EXPLORATION LICENCE 7686
"WARREGO EAST"

FIRST ANNUAL REPORT

10 APRIL 1992 - 9 APRIL 1993

LICENSEE:

TC8 PTY LTD
A.C.N. 009 644 188

TENNANT CREEK *1:250,000*
SE53-14
SHORT RANGE *1:100,000*
5659

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DARWIN N.T.
MAY, 1993

CONTENTS

1. INTRODUCTION AND SUMMARY

This report records the exploration work carried out on Exploration Licence 7686 for the first year of the Licence, from 10th April 1992 to 9th April 1993.

Exploration Licence 7686, "Warrego East", is held by TC8 Pty Ltd, a subsidiary of Giants Reef Mining N.L. The Licence area is of 3 blocks totalling approximately 10 square kilometres. The southwest corner of the tenement is approximately 1.6 kilometres northwest of the headframe of the Warrego copper-gold mine at Tennant Creek.

The targets are gold and copper orebodies.

Aeromagnetic surveys by Geopeko in the past suggest that the area is underlain by the Black Eye Member of the (Early Proterozoic) Carraman Formation, although this has not definitely been established.

Reconnaissance visits and existing maps established that there is no basement outcrop in the EL, which is virtually flat and mostly covered by thick mixed scrub and small trees which makes traversing in 4WD vehicles difficult. Various roads and tracks allow limited access into the Licence area, especially at its western end.

The reconnaissance was followed by a trial geochemical lag sampling survey along a 1.5 kilometre traverse. Results showed low order gold anomalies, but no firm conclusions could be drawn from the exercise.

Work to date has established that clearing of gridlines is very necessary before the planned auger drilling or vacuum drilling and gravity survey can be carried out during the second year of the licence. An arrangement is being made with Austirex International Ltd to carry out low level detailed aeromagnetics over the EL instead of the extensive ground magnetics survey originally planned. The aeromagnetic survey will be flown along north-south flight lines, 80 metres apart and with a sensor height of 60 metres. This will be done in mid-May 1993, as part of a similar coverage of nearby ELs 7465, 7688 and 7801, held by the Giants Reef group.

2. LOCATION AND ACCESS

EL 7686 is situated about 43 kilometres northwest from Tennant Creek, in the south portion of the Short Range 1:100,000 scale sheet 5659. Figure 1 shows the locations of EL 7686 and the surrounding tenements.

The area is reached from the Warrego mine area by the road from the mine to the No. 1 Water Dam, 7 kilometres to the northeast. The Alice Springs to Darwin gas pipeline route also cuts through the western block of EL 7686. Further east, a powerline track runs south-southwest through the EL to a point on the Warrego Road, 3 kilometres east of the mine.

The area is quite flat, but thick mixed scrub and small trees cover most of the EL and make 4WD vehicle access difficult because of the likelihood of punctured tyres.

3. TENURE

Exploration Licence 7686 was granted to TC8 Pty Ltd, now a wholly-owned subsidiary of Giants Reef Mining N.L., on 10th April 1992 for a period of three years.

The expenditure covenant for the first year was set at $5,000.

The licence area covers 3 one-minute blocks totalling approximately 10 square kilometres but excluding two mineral claims (MCs C354 and C355, covering about 30 hectares) in the western block.

The EL lies within Perpetual Pastoral Lease 946, known as Phillip Creek Station.

4. GEOLOGY AND MINERALISATION

There is no outcrop of basement rocks within the Licence, nor for some distance surrounding it. The 1978 BMR 1:250,000 Tennant Creek geology map, SE53-14, shows the area as covered by sand, soil, colluvium and gravel.

Regional aeromagnetics, together with the lithologies encountered by Geopeko in the mid-1970's when some drilling was done in the southwest part of what is now the Licence area, are consistent with the underlying rocks belonging to the Carraman Formation of the Early Proterozoic Warramunga Group, but other interpretations are also possible.

