EL6905 "SHOOBRIDGE SOUTH"
MT. SHOOBRIDGE AREA, NT
FINAL REPORT TO 20 JUNE 1992
YEAR 2 OF TENURE

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September 1992

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1. SUMMARY

This report details the exploration activities (1990-92) completed on EL6905 prior to expiry on 20 June 1992.

The licence, comprising one (1) graticular block, was granted to Dominion Gold Operations on 21 June 1990 for a period of two (2) years. The Dominion exploration programme consisted of photogeological interpretation of aerial photography, interpretation of airborne geophysical data, ground magnetic and radiometric surveys, and regional mapping at 1:25000 scale.

Results from the exploration programmes returned a **maximum of 4ppb Au(silt), 14ppm Cu (silt), 8ppm Pb (silt) and 28ppm Zn (silt)**. Review of geological and geophysical data indicates a structurally complex zone beneath residual soils and transported overburden.

EL6905 is now pegged under mineral claim applications MCN(A)4364-69, lodged with the NTDME on 19 June 1992.

2. LOCATION AND TENURE

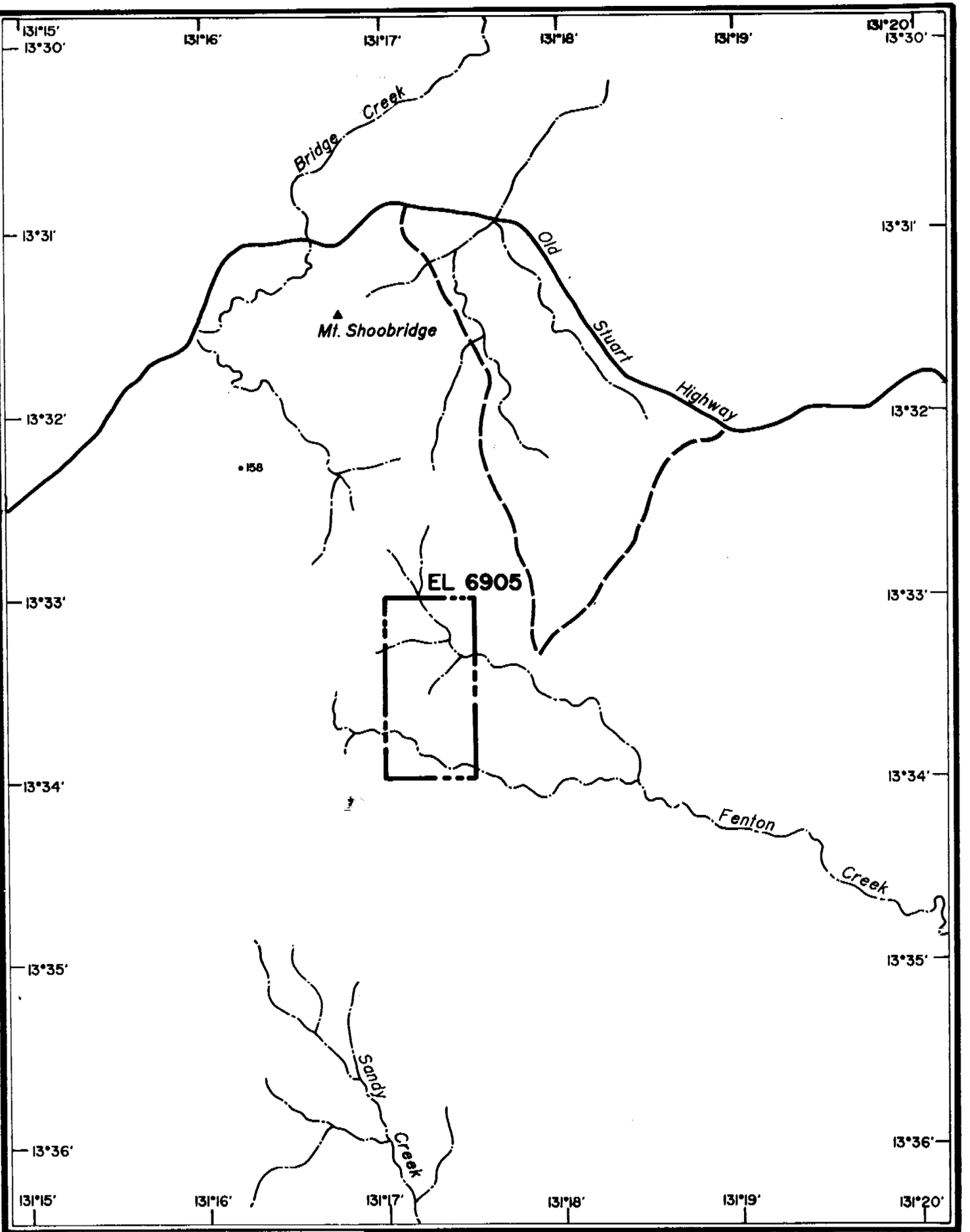
EL6905 is location 160km south of Darwin approximately 12km west of the Cosmo Howley Mine and is located on the Fenton 1:50,000 (14/5-1 sheet). The tenement lies between latitudes 13°33'S and 13°34'S and longitudes 131°17'E and 131°18'E. See Fig. 1 for tenement location.

Access is via the Stuart Highway, Dorat Road and Douglas Station tracks. Climatically, EL6905 experiences a wet season (November to April) and a dry season (May to October). Average annual rainfall is 1249mm and the mean temperature is approximately28°C.

Local relief is moderate, ranging from 130 to 140m above sea level, with Mt. Shoobridge 4km to the NNW.

The licence was granted to Dominion Gold Operations Pty Ltd on 21 June 1990 for two (2) years.

Pegging of mineral claims, MCN(A)4364-4369 to cover the expiring EL were lodged with the NTDME on 19 June 1992.



N

0 0.5 1 1.5 3 km

EL 6905 TENEMENT LOCATION

PROJECT	SHOOBRIDGE			STATE	N.T.
ORIGINATOR	N.B.	Date 8/91	DRAWN	R.L.	Date 8/91
SCALE	1:50000	FIGURE No: 1		PLAN No:	40A-Tb7

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3. GEOLOGY

3.1 Regional Geology

The geology of the Pine Creek Basin has been well documented by the BMR [Wallace et al (1985), Needham, et al (1980)].

The Early Proterozoic sequence was deposited by alternating shallow marine and continental environments in an intracratonic basin setting. Following intrusion by conformable sills, a major period of deformation and regional metamorphism, related to granite intrusion, produced a series of tight, upright folds.

