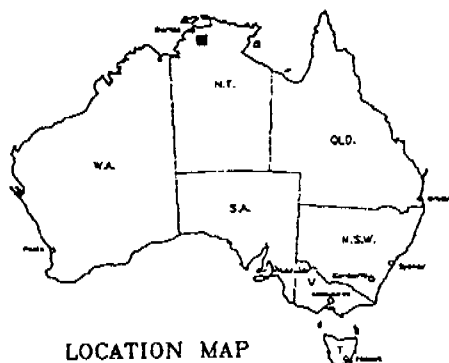
1.	BLEG Soil Sample Assay Results
----	--------------------------------

Report No: 14918

Title: ANNUAL REPORT
AUTHORITY N 349
KYLIE AREA, NORTHERN TERRITORY
26/11/1993 - 25/11/1994

Author: I.K. Butler

Date: 21st December 1994



SUMMARY

A considerable amount of exploration for uranium and base metal mineralisation has been carried out in the area, particularly by Uranerz Australia Pty Ltd in the late 1970s to early 1980s. Two small uranium prospects, Kylie and SE Kylie were discovered. Previous gold exploration was limited.

The main exploration target for year two was unconformity related gold and platinum group element mineralisation, in the vicinity of the Middle Proterozoic/Lower Proterozoic unconformity, specifically in the carbonate rich lithologies.

BLEG (Bulk Leach Extractable Gold) soil sampling was conducted over much of the prospective Lower Proterozoic carbonate/schist sequence continuing on from a programme commenced in year one.

Gold results were generally low, however there are some spot highs aligned along NNW trending structures. Follow up exploration is proposed for year three.

1. INTRODUCTION

Authority N 349 was granted to Aztec Mining Company Limited on 26th November 1992 for a period of three years. The Authority comprises 7 graticular blocks and is located approximately 19km south southwest of Batchelor township (figure 1).

The area is considered to be prospective for gold, platinum group elements and base metals.

This report covers work conducted in the second year of tenure and proposes a work program and expenditure for year three.

