YATES / NORTH FLINDERS MINES / POSEIDON GOLD LTD

JOINT VENTURE

RELINQUISHEMENT REPORT

EL7710 LAMBETH

FOR THE PERIOD

TO 13th MARCH 1994

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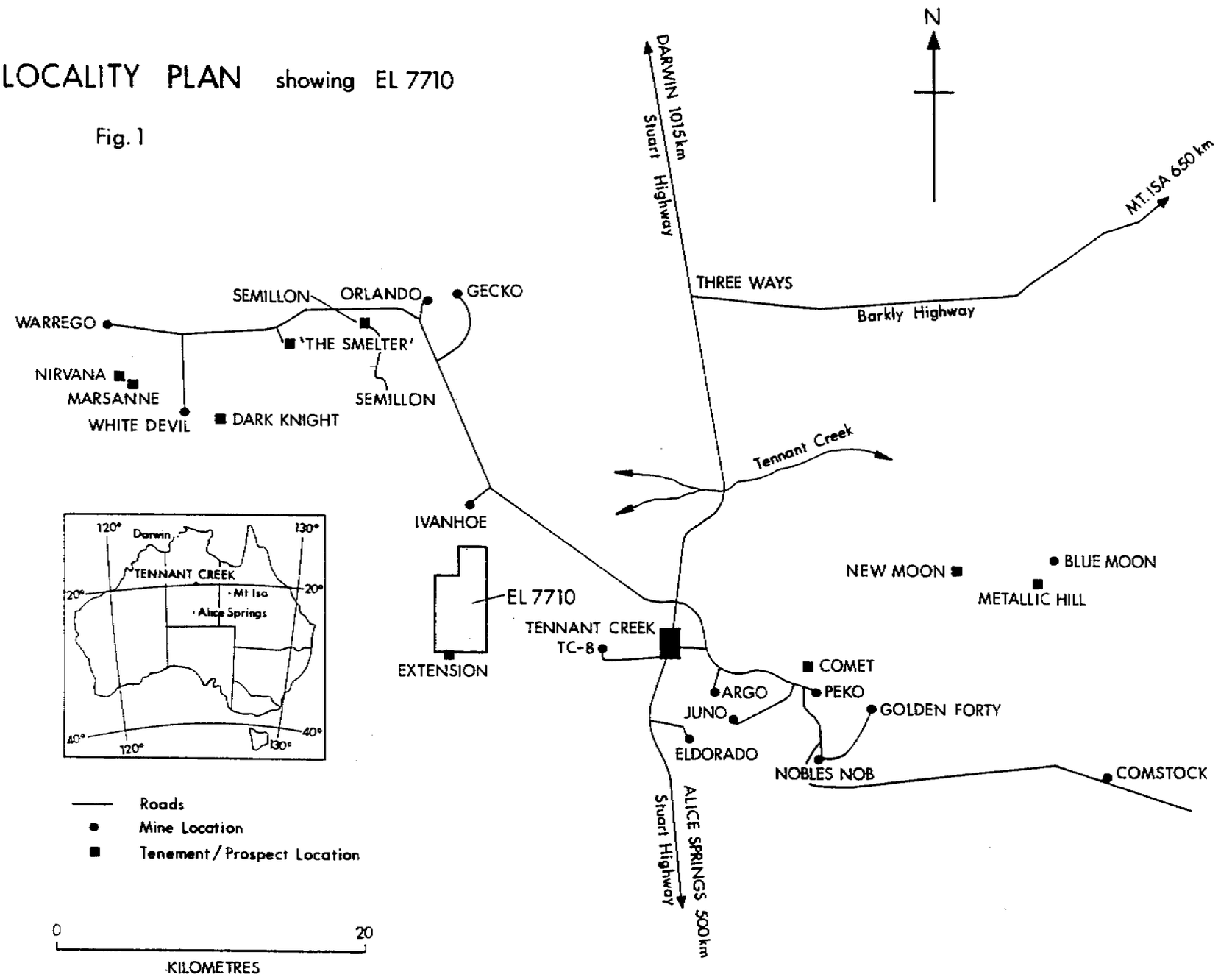
M.I. Hatcher
North Flinders Exploration
June 1994
RH:MIH187

LOCALITY PLAN showing EL 7710

Fig. 1



SUMMARY

This report is a summary of exploration undertaken on the graticular blocks of EL7710 Lambeth relinquished on the 13th March 1994.