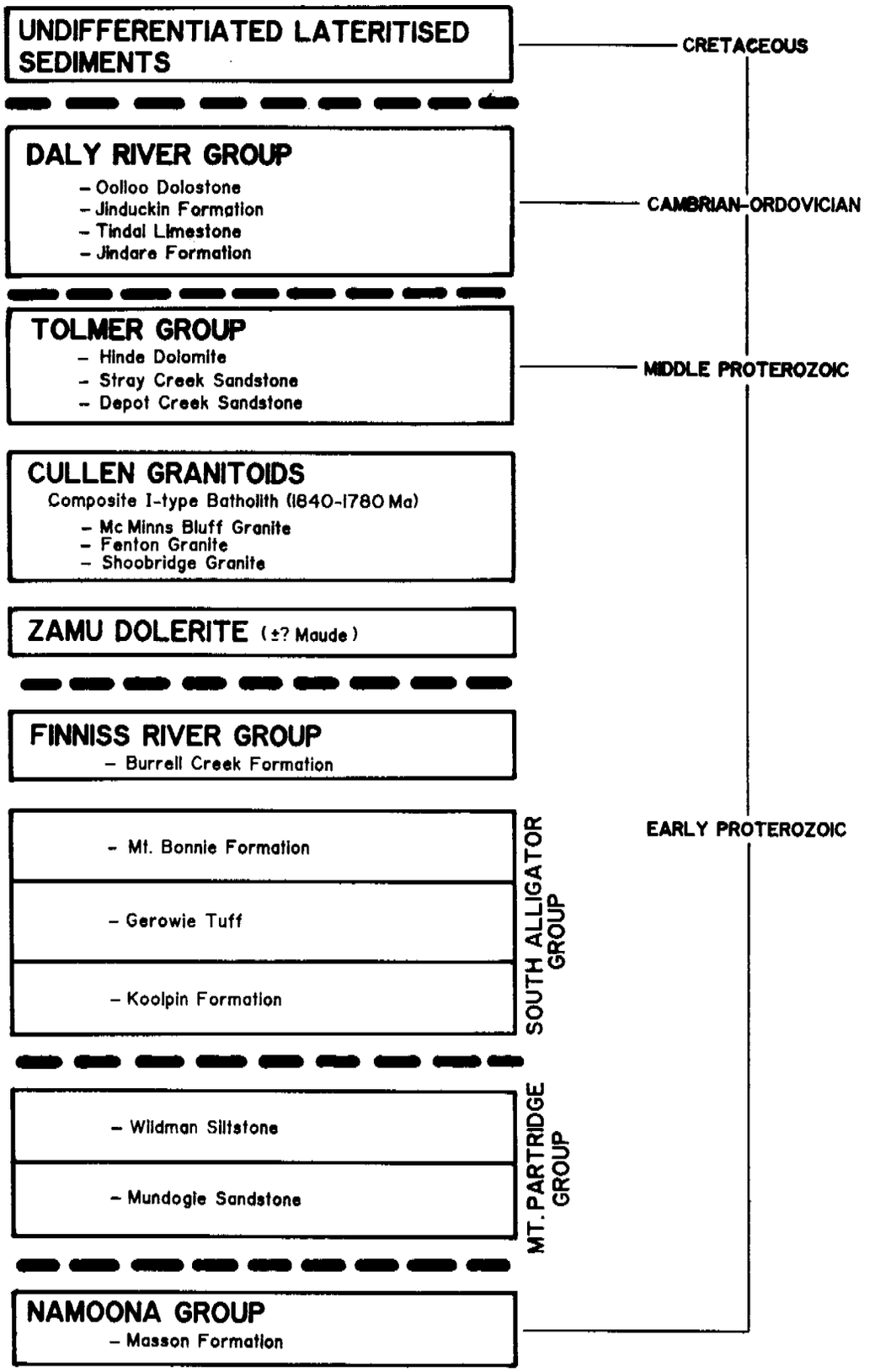
Early Proterozoic stratigraphy of the Pine Creek/Adelaide River area is shown in Fig. 2.

3.2 Local Geology

Field inspection and regional mapping at 1:25000 scale indicate EL6905 is dominantly covered by residual soils and transported alluvium. Minor outcrops of red-brown micaceous phyllites, classified as Mt. Bonnie Formation sediments by the NTGS, have been mapped. See Fig. 3 for tenement geology.

Two major schistosities within the phyllites have been observed. Schistosity S_1, a crenulation cleavage defined by biotite segregation and a rare intersection lineation, trends approximately 270°M with the dominant phyllite schistosity (S_2) also defined by biotite and trending 000-010°M. Minor quartz veinlets parallel to S_1 have been observed.