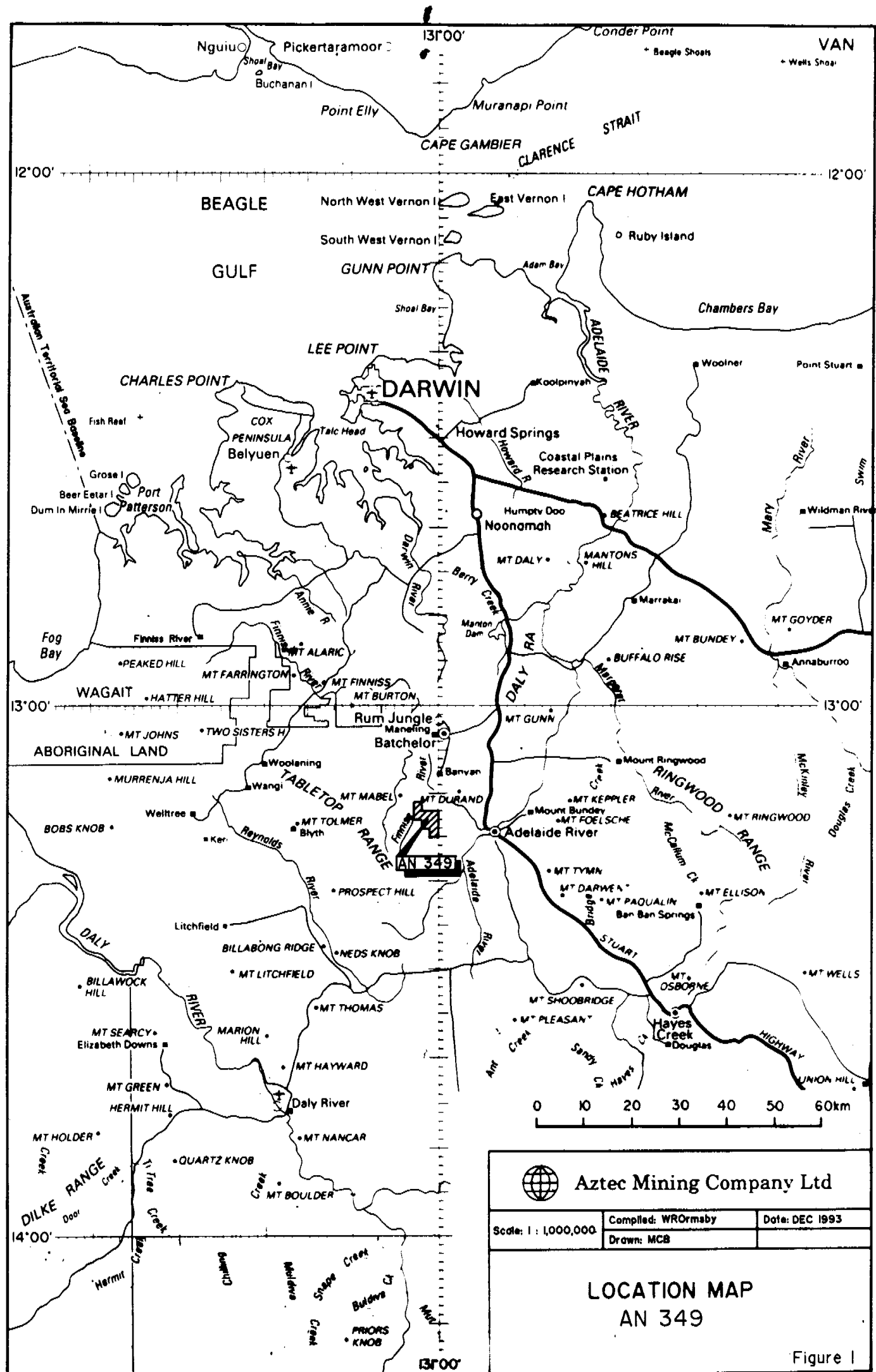
2. CONCLUSIONS

1. The region covered by AN 349 had not previously been fully evaluated for gold and platinum mineralisation.
2. The results of the BLEG soil sampling indicate that this method is effective in delineating weakly anomalous gold areas.
3. There are weakly anomalous Au and Pt values coincident with uranium prospects and higher Au values aligned along interpreted NW trending structures.

3. PREVIOUS EXPLORATION

Private company exploration of the area commenced in 1971. Queensland Mines Ltd was granted AP2501 which included all of the current EL 7885. Exploration was mainly for uranium and included airborne radiometrics, follow-up and reconnaissance ground radiometrics and auger drilling along the inferred Coomalie Dolomite/Whites Formation contact. Some reconnaissance panning for gold and testing for heavy metals by a field geochemistry kit were also undertaken. Three main uranium prospects were identified and followed up, however they were all located outside the current licence.

In 1977, Uranerz Australia Pty Ltd entered into a joint venture with Mines Administration Pty Ltd on EL1298. Over the next six years Uranerz carried out intensive exploration for veinlike type uranium deposits and economic base metal mineralisation. The work concentrated upon the Lower Proterozoic carbonate, siltstone, shale, schist sequence immediately to the south and southwest of the Waterhouse Complex, including the area covered by this report.



Uranerz initially carried out literature research, gridding and both ground and airborne radiometrics and magnetics. Regional auger/RAB drilling along lines spaced 200m apart over the prospective zone was also conducted. Bottom hole samples were collected and routinely analysed for U, Th, Cu, Pb, Zn, Ni and Co and holes were radiometrically probed. Regional mapping was also carried out.

Many radiometric anomalies were located, leading to further work on a number of prospects. Two of the most promising prospects; Kylie and SE Kylie are situated in AN 349 which is adjacent to EL 7885. Follow up work on these prospects included; detailed RAB drilling, trenching, geological mapping, ground radiometric, magnetic and SIROTEM surveys. A total of 52 percussion/diamond drill holes were drilled at the Kylie Prospect and 25 holes in the SE Kylie area.

Uranium mineralisation was found at both Kylie and SE Kylie Prospects, in association with anomalous Cu, Pb, Zn, Ni and Co. The geology of these prospects is complex, and whilst ore grade uranium mineralisation was intersected by drilling, no ore reserve figures are available in the cited literature. These discoveries were considered to be too small to warrant further evaluation, and Uranerz halted field exploration in 1983 (Heyworth, 1984).