On 19th November 1993, NFM signed a joint venture agreement with Keith Yates, the holder of the tenement. Under the terms of the agreement the NFM and Poseidon Gold Ltd. will sole fund and manage ongoing exploration on EL7710 to earn a participating interest.

The tenement is favourably located in the central western part of the Tennant Creek Goldfield, between the Mount Samuel Fault Zone (MSFZ) and the Mary Lane Shear Zone. Outcrop within the tenement is poor due to a cover (up to 25m thick) of colluvial gravel and soil. The interpreted geology from limited bedrock exposure and interpretation of aeromagnetic data consists of Lower Proterozoic Warramunga Group greywacke and siltstone with intruded porphyry bodies.

The field exploration programme undertaken to date has been targeted at the southwest of the licence for Au-Cu-Bi mineralisation associated with possible dilation zones developed at the intersection of the east-west trending 'TC8 mineralised corridor' and the west northwest trending MSFZ. No field work was undertaken in the area relinquished.

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1 INTRODUCTION

This report was prepared by North Flinders Mines Ltd and is a summary of the work programme undertaken on the graticular blocks of E.L.7710 relinquished on the 13th March 1994.

On 19th November 1993, a joint venture agreement was signed with the holder of EL7710, Keith Yates, by a farm-in party, the Tennant Creek Central Joint Venture explorers comprising North Flinders Mines Ltd and Poseidon Gold Ltd. Under the terms of the agreement the latter parties sole fund and manage exploration within the joint venture tenement to earn a participating interest.

The report is a compilation of work by a number of workers, namely Keith Yates, Mike Hatcher, Andrew Cooper, and Rohan Halfpenny. Peter Pring, a geological contractor from Eupene Exploration, was also involved in the work programme.

2 LOCATION AND ACCESS

Tenement EL7710 is located 10km west of Tennant Creek (Figure 1).

Access to the southern portion of the EL is west via bitumen road from Tennant Creek towards the closed underground Au-Cu-Bi TC8 Mine. Several hundred metres east of the mine a dirt road provides access 1.5km north to Tennant Creek Station. Between the gate and the station, a rough dirt track heads west adjacent to the Tennant Creek Gas Pipeline spur. Approximately 8km along the buried pipeline a track west for 4km provides access to the abandoned Extension Mine, located along the southern boundary of the EL.

The central and northern parts of the tenement are accessed 5km west of Explorer 104 (Zinfandel) prospect along the Tennant Creek Station - Phillip Creek Station boundary fence. Access to Explorer 104 is via the bitumen Warrego Road and southwest past Mount Otto and Jacquline Mine and west along the fence.

The northern portion of the EL is also accessible by dirt road 3km south from the abandoned Ivanhoe Mine (located west of the Warrego Road) to Explorer 54 and thence south.

3 TENEMENT DETAILS

EL7710 Lambeth was granted on 13th March 1992 to Keith Yates for a period of 6 years and expires on the 12th March, 1998. The tenement area originally comprised 10 graticular blocks but was reduced on 12th March 1994, its second anniversary to 7 blocks. A plan of the tenement and relinquished blocks is shown in Figure 2.

A number mineral claims are located on the southern boundary of EL7710. Specific details are contained in Table 1.