STRATIGRAPHIC COLUMN



CULLEN MINERAL FIELD STRATIGRAPHIC RELATIONS

PROJECT			STATE N.T.
ORIGINATOR F.F.	Date 5/91	DRAWN R.L.	Date 5/91
SCALE	FIG 2		PLAN NO: 2A - G100

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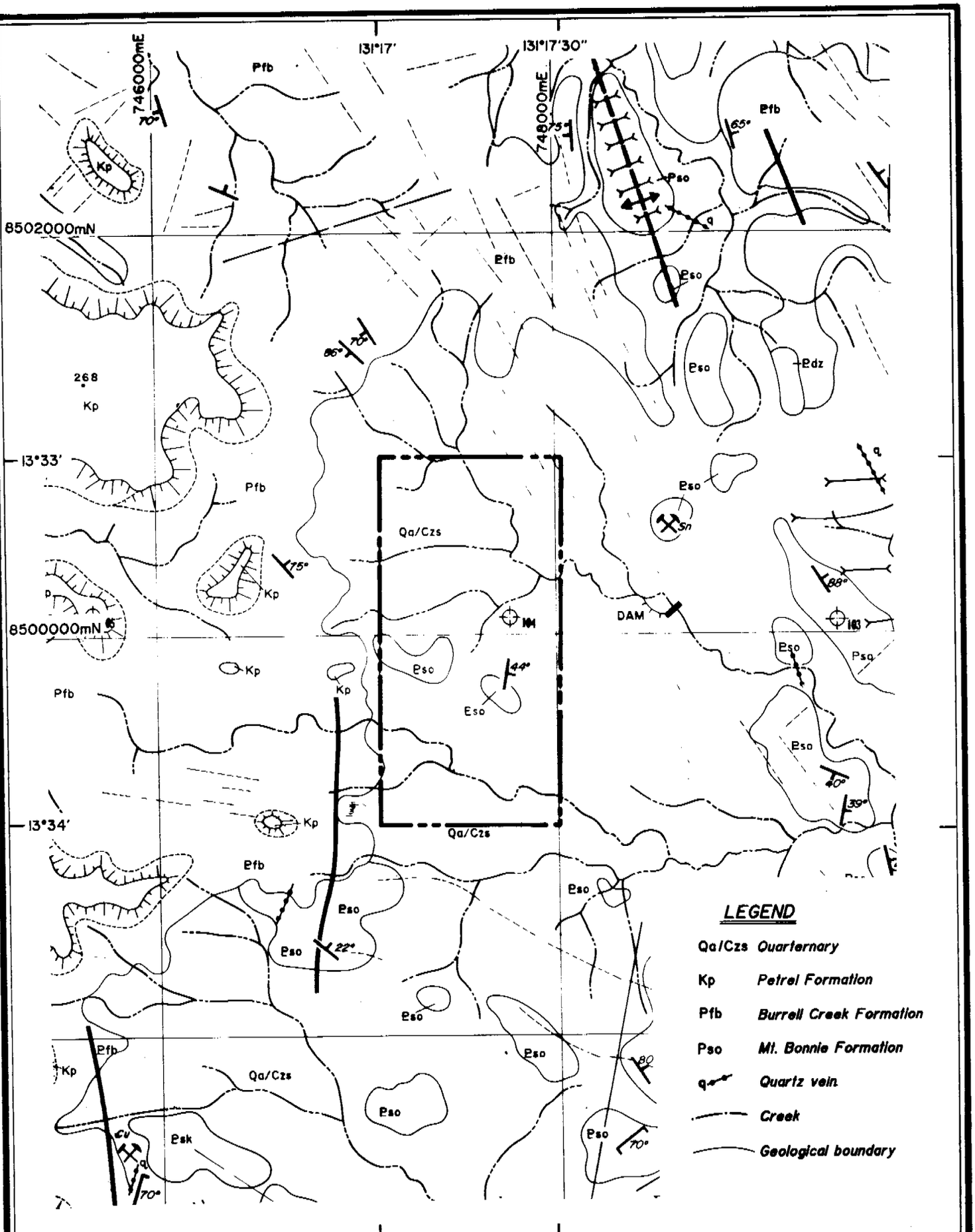

EL 6905
FACT GEOLOGY

PROJECT	SHOOBRIDGE			STATE	N.T.
ORIGINATOR	N.B.	Date 8/91	DRAWN	R.L.	Date 8/91
SCALE	1:25000	FIGURE No: 3		PLAN No:	40A-Ga4

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4. 1990/92 WORK PROGRAM

4.1 Aerial Photography

During May 1989, Airesearch Mapping of Darwin, flew the Cosmo Howley-Woolwonga tenements held by Dominion and produced sets of 1:25000 and 1:10000 scale air photos (relevant air photo run is AM521 Run 7 No. 104-106). EL6905 was located at the western end of photo runs and was not fully covered by this work.

Airesearch Pty Ltd were commissioned in April 1991 to fly the Shoobridge-Fenton tenements held by Dominion. EL6905 is covered by AM529 Runs 6 (No. 051-52) and 7 (No. 063-64).

Air photography interpretation shows the tenement to be predominantly covered by residual and transported soils related to the Shoobridge anticline and the faulted escarpment to the west. Photogeological interpretation is shown in Fig. 4.

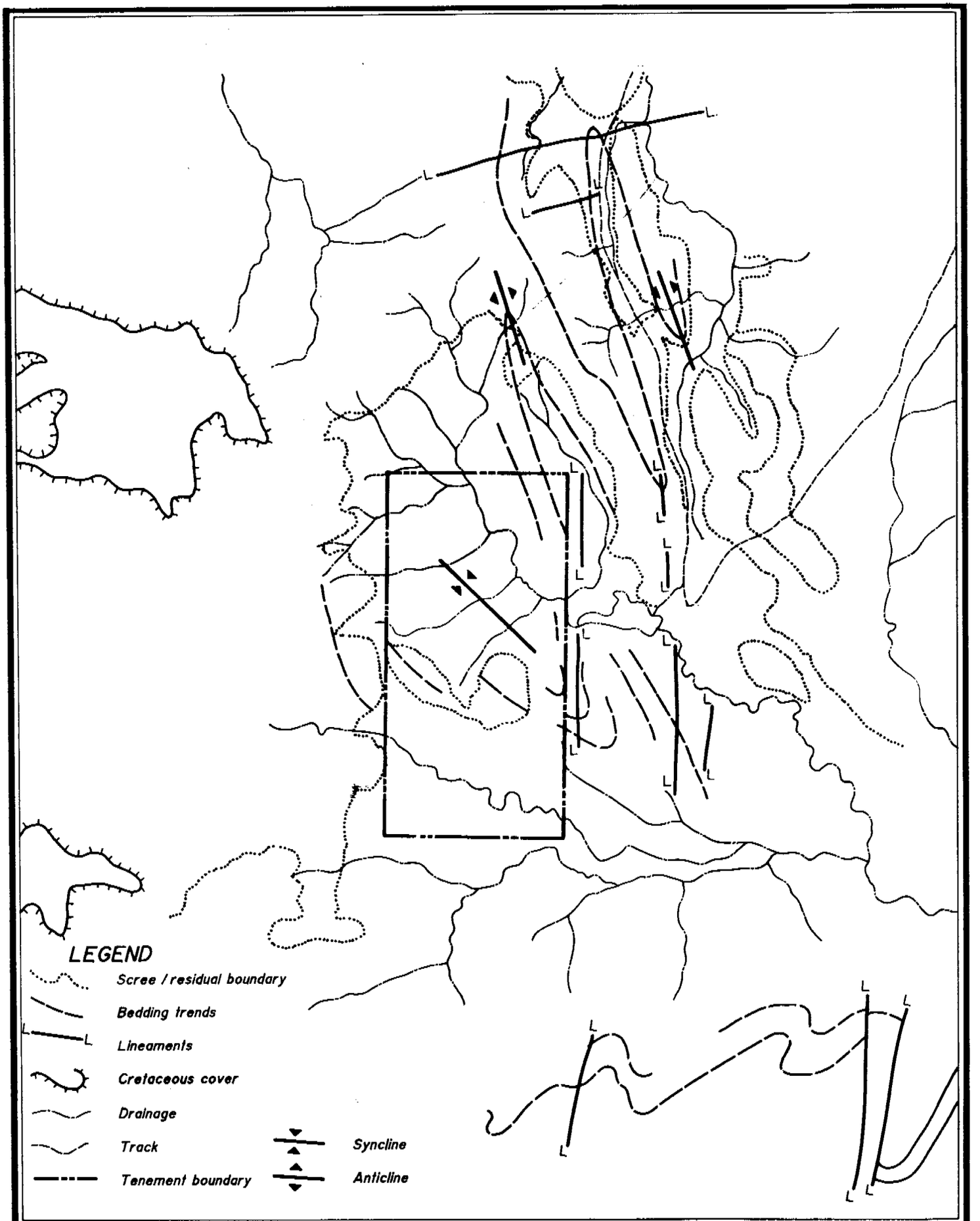
Minor ridges of Mt. Bonnie Formation/Burrell Creek Formation sediments (phyllites and schists) trend 100-120°M.

