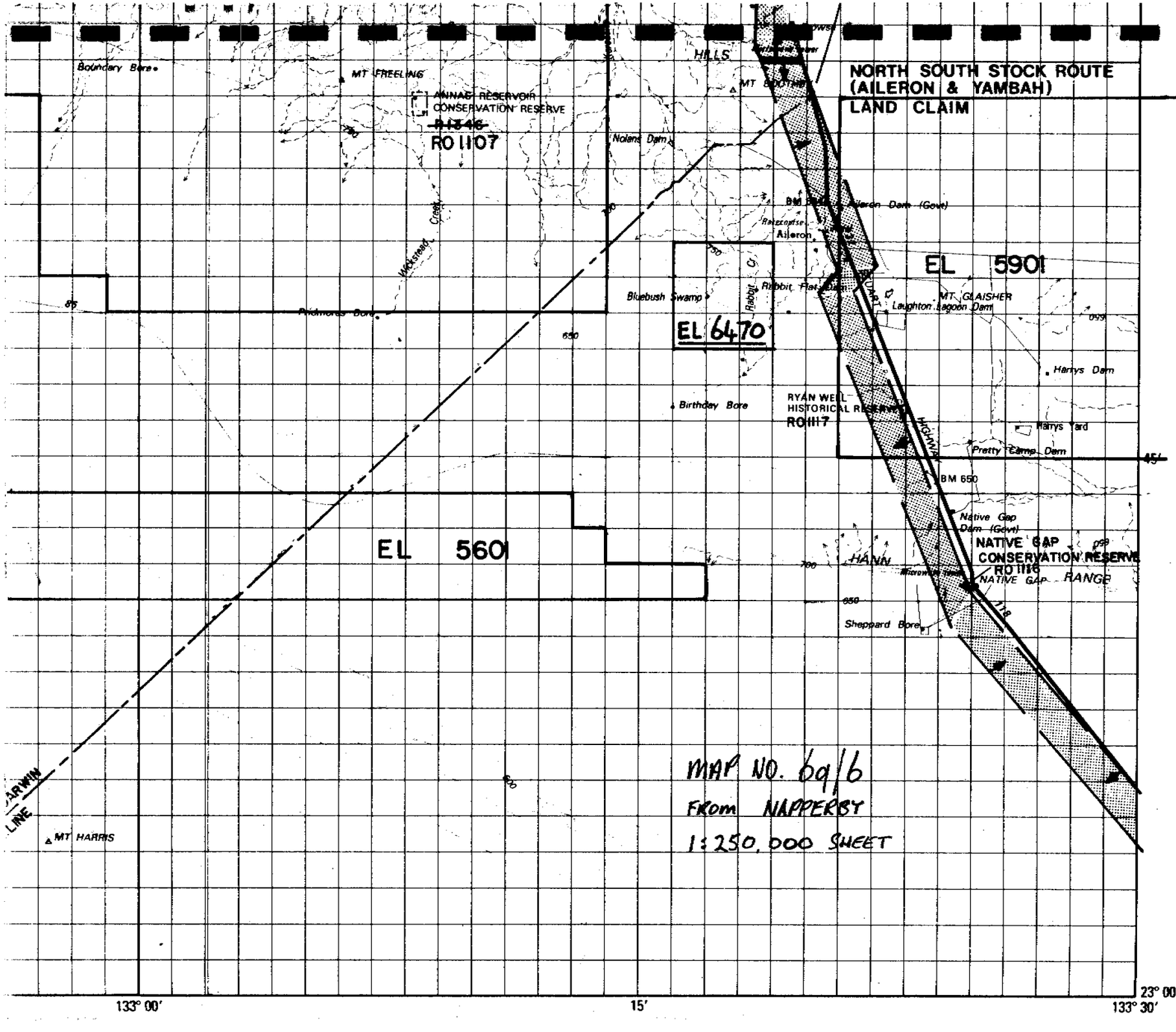
OPEN FILE

EL 6470. NAPPERBY 1:250 000 MAP LOCALITY.
GRANTED 9/5/89

FINAL REPORT
FOR PERIOD 9/5/89 To 8/5/90

LICENCE HOLDER: L.A. JOHANNSEN
PMB 41,
ALICE SPRINGS.