5. PREVIOUS EXPLORATION

Metana Minerals N.L., in a joint venture with Placer Prospecting Australia Ltd, were the most recent explorers in the area, between 1988 and 1990. A detailed aeromagnetic survey was followed up by a ground magnetics survey over an anomaly on or near the southern boundary of what is now EL 7686, but the anomaly was not drilled.

Metana also carried out a bulk cyanide leach soil geochemistry trial traverse across the present EL 7686. A peak value of 11.4 ppb gold was noted on the southern boundary, but this was not followed up.

Geopeko has held this ground, as parts of larger tenements, during the years from 1982 to 1987 and before that from 1972 to 1976. Work in the earlier period identified a magnetic anomaly called Explorer 74 (now held under MCs C354 and C355) where ground magnetics and shallow (auger) drilling was carried out. It was interpreted that the source of the anomaly could be a dyke or an iron rich shale, and no more work was done. Geopeko did not produce any new targets on what is now

EL 7686 during their second period of tenure, when a detailed regional aeromagnetic survey was flown.

6. FIRST YEAR'S EXPLORATION

6.1 Air photographs

Coloured 1:25,000 scale air photos of the licence area were purchased through AiResearch Mapping Pty Ltd in Darwin.

6.2 Reconnaissance

The Licence area was reconnoitred using a 4WD vehicle. This exercise quickly confirmed that the possibility of any basement outcrop being present was very unlikely, and that the scrub would provide serious difficulties if attempts were made to carry out any ground geochemical, geophysical or shallow pattern drilling programmes without first surveying and clearing the necessary grid lines.

6.3 Geochemical lag sampling trial

A 1.5 kilometre lag sampling traverse was conducted across a north-northwest trending regional magnetic lineament in the northern part of the EL. The Warrego mine to No. 1 Water Dam road was used as a convenient baseline for this work, as it cuts the magnetic lineament at an angle of about 70 degrees.

The northern end of the traverse was at the northern boundary of the EL. From there it extended southwest for a distance of 1.5 kilometres, as shown on Figure 3.

Samples were taken at 50 metre intervals along the south side of the road, between 50 metres and 100 metres off the road to avoid any contamination effects from the ex-mine rock used to surface the road. Every second sample site along the road was marked with a short wooden stake, with the sample written on a stapled aluminium tag and also in paint pen on the bare wood.

The sampling technique used was to scrape and loosen the surface material to a depth of about 10 centimetres and to sieve about 10 kilograms of this material through two stacked sieves, so that a minus-6 mm to plus-3 mm fraction sample was obtained. This consisted of a mixture of very decayed and soft rock fragments, a proportion of weakly cemented sand and fine gravel pellets, and a very small portion of lithic fragments of quartz and iron oxides. There was little discernible variation between samples. From each site a 100 gram packet was collected for laboratory analysis.

The samples were sent to Amdel Laboratories Limited in Darwin for pulverising, followed by gold analysis by fire assay with an AAS finish. This gave a detection

perchloric and hydrochloric acid digest. Assay results for gold (in ppb) and for copper (in ppm) are shown on Figure 4.

Some of the gold results can be interpreted as anomalous at levels of up to 10 ppb Au, while the copper results, ranging from 15 to 33 ppm Cu, appear to reflect a normal background range. All the samples registered less than 10 ppm for bismuth. The assay results are given in the appendix.

In this flat terrain, it is uncertain whether the weak gold anomalies are reflecting possible bedrock mineralisation, or whether they represent slight elevations in gold levels in thin transported overburden. There is a general elevation in the gold results at the southwest end of the line, near MCs C354 and C355.

7. CONCLUSIONS

Reconnaissance showed that access is difficult for 4WD vehicles, and that the programme of grid line clearing for vacuum drilling and a detailed gravity survey, as planned for the second year of tenure is definitely required.

Results from the lag sampling traverse are inconclusive in that the low level anomalous readings for gold could either originate from underlying bedrock mineralisation or be derived from a thin surface layer of transported material. More work is needed to establish the nature and thickness of the overburden before deciding whether this kind of geochemical work is worth persisting with in this locality.