Exploration licence 1298 was superceded by EL4378 in 1983. Mines Administration Pty Ltd subsequently transferred its 50% share of EL4378 to CSR Limited. Initial work on EL4378 was directed towards epithermal gold mineralisation. Stream sediment sampling was carried out by CSR Limited in 1984. Samples were assayed for Au, Cu and Ag. The gold and silver results were all low but elevated copper results were obtained. Rock chip and core samples were also taken and analysed for Cu, Pb, Zn, Ni, Co, Bi, Au, Ag, Mo, As, Sb and Ba. None of the samples resulted in anomalous values for Au or As, whilst some elevated values for Cu and Ni were noted.

The only other significant reported work on EL4378 comprised multi-element geochemical studies on analytical results from drill core samples from the Kylie Prospect (Paterson and Raylor, 1985). The results were presented as histogram plots and correlation matrices, however no specific conclusions could be drawn from them.

No further work is recorded for the area now covered by EL 7885.

4. GEOLOGY AND MINERALISATION

The geology and mineralisation for the area covered by EL 7885 is described in detail in Pagel et al (1984), which includes descriptions of both the Kylie and SE Kylie uranium prospects (see Enclosure 1).

The Lower Proterozoic Crater Formation unconformably overlies the Archaean Waterhouse Complex and comprises a basal meta-conglomerate which grades upwards into meta-arkose. The overlying stratigraphic sequence comprises predominantly dolomite/magnesite with numerous lenses of graphite, chlorite, tremolite, tourmaline and biotite-rich metapelites (Pagel et al, 1984). The sequence does not strictly confirm with the formal BMR stratigraphic correlations, although Pagel et al (1984) suggest that it is equivalent to the Lower Proterozoic Coomalie Dolomite to Wildman Siltstone section.

Overlying the carbonate/metapelite sequence is a unit of quartz sericite schist with minor interbedded carbonaceous schist which is considered to be the equivalent to the South Alligator Group (Pagel et al, 1984). This is overlain by the typical flyschoid sequence of the Burrell Creek Formation.

Unconformably overlying the Lower Proterozoic sequence is the hematitic quartz sandstone of the Depot Creek Sandstone Member which is of probable Middle Proterozoic age. The Depot Creek Sandstone appears to be preferentially preserved overlying the carbonate/metapelite sequence.

The uranium mineralisation is closely associated with complicated tectonic zones within Lower Proterozoic metapelite/dolomite sequences related to reverse faults marginal to the Depot Creek Sandstone Member. Alteration minerals include chlorite, hematite and magnesite (Pagel et al, 1984).

5. PRESENT EXPLORATION

Work for year two included continuing on with reconnaissance BLEG soil, sampling to cover the remaining prospective stratigraphy of AN 349.

The main target for exploration in years one and two was unconformity related gold and platinum group element mineralisation in the vicinity of the Middle Proterozoic/Lower Proterozoic unconformity. As this type of mineralisation is often spatially related to uranium mineralisation, maps of the Uranerz radiometric anomalies and prospects were utilised in conjunction with the Uranerz geological mapping for planning the reconnaissance soil sampling program (see Enclosure 1). Low levels of gold were anticipated from the soil sampling because gold mineralisation was expected to be associated with the buried unconformity surface. The low relief and poor drainage of most of the area also suggested that the previous reconnaissance BLEG stream sampling may not have fully evaluated the region for gold.

The soil sample traverses were orientated approximately perpendicular to strike and were planned to cover the mapped Lower Proterozoic carbonate/schist sequence. Traverses were made by hip chain and compass, and sample locations were marked by permatags and flagging tape.

A total of 103 BLEG soil samples were collected at 50m intervals along the traverses which were generally spaced 200m apart. The samples were dried at Woodcutters Mine and sieved. The -2mm fraction was submitted for leaching. All samples submitted were approximately 2kgs in weight (see Appendix 1) and comprised a composite of two samples spaced 50m apart. The samples were leached at the Normandy Exploration Laboratory in Perth and assayed at Analabs, Perth.