CONTENTS:
1. EXERPT FROM NAPPERBY 1:250,000 MAP, (NO. 6916)
2. FINAL REPORT DETAILS. (PP. 1 & 2)
3. MAP 2, SHOWING DRAINAGE FEATURE LOCALITIES, AND POSITION OF GOLD PROSPECT.
4. MAP 3, SHOWING PERCUSSION DRILL HOLE LOCATIONS.
5. DRILLING DETAILS, (P. 3.)
6. EXPENDITURE DETAILS, (P. 4)
7. DRILLING SAMPLE RECORD.



MAP 1.

MAP NO. 6916
FROM NAPPERBY
1:250,000 SHEET

10

EL 6470 FINAL REPORT.

THE LAND WITHIN EL6470 WAS TAKEN UP ON THE BASIS OF THE OBSERVATION FROM AIR PHOTOS OF TWO CIRCULAR DRAINAGE FEATURES OCCURRING ON SOMEWHAT ELEVATED GROUND WITHIN A MAJOR FAULT COMPLEX. THEY APPEARED SUFFICIENTLY DIFFERENT IN CHARACTERISTICS TO A NORMAL CLAYPAN TYPE TO WARRANT, (I BELIEVE) TESTING FOR CERTAIN MINERALS WHICH MAY INDICATE THE PRESENCE OF AN UNDERLYING KIMBERLITE PIPE.

ALSO, I WANTED TO SAMPLE AND ASSESS A SMALL (1930's) GOLD PROSPECT SEVERAL KILOMETERS TO THE NORTH OF THE PRIMARY TARGETS.

AN INFORMAL GROUND MAGNETOMETER SURVEY WAS CONDUCTED ACROSS THE TARGET AREA AND ENVIRONS AS A PRELIMINARY TO DRILLING, BUT NO VARIATION IN THE MAGNETIC INTENSITY WAS OBSERVED.

SEVEN HOLES WERE DRILLED IN THE LARGER OF THE DRAINAGE ANOMALIES, AND ONE IN THE SMALLER, THE HOLES BEING DRILLED BY PERCUSSION WITH A DIAMETER OF ABOUT 75mm. (MAP 3.)

THE AREA APPEARS TO HAVE BEEN BACKFILLED WITH UP TO 4.5 METERS OF ALLUVIUM. UNDERLYING THIS IS A FINE GRAINED QUARTZ BIOTITE SCHIST CONTAINING SMALL VEINS OF QUARTZ AND/OR CALCRETE. NO HEAVY MINERALS WERE FOUND. THE ONLY ACCESSORY MINERAL OBSERVED IN THE CHIP SAMPLES WERE A FEW CHIPS OF KYANITE, (RARE)

THE CONCLUSIONS DRAWN FROM THIS ARE THAT (a.), THE GEOLOGY UNDERLYING THE FEATURES CONFORMS TO THAT OF THE IMMEDIATE LOCALITY, WHICH IS PART OF A LARGE FAULT ZONE, AND (b.), THE ORIGIN OF THE CIRCULAR FEATURES IS PROBABLY DUE TO UNDERLYING WEATHERING PROCESSES WHICH SUSTAIN A SLIGHT DEPRESSION IN THE GROUNDLEVEL DESPITE THE GRADUAL BUT CONSTANT INPUT OF WIND AND WATER BORNE SAND AND SILT.

AT THE AILERON GOLD PROSPECT, (SO CALLED), SAMPLES WERE TAKEN FROM THE DIGGINGS CONSISTING OF QUARTZ WITH INCLUSIONS OF DISSEMINATED ARSENOPYRITE, AND MAGNETITE WITH ARSENOPYRITE. ALSO THREE SEDIMENT SAMPLES WERE TAKEN FROM APPROPRIATE LOCAL STREAMS. THESE WERE FORWARDED TO CLASSIC COMLABS DARWIN, THE FORMER FOR FIRE ASSAY AND THE LATTER FOR BULK LEACH.

ALL WERE BELOW DETECTABLE Au LIMITS, WHICH PROMPTS ME TO MAKE THE FOLLOWING COMMENT.