8. EXPENDITURE

Total expenditure costed to EL 7686 for the first year of tenure is as follows:

Research	$ 500
Geological	2,211
Geochemical	2,009
Administration	500
Overheads	783
TOTAL	$6,003

9. PROGRAMME FOR SECOND YEAR

During the second year of tenure it is intended to:

establish a cleared grid line system over the entire EL, using a small bulldozer, grader or a front end loader, but disturbing the surface as little as possible;

carry out the low level detailed aeromagnetic and radiometric survey, with a flying height of 60 metres above the terrain and with north-south flight lines at 80 metre spacings;

- conduct a detailed gravity survey over the entire Licence area, with stations at 100 metre x 25 metre spacings;

  auger or vacuum drill the EL, particularly in all areas where identifiable bedrock can be reached by this method (using Giants Reef's own drill rig);

- evaluate the Metana-Placer 11.4 ppb Au soil anomaly and ground magnetics anomaly in the light of results of the above work.

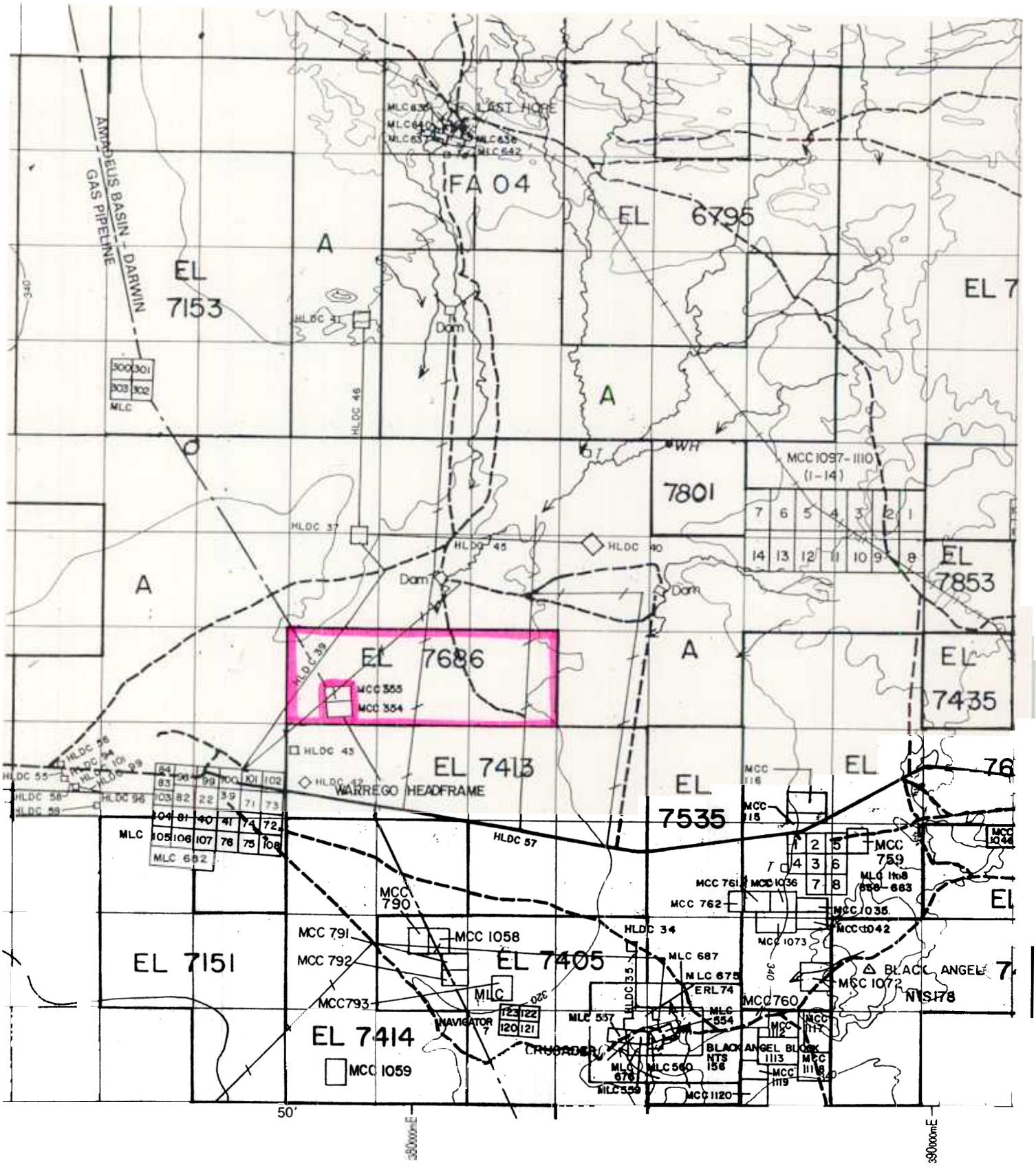
10. PROPOSED EXPENDITURE

The estimated minimum expenditure costs for the planned exploration on EL 7686 during the second year of tenure are as follows:

• Detailed aeromagnetics and radiometrics	$ 4,000
• Line clearing and gridding	4,000
• Gravity survey (including levelling)	12,000
Vacuum or auger drilling (including assaying)	10,000
TOTAL	$30,000

Exploration programmes can be affected by results, and while $30,000 is the proposed minimum expenditure, the specific activities may vary according to the results achieved.

P. G. SIMPSON
EXPLORATION MANAGER

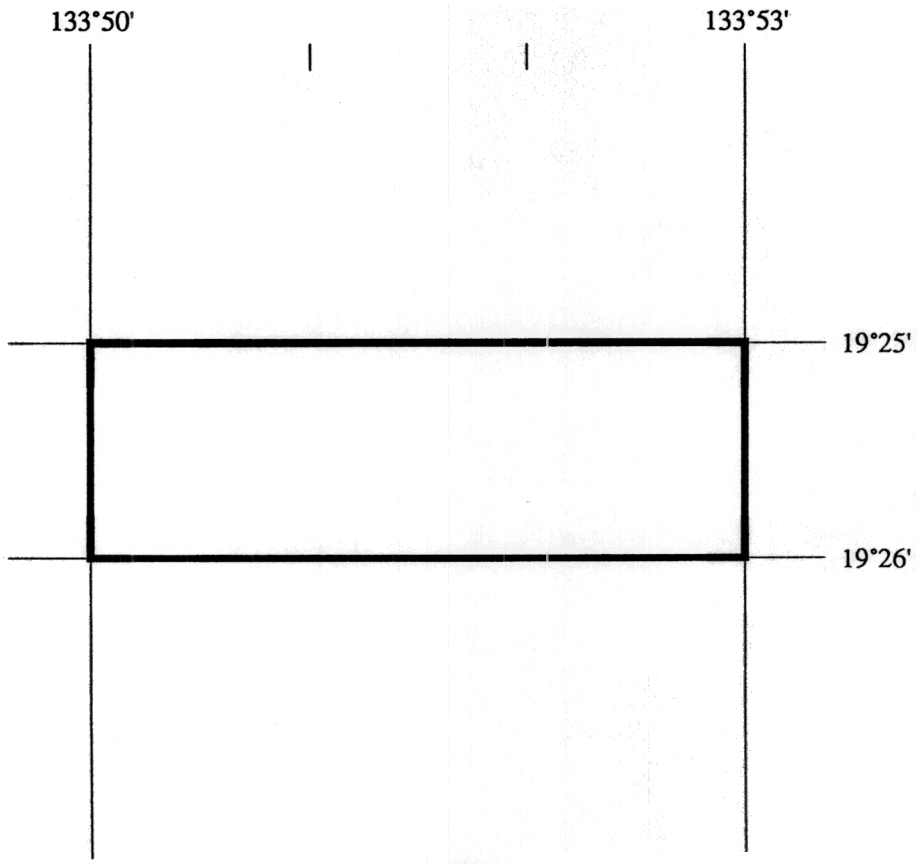


EL 7686 and Surrounding Tenements

0 5 10 km

Base map : NTDME Tenement Map 52/1 Short Range

Figure 1



BOUNDARIES OF EL7686

(From NTDME Exploration Licence document)