Soil sample locations are shown in Enclosure 2. The analytical results are listed in Appendix 1. Whilst the Au results were generally low there were some spot highs (52.1 ppb max - 684413) which are aligned along interpreted NNW trending faults. The uranium anomalies are also commonly associated with these faults.

6. EXPENDITURE FOR YEAR TWO

Wages/Salaries	\$2,650
Consultants	650
Assays	2,200
Service/Repairs/Tyres	450
Fuel	110
Supplies	150
Administration (15%)	932
TOTAL	<u>\$7,142</u>

7. PROPOSED WORK PROGRAMME AND EXPENDITURE FOR YEAR THREE

The proposed work programme for year two is as follows:-

1. Locate and selectively assay for Au, Uranerz drill hole samples. \$1,500
2. Follow up geochemical sampling and mapping in the vicinity of anomalous Au geochemistry. \$5,500

The proposed expenditure for year three is \$7,000.

8. REFERENCES

- Ahmad, M., 1971. AP2501 - Rum Jungle Area, Annual Report. *NT Department of Mines and Energy Library CR71/115.*
- Butler, I.K., 1994. Annual Report EL 7885 for year one. Unpublished report for the NT Department of Mines and Energy.
- Borshoff, J. & Easdown, R.M., 1988. Annual Report on Exploration Licence 4378, Rum Jungle, Northern Territory. Unpublished Report for Uranerz Aust. Pty Ltd. *NT Department of Mines and Energy Library CR88/450.*
- Coles, R. & Taylor, K.S., 1983. Final Report on Exploration Licences PT 3192, 3194, 3195, 3196 and Part 1298, Rum Jungle Area, Northern Territory, Covering the Period 3 May, 1982 to 2 May, 1983. *NT Department of Mines and Energy Library CR83/159A-B.*
- Coles, R., 1988. Report on Partial Relinquishment of EL4378, Rum Jungle Area, Northern Territory. Covering the Period 28 September 1983 - 27 September 1988. *NT Department of Mines and Energy Library CR88/459A-D.*
- Easdown, R.M., 1987. Annual Report on Exploration Licence 4378, Rum Jungle, Northern Territory. Unpublished Report for Uranerz Aust. Pty Ltd. *NT Department of Mines and Energy Library CR87/286.*
- Heyworth, D.S., 1984. Exploration Licence 4378, Waterhouse, Northern Territory. Annual Report 1983/84. Unpublished Report for CSR Ltd. *NT Department of Mines and Energy Library CR84/273.*
- Ormsby, W.R., 1993. Annual Report AN 349 for Year One Kylie Area. *Unpublished Report for NT Department of Mines and Energy.*
- Paterson, J. & Taylor, K.S., 1985. Annual Report on Exploration Licence 4378, Rum Jungle, Northern Territory. Unpublished Report for Uranerz Aust. Pty Ltd. *NT Department of Mines and Energy Library CR86/147.*
- Taylor, K.S., 1986. Annual Report Exploration Licence 4378, Rum Jungle, Northern Territory. Unpublished Report for Uranerz Aust. Pty Ltd. *NT Department of Mines and Energy Library CR86/261.*
- Taylor, K.S., 1989. Final Report on Exploration Licence 4378, Batchelor, Northern Territory. Unpublished Report for Uranerz Aust. Pty Ltd. *NT Department of Mines and Energy Library CR 90/189.*
- Uranerz, 1978. Annual Report EL1298, 3-5-77 to 2-5-78. *NT Department of Mines and Energy Library CR78/096.*
- Uranerz, 1979. Annual Report EL1298, 3-5-78 to 2-5-79. *NT Department of Mines and Energy Library CR79/102.*
- Uranerz, 1980. Annual Report. *NT Department of Mines and Energy Library CR80/138A-C.*
- Uranerz, 1981. Annual Report Exploration Licence 1298, Rum Jungle Area, Northern Territory covering the period 3 May, 1980 to 2 May, 1981. *NT Department of Mines and Energy Library CR81/176.*
- Uranerz, 1982. Annual Report Exploration Licence 1298, Rum Jungle Area, Northern Territory covering the period 3 May, 1981 to 2 May, 1982. *NT Department of Mines and Energy Library CR82/239.*

APPENDIX 1

**BLEG SOIL SAMPLE
ASSAY RESULTS**

ACN 004 591 664

Analabs Pty Ltd
59 Crocker Drive
Malaga WA 6062
Ph: (09) 249 3499
Fax: (09) 249 3484

ANALYTICAL REPORT

NORMANDY POSEIDON.
PO BOX 1143
WEST PERTH. W.A. 6005.