Refer to this map as:—
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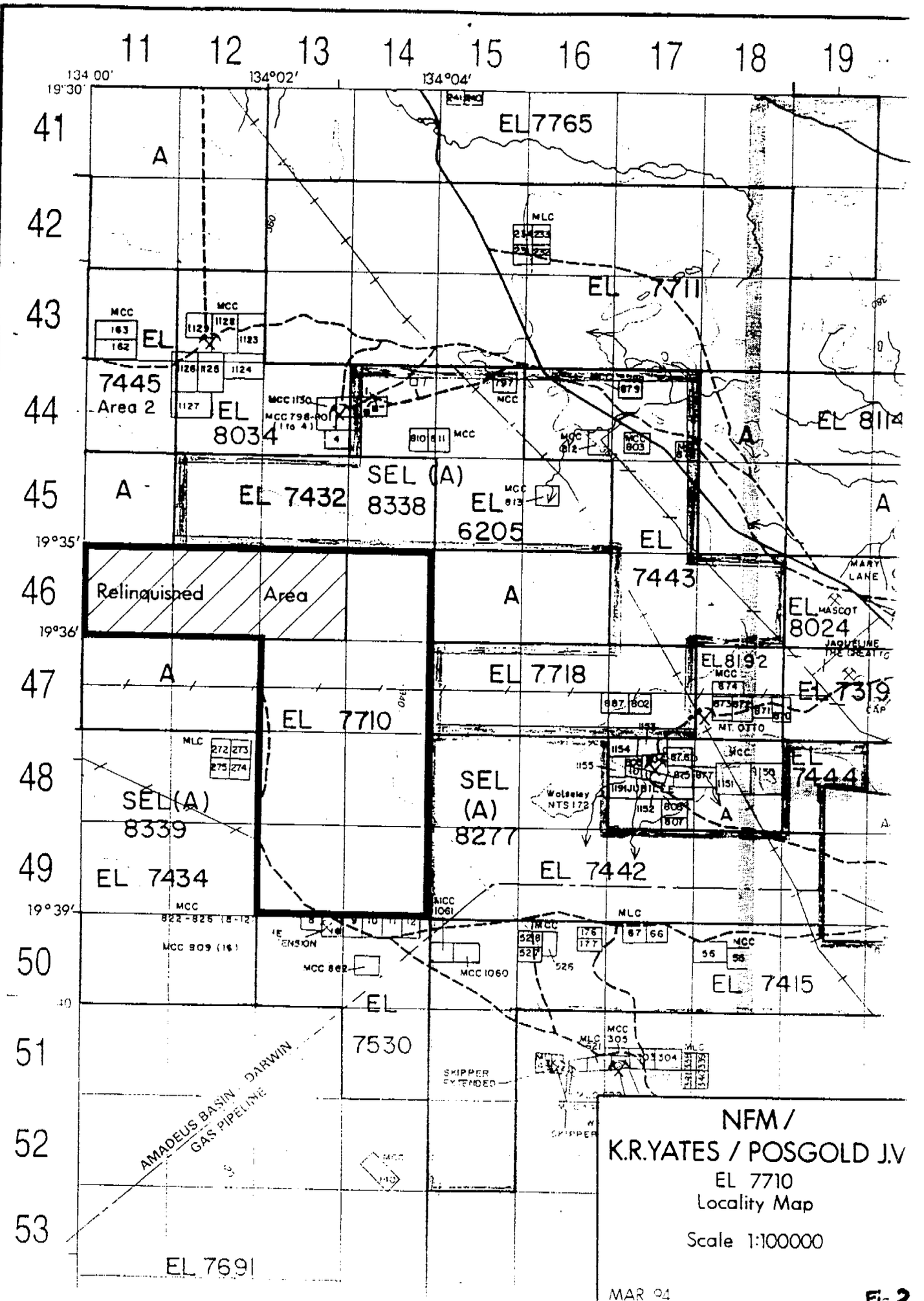


NFM / K.R.YATES / POSGOLD J.V
EL 7710
Locality Map

Scale 1:100000

MAR 94

Fig. 2.

TABLE 1 EL7710 - MINERAL CLAIMS

Title	Holder	Date Granted	Expiry Date	Area(ha)
MCC822	Jackson/Lindner	7/12/88	6/12/93	20
MCC823	Jackson/Lindner	7/12/88	6/12/93	20
MCC824	Jackson/Lindner	7/12/88	6/12/93	20
MCC825	Jackson/Lindner	7/12/88	6/12/93	20
MCC826	Jackson/Lindner	7/12/88	6/12/93	20

Renewal applications are current for these mineral claims.