Figure 2

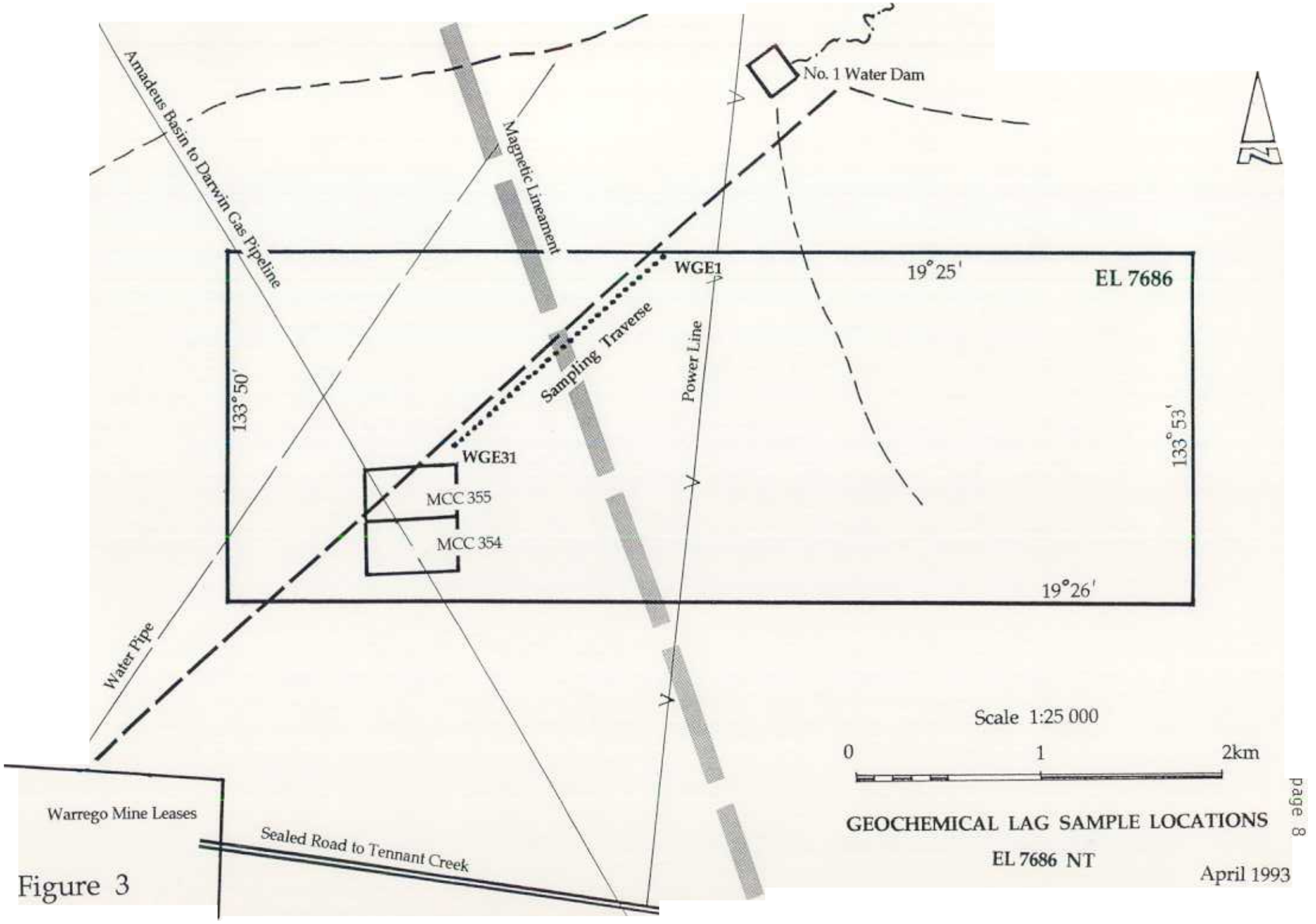