Attention: I. BUTLER
Copies to: B. GRIFFIN

Our Reference : 19252/1294
Your Reference : 24299

Samples Received : 15/12/1994
Results Reported : 19/12/1994
No. of samples : 105
No. of report pages : 3

Elements analysed : Au[105] Cu[105] Ag[105]

Report codes: I.S. = Insufficient sample
SNR = Sample not received


.....
Issued on 19/12/1994
Alastair Inglis
Manager, Perth

The analytical results in the following report pertain to the samples received at this laboratory.

Page: 3

Method : Zincons (Au Cu Ag)

Order : 24299

Report : 19252/1294

Sample Number	ppb Au	ppm Cu	ppb Ag
684408	0.29	0.10	7.5
684409	0.66	0.13	6.0
684410	0.54	0.29	9.5
684411	2.03 $\times 1.5 = 2.15$	0.11	9.0
684412	2.53	0.12	6.0
684413	52.1 $\times 1.07 = 55.75$	0.42	17.0
684414	0.12 $\times 1.30 = 0.16$	0.25	6.0
684415	0.42 $\times 1.25 = 0.50$	0.38	9.0
684416	0.25 $\times 1.28 = 0.32$	0.63	14.0
684417	0.29 $\times 1.59 = 0.46$	0.75	9.5
684418	1.00	1.15	15.5
684419	0.58	0.17	7.5
684420	0.71 $\times 1.34 = 0.95$	0.23	11.0
684421	0.21 $\times 1.03 = 0.22$	0.14	6.5
684422	0.37	0.18	6.0
684423	1.00	0.29	12.5
684424	0.66	0.18	13.5
684425	0.75	0.17	18.0
684426	0.17	0.10	6.5
684427	0.29	0.06	5.0
684428	0.29	0.14	6.5
684429	0.66	0.11	6.0
684430	0.33	0.17	12.0
684431	0.29	0.14	5.0
684432	0.17	0.11	3.5

Detection Limit :	0.01	0.01	0.5
-------------------	------	------	-----

Page: 2

Method : Zincons (Au Cu Ag)

Order : 24299

Report : 19252/1294

Sample Number	ppb Au	ppm Cu	ppb Ag
684364	1.29 $\times 1.68 = 2.17$	0.30	18.5
684365	0.75 $\times 1.41 = 1.06$	0.51	9.0
684370	0.66 $\times 1.26 = 0.83$	0.14	4.0
684371	0.25 $\times 1.32 = 0.32$	0.14	4.0
684372	0.50	0.11	4.0
684373	0.21 $\times 1.14 = 0.24$	0.14	3.5
684374	0.21	0.10	4.0
684375	0.29	0.12	5.0
684376	0.25	0.13	7.5
684377	0.17	0.18	4.0
684378	0.25	0.11	7.5
684379	0.37	0.12	8.5
684380	0.37 $\times 1.06 = 0.39$	0.13	8.5
684381	0.62 $\times 1.30 = 0.81$	0.36	13.5
684382	0.25	0.46	14.0
684383	0.37	0.42	14.5
684384	0.25	0.29	8.0
684385	0.04 $\times 1.32 = 0.05$	0.10	3.0
684386	0.21	0.08	3.5
684387	0.25	0.11	6.5
684388	0.29	0.10	8.5
684389	0.17	0.12	7.5
684390	0.08	0.13	5.5
684391	0.21	0.13	6.5
684392	0.12	0.10	5.0
684393	0.95	0.15	7.5
684394	25.0	0.19	14.0
684395	0.58	0.21	10.0
684396	0.66	0.13	9.5
684397	0.58 $\times 1.21 = 0.82$	0.19	9.0
684398	0.46	0.14	10.0
684399	0.21 $\times 1.14 = 0.24$	0.16	8.5
684400	0.37	0.13	7.5
684401	0.46	0.11	4.0
684402	0.33	0.10	4.0
684403	0.21	0.09	4.5
684404	0.29	0.11	8.0
684405	0.17	0.14	5.0
684406	0.21 $\times 1.05 = 0.22$	0.11	4.0
684407	0.25	0.12	6.0