4 REGIONAL GEOLOGY

4.1 Introduction

EL7710 is located in the Early Proterozoic Tennant Creek Inlier as defined by Le Messurier & others(1990). Gold production from the Tennant Creek Goldfield since 1930, is in excess of 4.4 million ounces (150 tonnes) making it the sixth largest goldfield in Australia (Wedekind & others,1989).

The Early Proterozoic Warramunga Group sediments consist of greywacke, siltstone and mudstone (Figure 3) and host the Au-Cu-Bi mineralization in the Goldfield. The composition, bedding characteristics and sedimentary structures of the sediments have historically been interpreted as indicative of turbidite or flysch deposits. Ivanac(1954) deduced a predominantly felsic volcanic provenance for the sediments. The general tectonic setting is inferred as an intracratonic rift environment.

The sediments of the Warramunga Group have been deformed by a number of deformations with the main structural fabric defined by open to tight, upright and upward facing macroscopic folds trending east-west. Axial plane to the folds is a pervasive slaty cleavage. The folds are doubly plunging i.e. to the east and west, and this is inferred to reflect an earlier north-south oriented open flexure (Ding Pinguan, pers. comm.,1992).

Intruding the Warramunga Group are a number of granitic batholiths with two ages recognised. The granites are typically medium to coarse grained, weakly to moderately porphyritic with K-feldspar megacrysts, and contain biotite. The plutons are crudely elongate east-west parallel to the main slaty cleavage.

Alteration and mineralisation may display a crude vertical zonation. A quartz + magnetite stringer zone extends upwards through massive magnetite (or hematite) to talc and dolomite. Chlorite with varying proportions of disseminated iron oxide forms an alteration envelope, albeit narrow in some instances, in sediments hosting the lode. Mineralisation is generally in fractures in the lode (White Devil is an exception) and passes vertically from a gold-bismuth core to an outer copper zone (i.e. Juno - Large,1975).

Uranium in the form of uraninite has been noted at a number of mines (e.g. Juno - Large,1975 and North Star) and sericite is a common indicator of gold mineralisation e.g. Nobles Nob (Yates & Robinson,1990).