4.2 Airborne Geophysics

In 1987 and 1988 Aerodata flew a large portion of the Western Pine Creek Basin.

The survey of 22,663 line kilometres was originally commissioned by Golden Plateau NL and completed in May 1988. It was subsequently made available for general sale and Dominion acquired the data in late 1988.

Continued interpretation of this data has been used to identify favourable lithological/structural settings of Au mineralization. See Fig. 5 for total field magnetic contours.



EL 6905
PHOTO GEOLOGY

PROJECT	SHOOBRIDGE			STATE	N.T.
ORIGINATOR	N.B.	Date	DRAWN	R.L.	Date 10/92
SCALE		FIGURE NO: 4		PLAN NO:	

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131°17' 747500mE 131°17'30"

8502500mN

13°33'

8500000mN

13°34'

0 250 500 750 1500 m

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EL 6905 TOTAL FIELD MAGNETIC CONTOURS

PROJECT	SHOOBRIDGE			STATE	N.T.
ORIGINATOR	N.B.	Date 8/91	DRAWN R.L.	Date	8/91
SCALE	1:25000	FIGURE No: 5		PLAN No:	40A-Pa3

4.3 Mapping Programme

A 1:25000 regional mapping programme was undertaken by a senior consultant for Dominion Mining Ltd. The scope of this work was to map an area of approximately 350km^2 south of the Stuart Highway between Robin Falls and Cosmopolitan Howley Mine, using recently acquired 1:25000 scale colour air photos. Fieldwork was carried out over five weeks between July and September 1991. As stipulated under the contract the work placed particular emphasis on:

- Air photo interpretation
- Outlining areas of uncormably overlying younger sediment packages
- Delineating alteration and stockwork zones
- Definition of granite margins and extent of contact metamorphism
- Regional metamorphic grade
- Relationship of structural, veining, alteration and intrusion history

Regional mapping over EL6905, shown in Fig. 6, indicates a SE plunging synclinal zone within Burrell Creek Formation sediments that have undergone biotite grade contact metamorphism.

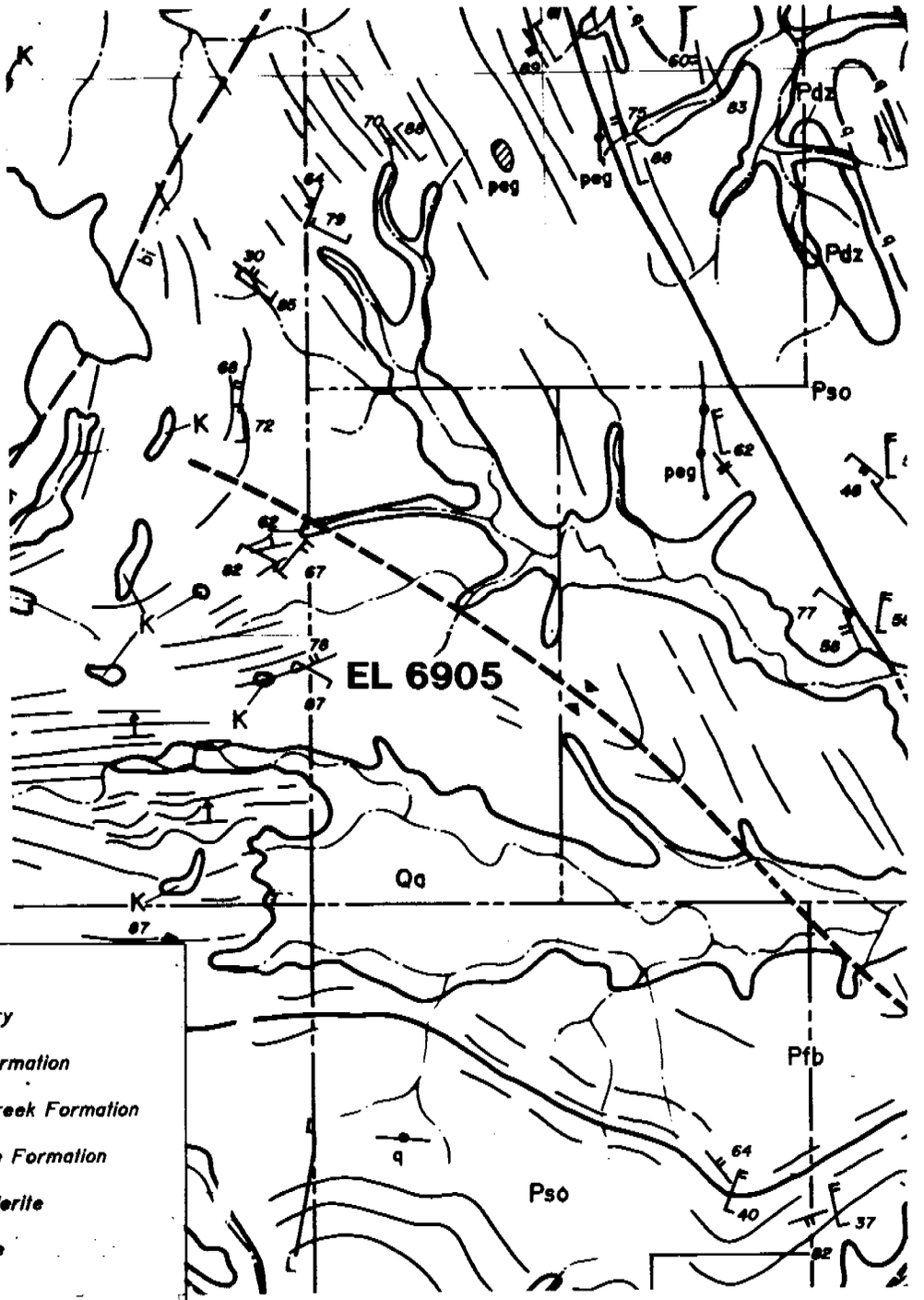
4.4 Ground Geophysics

A ground magnetic and radiometric survey was completed over EL6905 to test bedrock structure beneath the transported overburden with survey parameters listed below:-

Instrument: Magnetics: G-816/826 Protable Proton Magnetometer
Radiometrics: GR-500 Differential Gamma Ray Spectrometer/Scintillometer

Reading Stations: at 20m along E-W lines spaced 100m apart. Traverses utilize a central N-S base line from which loops 600m long alternately to the west and east (corresponding to adjacent N-S boundary lines) are read.