Detection Limit :	0.01	0.01	0.5
-------------------	------	------	-----

Page: 1

Method : Zincons (Au Cu Ag)

Order : 24299

Report : 19252/1294

Sample Number	ppb Au	ppm Cu	ppb Ag
347572	8.84	1.18	52.0
347573	<0.01	<0.01	0.5
684326	0.08	0.21	7.5
684327	0.21	0.12	5.0
684328	<0.01	0.09	4.5
684329	<0.01	0.10	4.0
684330	0.12	0.02	5.0
684331	0.04	0.10	3.0
684332	0.33	0.08	4.5
684333	1.16 $\times 1.55 = 1.80$	0.14	7.5
684334	22.8 $\times 1.15 = 26.2$	0.20	5.0
684335	0.12 $\times 1.79 = 0.22$	0.11	3.0
684336	0.29 $\times 1.21 = 0.35$	0.17	6.5
684337	0.12	0.12	3.5
684338	0.04	0.11	3.0
684339	<0.01	0.12	3.5
684340	0.12	0.09	2.0
684341	0.42 $\times 1.18 = 0.50$	0.08	4.5
684342	0.04	0.09	4.0
684343	0.08 $\times 1.40 = 0.11$	0.10	5.5
684344	0.95	0.10	5.5
684345	0.58	0.11	3.0
684346	0.83 $\times 1.06 = 0.88$	0.14	4.5
684347	0.08	0.08	6.0
684348	0.12	0.10	3.5
684349	0.08	0.11	4.5
684350	0.33 $\times 2.50 = 0.83$	0.13	4.0
684351	<0.01	0.09	3.0
684352	0.58 $\times 1.06 = 0.61$	0.10	3.0
684353	0.33	0.08	3.5
684354	0.04 $\times 1.08 = 0.04$	0.07	4.0
684355	0.08 $\times 1.44 = 0.12$	0.07	3.0
684356	0.12 $\times 1.21 = 0.15$	0.07	4.0
684357	0.17	0.09	6.5
684358	0.12	0.06	4.5
684359	0.62	0.12	8.0
684360	0.42	0.10	6.0
684361	0.54	0.21	12.0
684362	0.66	0.26	15.5
684363	0.58 $\times 1.06 = 0.61$	0.50	12.0

Detection Limit :	0.01	0.01	0.5
-------------------	------	------	-----

TO: IAN BUTLER,
WOODCUTTERS MINE.

LIST OF BLEG SAMPLES WITH LOW SAMPLE WEIGHTS RECEIVED.