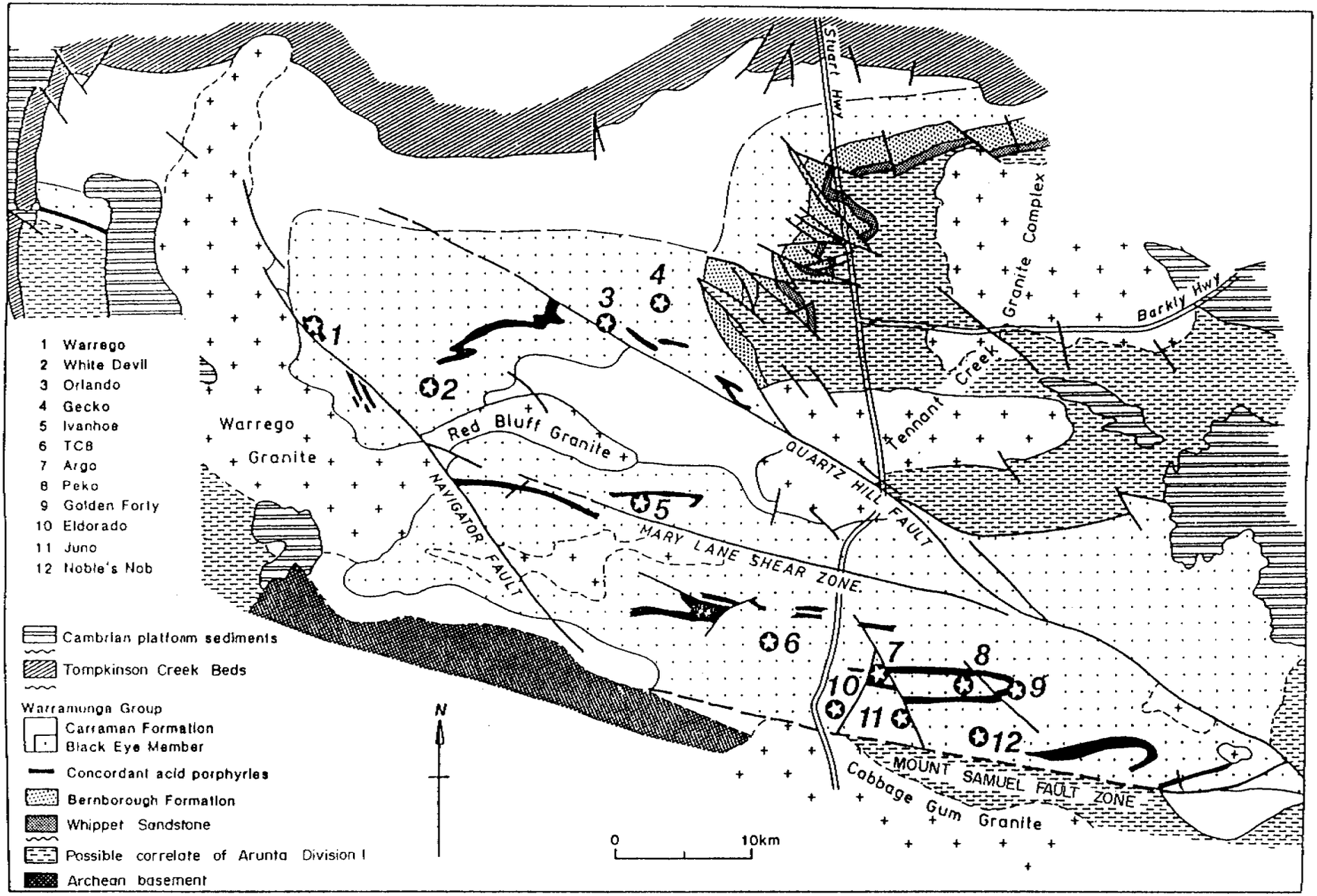


Fig 3. [illegible] of the Tennant Creek Goldfield (after Fox, 1990)

4.2 EL7710

The tenement is favourably located in the central western part of the Tennant Creek Goldfield between two major west northwest trending faults or shear zones; the Mount Samuel Fault Zone (MSFZ) in the south and the Mary Lane Shear Zone (MLSZ) in the north (Figure 3). The MSFZ contains the Mount Samuel-Eldorado-Nobles Nob 'line of lode' hosting the Nobles Nob (6.9Mt @ 6.6g/t Au) and Juno (0.45Mt @ 56g/t Au) Mines, both major producers in the field.

The majority of EL7710 is covered with a veneer up to 25m thick of colluvial gravel wash topped by windblown sand. Interpretive plans of the bedrock geology and regional aeromagnetics at 1:25 000 scale are shown in Figures 5 & 6 respectively.

In the central and northern parts of the tenement, elongate east-west porphyry bodies intrude the Warramunga Group sediments (Figure 5). Between these bodies is located a ridge of moderate high magnetics. The ridge strikes east-west and is offset by several northwest trending sinistral faults. Displacement on the faults is in the order of 1km. These faults are interpreted to post-date the deposition of magnetite. Along the magnetic ridge to the west are located (from east to west) Explorers 43 (Quart Bowl East), 39 & 40 (Quart Bowl), Shrike, and Explorer 44 (Quart Bowl West).

The east-west trending 'TC8 mineralised corridor' extends along the southern margin of the EL and passes up through the southwest corner of the tenement. This structure hosts the TC8 Mine (40 000t @ 67g/t Au, 1.2% Cu & 0.5% Bi) and a number of prospects including (from east to west) Explorers 3 & 4 (Traminer), 11 (Chardonnay), 107, Placer Anomaly, Extension South and Extension.