Base stations are transferred after successive loops along the central N-S base line, with a Main base read at 2-3 hourly intervals.



LEGEND

Qa	*Quaternary*
K	*Petrel Formation*
Pfb	*Burrell Creek Formation*
Pso	*Mt. Bonnie Formation*
Pdz	*Zamu Dolerite*
peg	*Pegmatite*
q	*Quartz*
	Strike and dip of strata
	Strike and dip of cleavage
	Syncline, approximate

0 250 500 750 1500 m

EL 6905
REGIONAL GEOLOGY

PROJECT	Mt. SHOOBRIDGE		STATE N.T.
ORIGINATOR N.B.	Date 10/92	DRAWN R.L.	Date 10/92
SCALE 1:25000	FIGURE No: 6		PLAN No: 40A-Qc4

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4.4 Ground Geophysics (Cont'd)

Readings:	Magnetics:	3 readings per station
	Radiometrics:	stations exactly as for **Mag.**
	–	One total count averaged over 10 secs
	–	Three x Potassium plus, av. over 1 sec.
	–	Three x Uranium plus, av. over 1 sec.
	–	Three x Thorium plus, av. over 1 sec.
Time:		Recorded at start/finish each line, plus every 100m station.

A total of 18 loops for 19.4km were completed. Assessment of the base station data indicates that ground magnetics show a diurnal drift with an increased peak at midday while radiometrics undergo a gradual decrease during the day.

Magnetic data detected the strong linear feature trending approximately 320°M as shown in Fig. 5 with raw data shown in Plate 1 and magnetic profiles in Plates 2 & 3.

4.5 Geochemical Sampling

A regional stream sediment sampling programme was conducted over the Shoobridge-Fenton tenements held by Dominion.

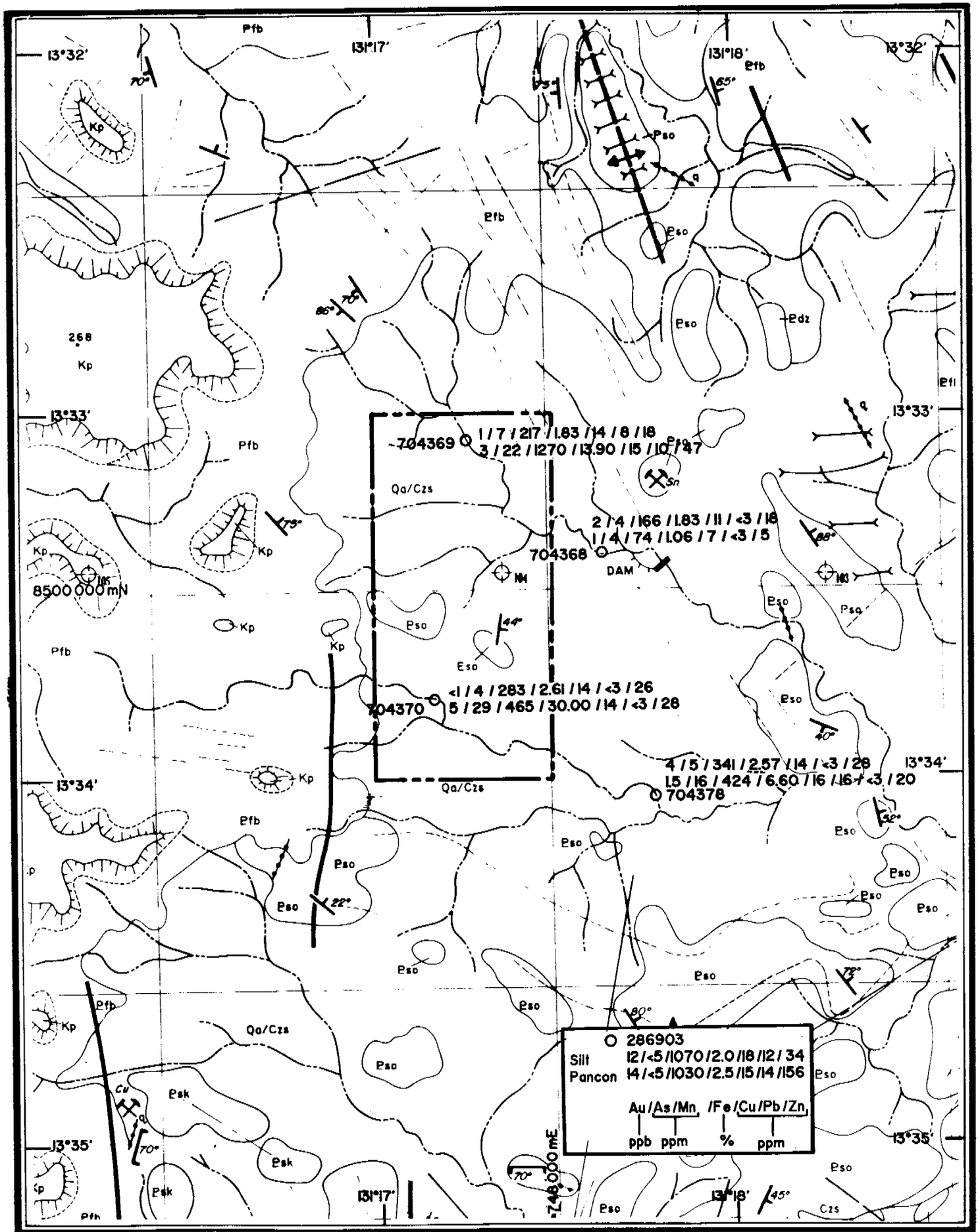
Stream sediment samples (704368-70, 704378) were collected from selected sites within drainages averaging 2km². Two sample sizes were collected:

i) -20# silt fraction, 203kg, sieved to -200# in the laboratory
ii) pan concentrate, approx. 100g.

Samples were despatched to Analabs Perth where they were analysed by the following methods:

Au:	Aqua regia digest, carbon rod AAS
Cu,Pb,Zn,As,Mn,Fe:	Low detection flame AAS

Sample location and assay results are shown on Fig. 7 and in Appendix 1.