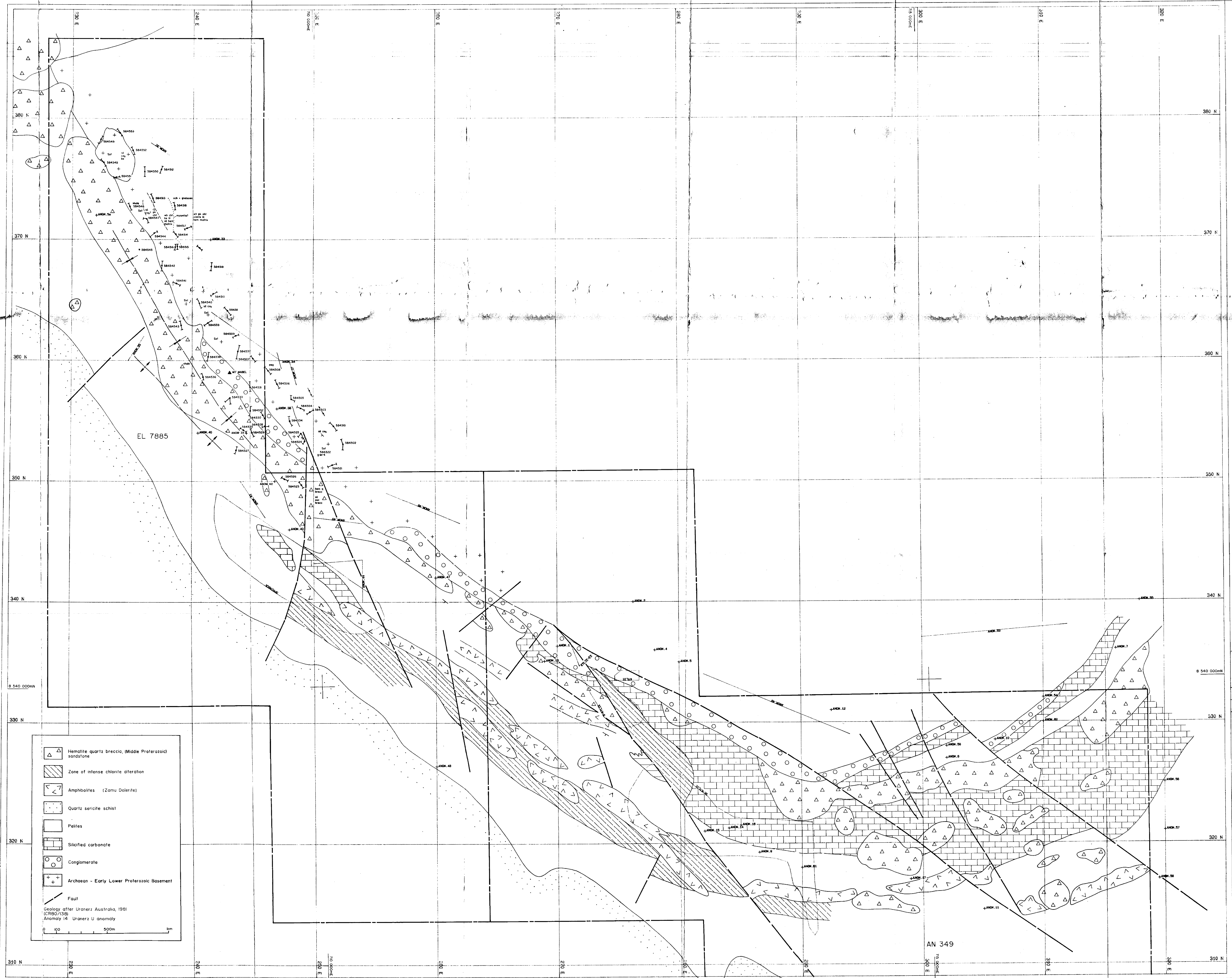
SAMPLE NUMBER	WEIGHT RECEIVED	CORRECTION FACTOR.
684326	1950g.	X 1.03 ✓
28	1840	1.09
29	1770	1.13
33	1290	1.55
34	1740	1.15
35	1120	1.79
36	1650	1.21
39	1940	1.03
41	1700	1.18
43	1430	1.40
46	1880	1.06
50	800	2.50 (organics)
51	1450	1.38
52	1370	1.46
54	1860	1.08
55	1390	1.44
56	1650	1.21
63	1730	1.16
64	1190	1.68
65	1420	1.41
70	1590	1.26
71	1560	1.28
73	1760	1.14
80	1880	1.06
81	1540	1.30
85	1520	1.32
97	1420	1.41
399	1750	1.14
406	1910	1.05
411	1880	1.06
413	1870	1.07
414	1540	1.30
415	1670	1.20
416	1560	1.28
417	1180	1.69
420	1490	1.34
684421	1940	X 1.03
END		

PLEASE CORRECT THE ASSAY RESULTS WITH THE ABOVE FACTORS.

NOTE: SAMPLES 684359, 15, 16, 17, and 684425 contained soluble organics
or slimes that caused clay dispersion problems.

REGARDS,

BILL GRIFFIN.