5 PREVIOUS EXPLORATION

Historically the southwestern part of the Tennant Creek Goldfield has been underexplored. This is surprising given its location between the Warrego and White Devil Mines in the northwest and Nobles Nob, Juno and Peko Mines in the southeast.

Previous explorers have included Peko Mines Ltd (1972 - EL214), Australian Ores and Minerals Ltd (1976 - EL1389), Australian Ores and Minerals Ltd/Marathon Petroleum Australia Ltd (1979 - EL2084), Peko Wallsend Operations Ltd (1982 - ELs3574 & 3575), Newmont Australia Ltd (1989 - ELs5073 & 5074), Tennant Creek Gold/Metana Minerals NL (1987 - EL5555), Allender-Le Brun/Metana Minerals NL (and later Placer Exploration Ltd) (EL5627).

The bulk the work was limited to geological mapping and interpretation of airborne and radiometric data. Specifically within the tenement, the programme of reconnaissance BLEG sampling on wide spaced centres by Newmont, probably covered the northern part of the EL. No geochemical bedrock or inclined drilling has been recorded on the licence.

Metana Minerals noted an old shaft adjacent the Tennant Creek - Phillip Creek Stations' boundary fence west of Explorer 104.

6 EXPLORATION PROGRAMME

6.1 1992/93

Keith Yates carried out a comprehensive analysis of previous explorers and their work.

* E.L.214 Peko Mines - generally little work of specific value or relevance to E.L.7710
* E.L. 3574 & 3575 Peko Mines. - geological and geophysical interpretations.
* E.L. 5073 & 5074 Newmont Aust. - magnetic anomaly on western boundary of E.L.7710
* E.L. 5555 TCG Ltd./ Metana - identified various structural trends.
* E.L. 6196 Asarco - reconnaissance lag sampling

From this data and mapping and ground reconnaissance (fig.4) K.Yates developed a number of exploration target areas.

6.2 1993/94

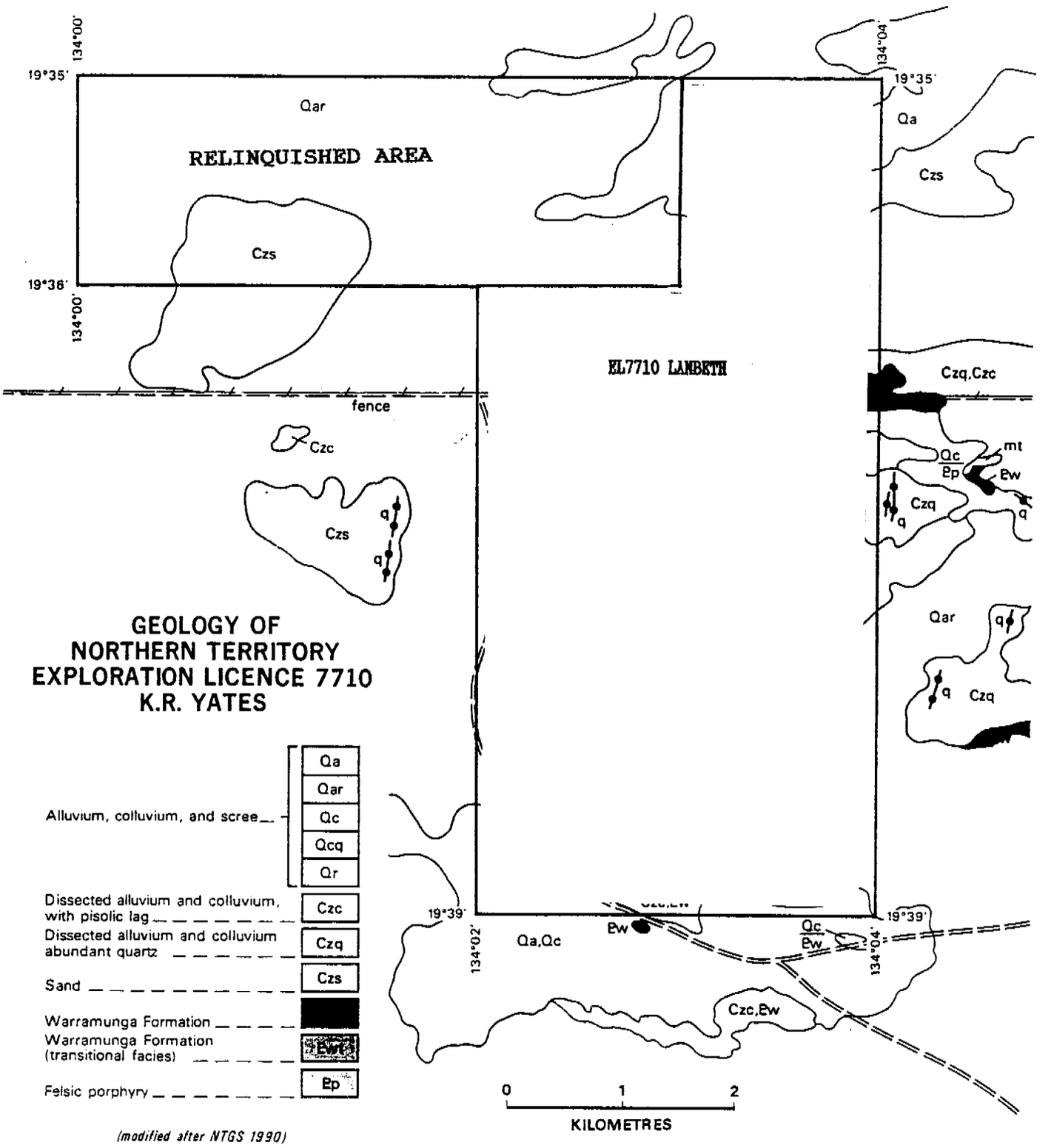
The basis of the exploration programme during the second year of the licence was a detailed photo-interpretation of the Tennant Creek 1:25,000 colour aerial photographs and interpretation of regional aeromagnetics to delineate zones of intersecting structure and dilation (Figures 5 & 6).