EL 6905
STREAM SEDIMENT SAMPLING

PROJECT	SHOOBRIDGE			STATE	N.T.
ORIGINATOR	N.B.	Date	9/92	DRAWN R.L.	Date 9/92
SCALE	1:25000	FIGURE No:	7	PLAN No:	40A–Cb18

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5. CONCLUSIONS AND RECOMMENDATIONS

Exploration activities conducted during 1992/92 within EL6905 included acquisition of aerial photography, photogeological interpretation, re-interpretation of airborne magnetic/radiometric data, regional mapping at 1:25000 scale and stream sediment sampling.

Results from the Dominion exploration programme reveal limited structural and geochemical data available for detailed interpretation.

Pegging of mineral claims MCN4364-69 will allow further detailed exploration to determine the economic potential of this area.

6. EXPENDITURE

Expenditure covenant for Year 2 (21 June '91 – 20 June '92) was $10,000.

Expenditure for EL6905 for the 12 months ending 30 June 1992, as given below, is $10,493.

EL6905 EXPENDITURE TO 30 JUNE 1992

Direct

Assay	138
Aerial Photography	104
Geophysics	838

Indirect

Salaries & Wages	4,624
Travel and Accommodation	715
Consultants	197
Vehicles	629
Drafting & Computing	492
Office	275
Field Supplies/Equipment	333
Camp Rental/Provisions	122
Administration	2,026
TOTAL	**$10,493**

7. REFERENCES

Burn, NR (July 1991)

"EL6905 Shoobridge South - Mt. Shoobridge Area, NT
Annual Report to 20 June 1991. Year 1 of Tenure.

Needham RS, Crick JH & Stuart-Smith PB (1980)

"Regional Geology of the Pine Creek Geosyncline" in proceedings of the International Uranium Symposium. International Atomic Energy Agency, Vienna. p1-22.

Wallace DA, Stuart-Smith PG, Needham RS and Roarty MJ (1985)

"The Geology of the McKinlay River Area, Northern Territory, Australia". Bureau of Mineral Resources. 1:100000 Geological Sheet 5271.

APPENDIX 1

STREAM SEDIMENT ASSAY RESULTS

ANALABS

A Division of Inchcape Inspection and Testing Services Australia Pty. Ltd

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	105160.21.07071	28/08/92	6344	2 OF 12

TUBE No.	SAMPLE No.		Mn	Fe	Cu	Zn	As	As	Au	Au
9	704368 A		74	1.06	7	5	4	-	-	0.001
10	704369 A		1270	13.90	15	47	22	-	-	0.003
11	704370 A		465	30.00	14	28	29	-	-	0.005
19	704378 A		424	6.60	16	20	16	-	-	0.002

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
— = element not determined

AUTHORISED OFFICER Wayne S. Tur

ANALABS

A Division of Inchcape Inspection and Testing Services Australia Pty. Ltd

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	105160.21.07071	28/08/92	6344	4 OF 12

TUBE No.	SAMPLE No.		Mn	Fe	Cu	Zn	As	As	Au	Au
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25	704368	B-200#	166	1.83	11	18	4	-	-	0.002

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
— = element not determined

AUTHORISED OFFICER Wayne S. Tur

ANALABS

A Division of Inchcape Inspection and Testing Services Australia Pty. Ltd

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No	PAGE
	105160.21.07071	28/08/92	6344	5 OF 12

TUBE No.	SAMPLE No.		Mn	Fe	Cu	Zn	As	As	Au	Au
1	704369	B-200#	217	1.83	14	18	7	-	-	0.001
2	704370	B-200#	283	2.61	14	26	4	-	-	<0.001
3										
4										
5										
6										
8										
9										
10	704378	B-200#	341	2.57	14	28	5	-	-	0.004
11										
12										
13										
14										
15										
17										
18										
19										
20										
21										
22										
23										
24										
25										

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
— = element not determined

AUTHORISED OFFICER Wayne S. Turner

MAGLAB.PF

SURPAC SOFTWARE INTERNATIONAL, AUSTRALIA

3750E 4000E 4250E 4500E 4750E 5000E 5250E 5500E

8250N

8000N

7750N

7500N

7250N

7000N

6750N

6500N

6250N

6000N

5750N

PLATE 1
EL 6905 GROUND MAGNETIC DATA

CR92/590

DOMINION MINING LTD.

PROJECT :	MT SHOOBRIDGE	
PROSPECT :	EL 6905	N.T.

LOCATION and READINGS (nT)

GROUND MAGNETICS

Scintrex MP3 Magnetometer

ORIG :	N.B.	PLATE No:	1
SCALE:	1:2500		
DATE :	19-OCT-92	PLAN No:	