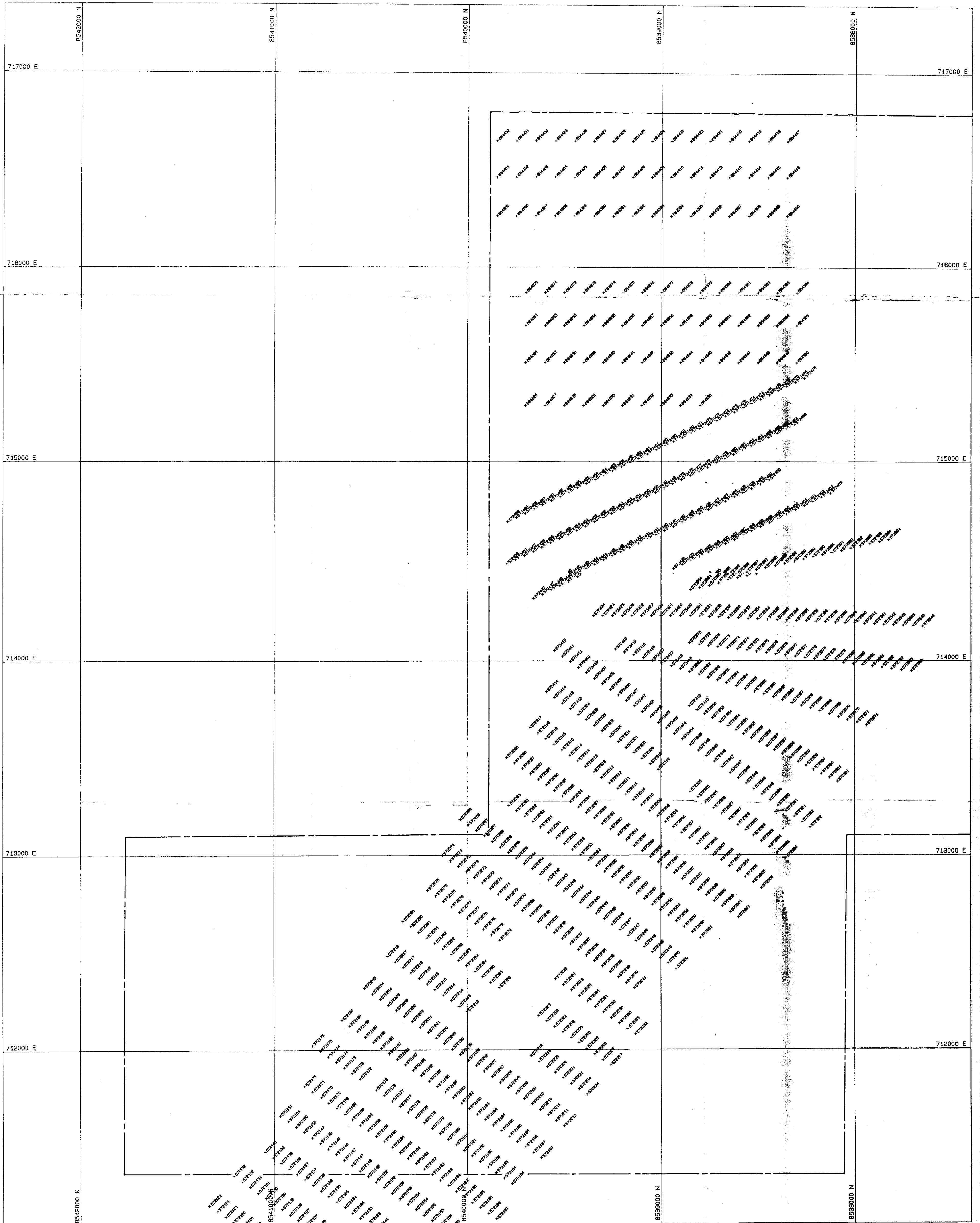
Woodcutters Mine

0 100 500m 1 km

Init	Date
Surveyor	IB
Drawn	
Checked	
Approved	

AZTEC MINING LIMITED
AN349 SAMPLE LOCATIONS
BLEG SOIL

File :AN349
Scale :1 : 10000
Date :20 Dec 1994
Enclosure 2



CR 95 / 19 . 1