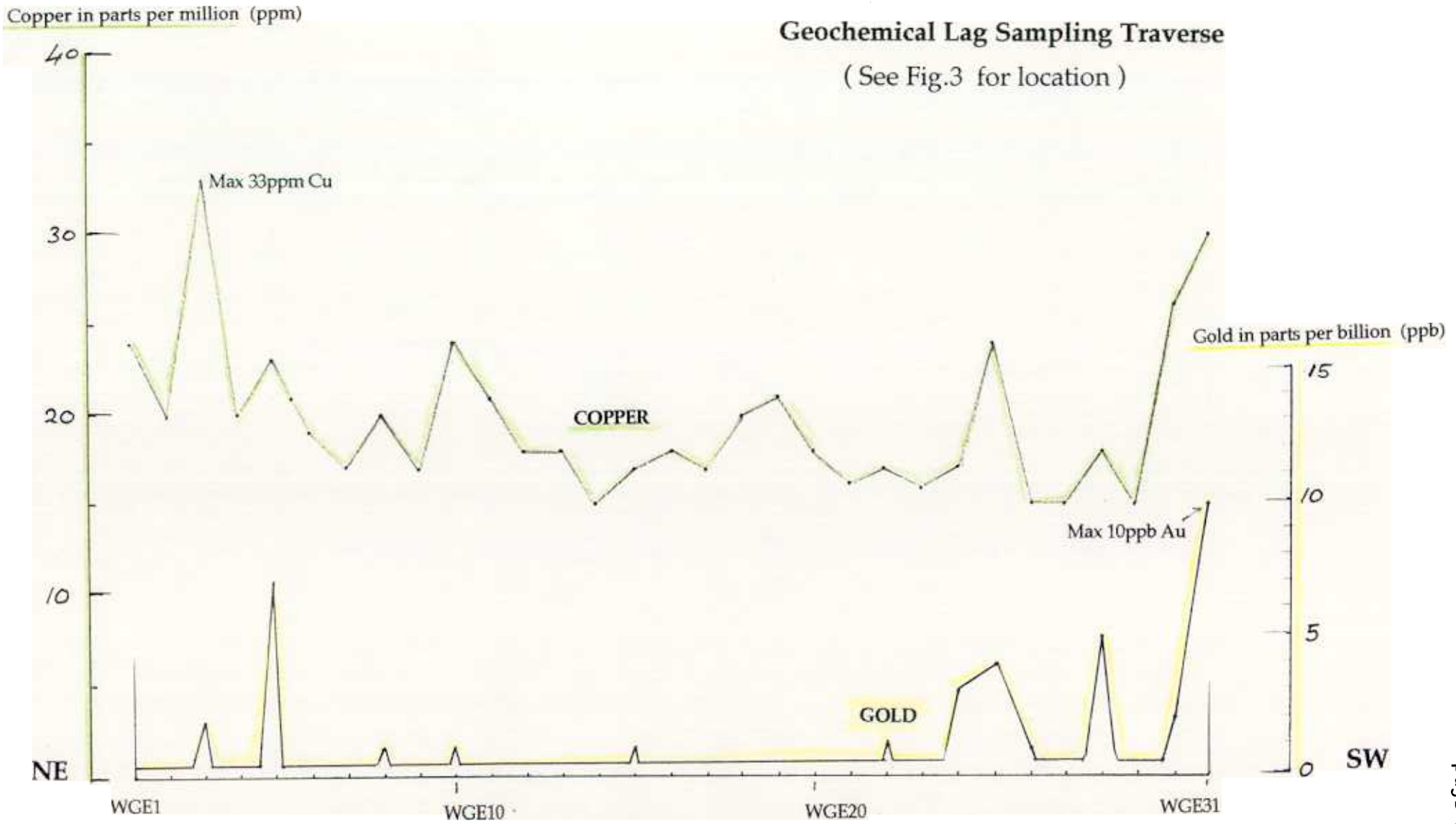