GROUND MAGNETIC PROFILES EL 6905

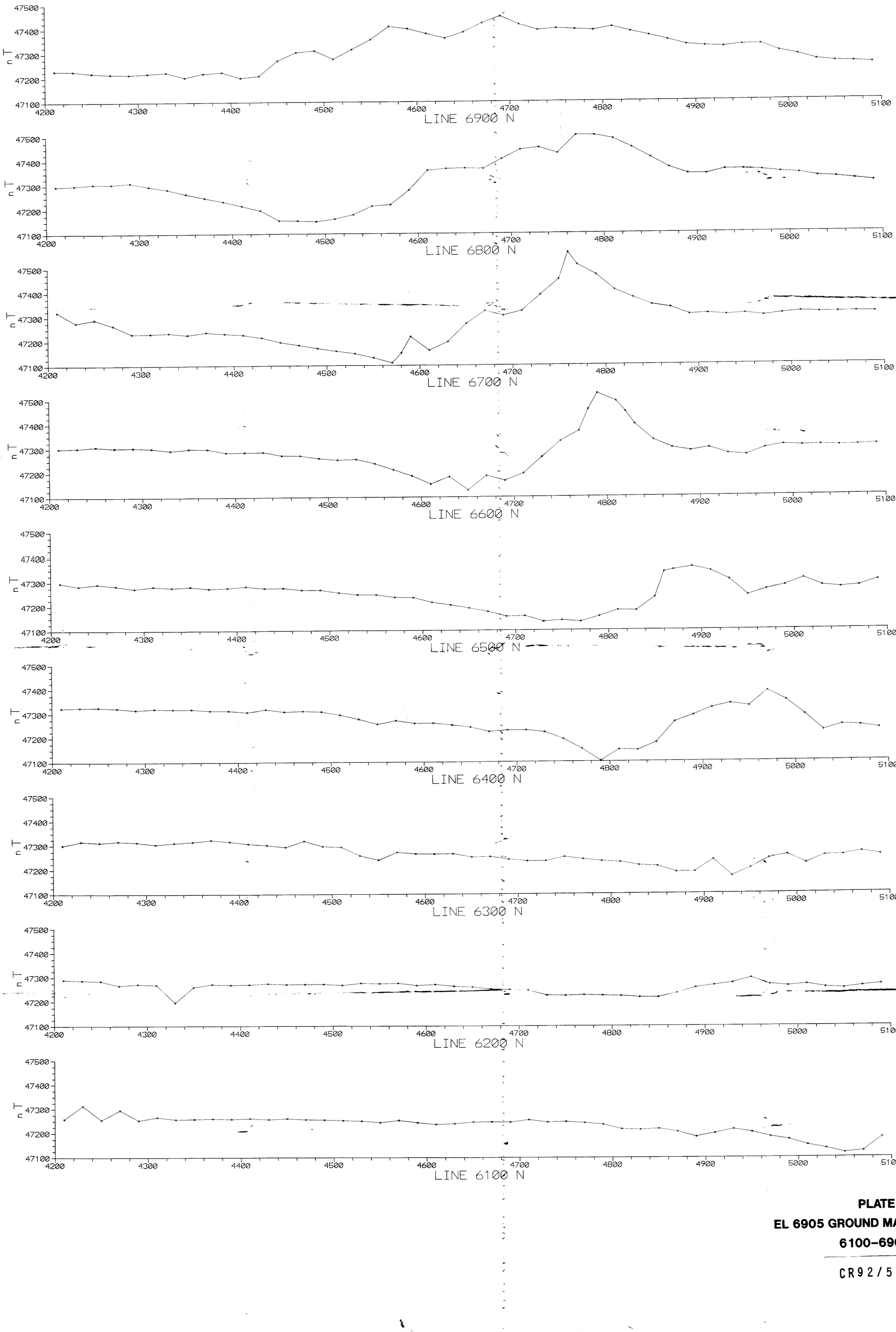


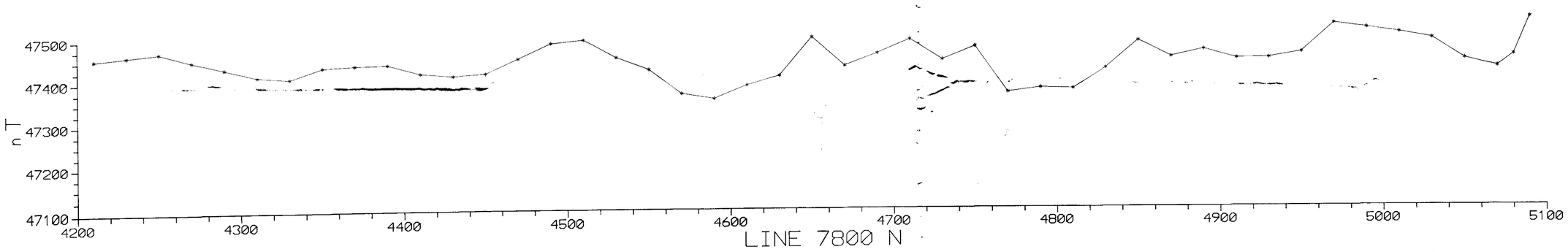
PLATE 2

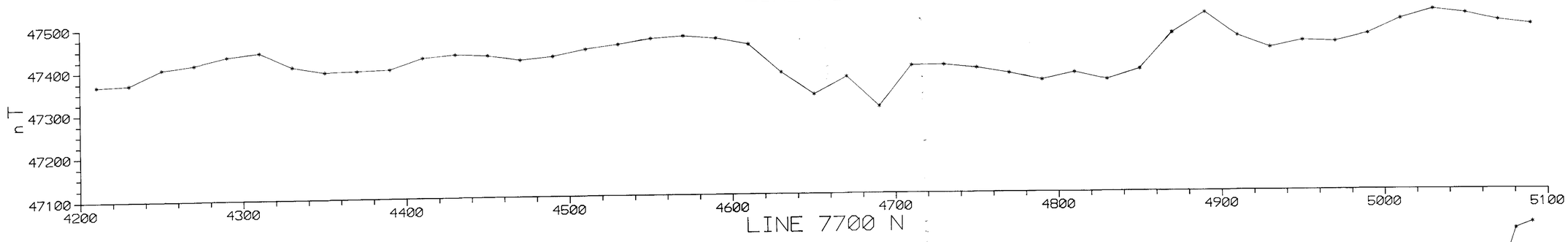
EL 6905 GROUND MAGNETIC PROFILES

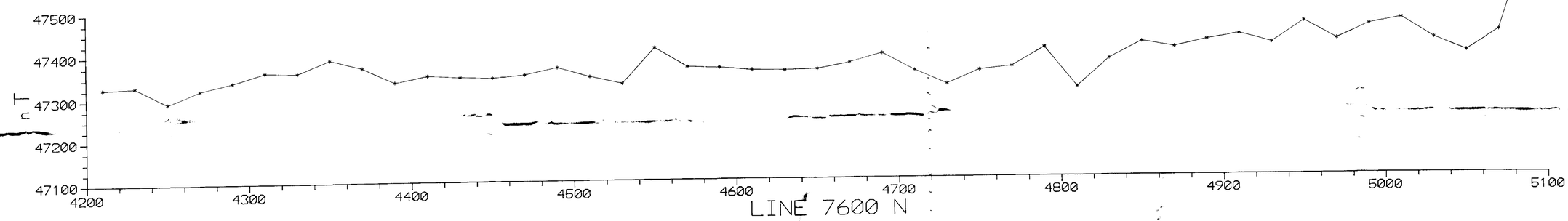
6100-6900N

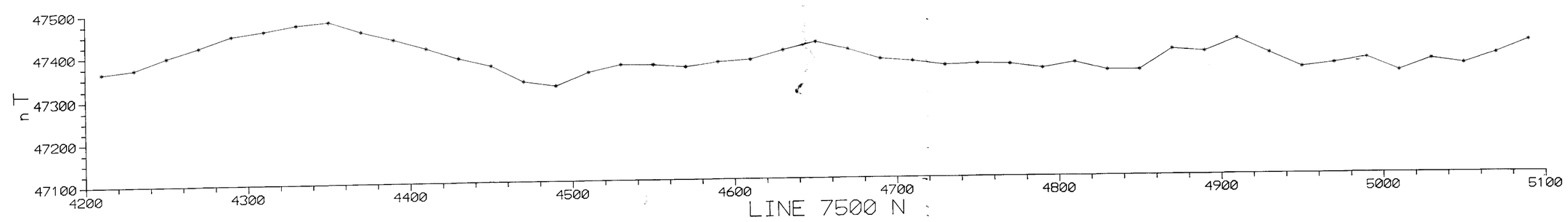
CR92/590