Outcrop is restricted to very small areas in the the southern and eastern parts of EL7710. Elsewhere a cover of alluvial and colluvial wash and windblown sand obscures bedrock.

During 1993/94 field exploration including gridding, ground magnetic and bedrock geochemical surveys were targeted at the intersection of the TC8 -Extension and the Mt. Samuel structures , primarily because it was felt that these systems may control the localisation of the mineralisation in the region. No targets were delineated within the relinquished portions of the exploration licence and no field work was undertaken in these areas.

7 DISCUSSION AND CONCLUSIONS

As a result of an evaluation of the aeromagnetic data and 1:25,000 geological interpretation no structural/magnetic/geological targets were identified on the relinquished blocks and no further work was recommended for these areas.



GEOLOGY OF NORTHERN TERRITORY EXPLORATION LICENCE 7710 K.R. YATES

(modified after NTGS 1990)

31-3-93

Figure 4.

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7835000mN

7832500mN

7830000mN

7827500mN

402500mE

Phillip Creek Station

Tennant Creek Station

Tennant Creek - NT Gas pipeline

EXTENSION

RELINQUISHED AREA

LEGEND

- Porphyry
- Dolerite
- Area of High Magnetic Intensity.
- Area of Moderate Magnetic Intensity.
- Background Magnetic Intensity.
- Trend of Magnetic Unit.
- Magnetic monopole highs.
- Fault or shear.
- Fence.

DATA BY	N.F.MINES	FEB. '94
DRAWN	CARTOGRAPHICS	MARCH '94
CHECKED		
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NORTH FLINDERS MINES LIMITED

N.F.M. - POSGOLD JOINT VENTURE

REGIONAL GEOLOGY

SCALE 1:25000

PREPARED by CARTOGRAPHICS 4/NFM-POS/1 FIG.

RELINQUISHED AREA

EL7710

EXTENSION

397 500mE

400 000mE

402 500mE

Figure 6. Regional Airborne Magnetics Scale 1:25 000
Feb 94