Amadeus Basin to Darwin Gas Pipeline
Magnetic Lineament
No. 1 Water Dam
N
WGE1
19° 25'
EL 7686
Sampling Traverse
Power Line
133° 50'
133° 53'
WGE31
MCC 355
MCC 354
19°26'
Water Pipe
Scale 1:25 000
0
1
2km
Warrego Mine Leases
Sealed Road to Tennant Creek
GEOCHEMICAL LAG SAMPLE LOCATIONS
EL 7686 NT
April 1993

Figure 3

EL 7686 "Warrego East"

Geochemical Lag Sampling Traverse

(See Fig.3 for location)



Sample numbers (50m intervals)

Figure 4

APPENDIX 1

LAG SAMPLE ASSAY RESULTS

amdel

R 20/4/93

21 Marjorie Street, Berrimah, Northern Territory
Postal Address : P.O. Box 58, Berrimah, N.T. 0828
Telephone: (089) 322 637 Facsimile: (089) 323 531

GIANTS REEF MINING N.L.
PO BOX 38254
WINNELLIE

NT 0821

ANALYSIS REPORT

Your Reference

Our Reference : 3DN0236

Samples Received : 02/04/93
Number of Samples : 31

Results Reported : 06/04/93
Report Pages : 1 to 1

This report relates specifically to the samples tested in so far as the samples supplied are truly representative of the sample source.

If you have any enquiries please contact the undersigned quoting our reference as above.

Report Codes:
N.A. -Not Analysed
L.N.R. -Listed But Not Received
I.S. -Insufficient Sample

Approved Signatory

for

ALAN CIPLYS
Manager - Darwin
AMDEL LABORATORIES LIMITED
A.C.N. 009 076 555

amdel

Job: 3DN0236
O/N:

Final

ANALYTICAL REPORT

SAMPLE	Au	AuDp1	Cu	Bi
WGE 01	<0.001	--	24	<10
WGE 02	<0.001	--	20	<10
WGE 03	0.002	--	33	<10
WGE 04	<0.001	--	20	<10
WGE 05	0.007	--	23	<10
WGE 06	<0.001	--	19	<10
WGE 07	<0.001	--	17	<10
WGE 08	0.001	--	20	<10
WGE 09	<0.001	<0.001	17	<10
WGE 10	0.001	--	24	<10
WGE 11	<0.001	--	21	<10
WGE 12	<0.001	--	18	<10
WGE 13	<0.001	--	18	<10
WGE 14	<0.001	--	15	<10
WGE 15	0.001	--	17	<10
WGE 16	<0.001	--	18	<10
WGE 17	<0.001	<0.001	17	<10
WGE 18	<0.001	--	20	<10
WGE 19	<0.001	--	21	<10
WGE 20	<0.001	--	18	<10
WGE 21	<0.001	--	16	<10
WGE 22	<0.001	--	17	<10
WGE 23	<0.001	--	16	<10
WGE 24	0.003	--	17	<10
WGE 25	0.004	--	24	<10
WGE 26	0.001	0.001	15	<10
WGE 27	<0.001	--	15	<10
WGE 28	0.005	--	18	<10
WGE 29	<0.001	--	15	<10
WGE 30	0.002	--	26	<10
WGE 31	0.010	--	30	<10

UNITS	ppm	ppm	ppm	ppm
DET.LIM	0.001	0.001	2	10
SCHEME	FA3	FA3	AAS2	AAS2