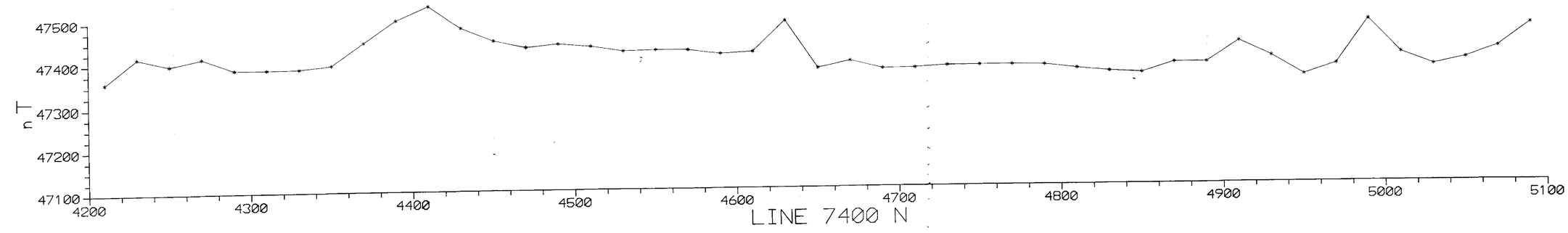
GROUND MAGNETIC PROFILES EL 6905

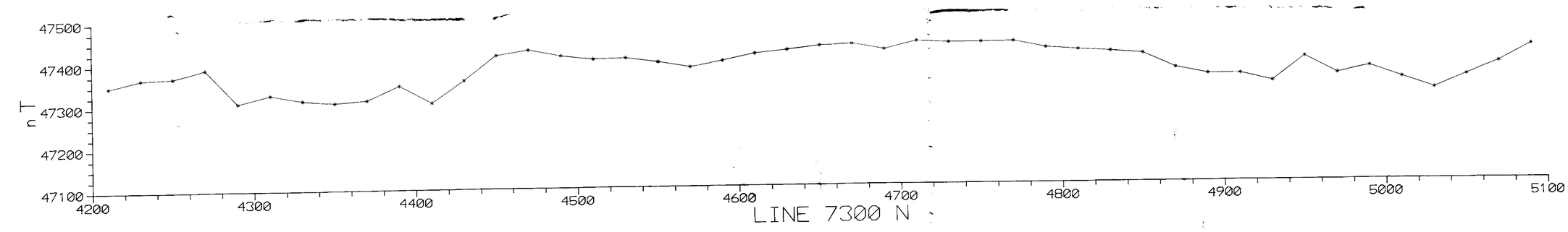


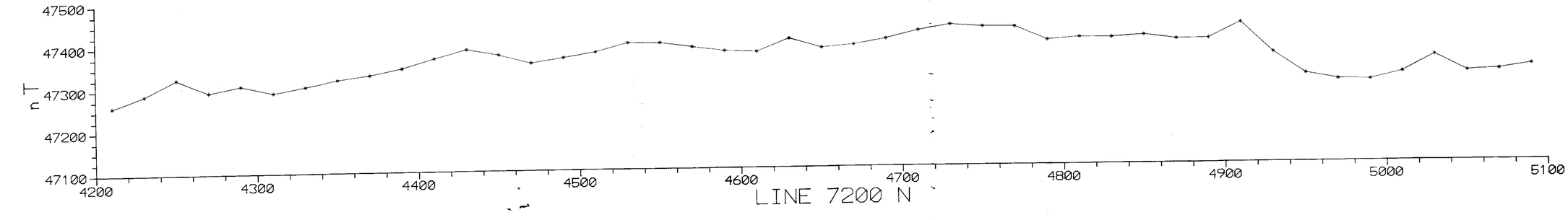


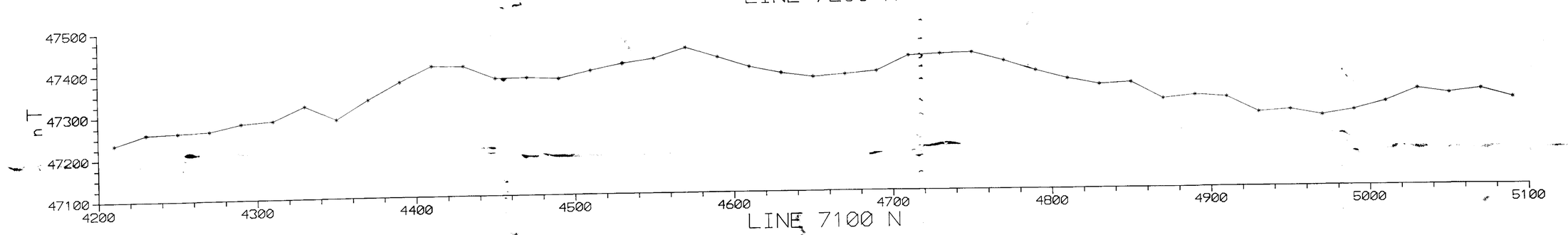












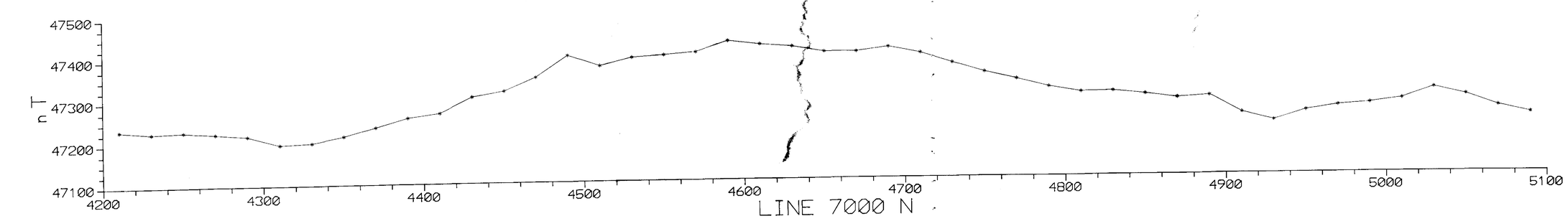


PLATE 3
GROUND MAGNETIC PROFILES
7000–7800N

CR92/590