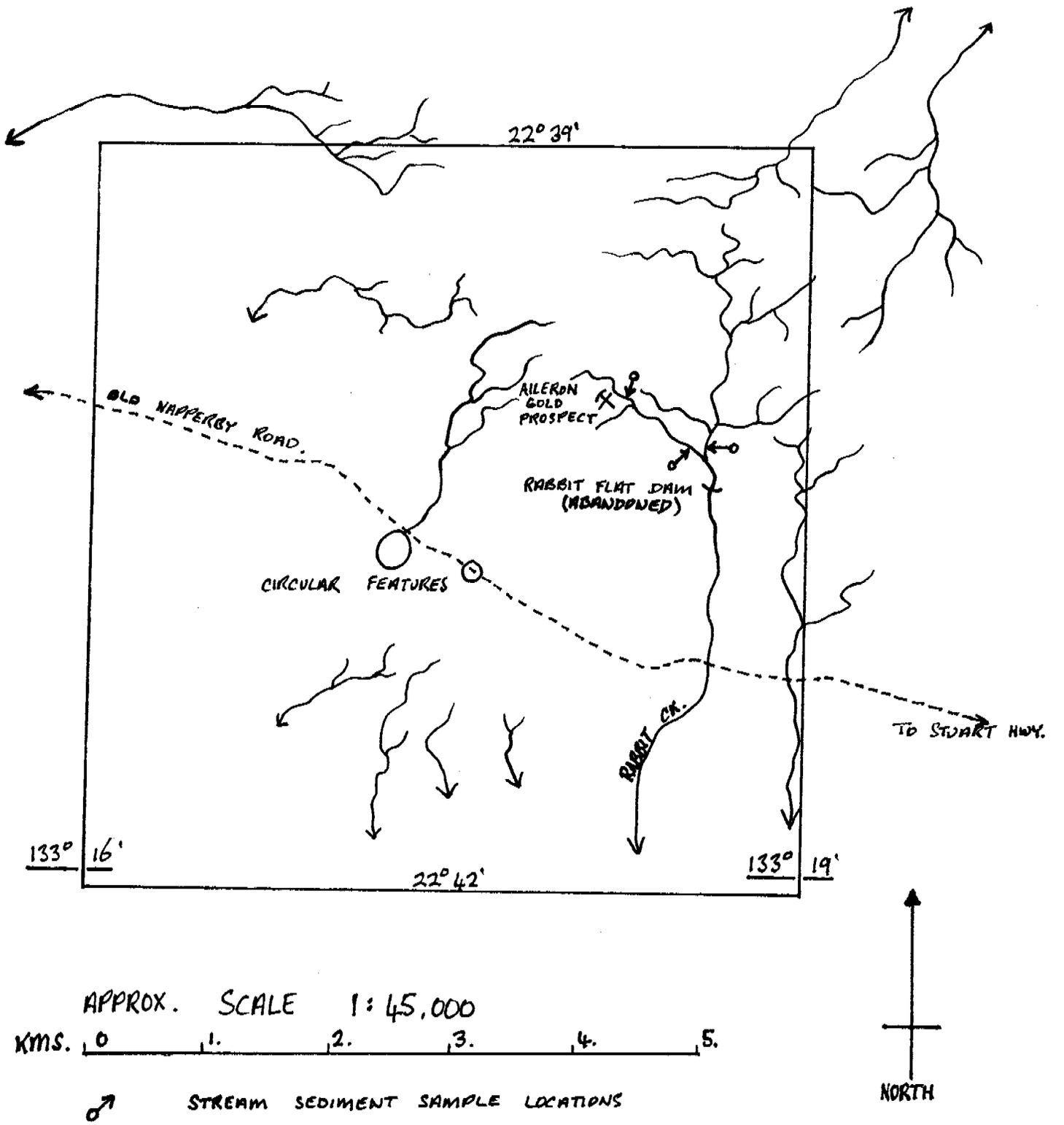
IN THE LATE 1930's MY FATHER, KURT JOHANNSEN, CARRIED A SMALL CONSIGNMENT OF ORE FROM THIS PROSPECT TO THE TENNANTS CREEK BATTERY ON BEHALF OF THE OWNERS. APPARENTLY THE RESULTING GRADE WAS SO LOW THAT RECOVERING PAYMENT FOR THIS SERVICE WAS QUITE DIFFICULT, AND HE FORMED A VERY STRONG OPINION THAT THE PROSPECT HAD, AT THE OUTSET, BEEN SALTED.

I CAN ONLY CONCLUDE THAT HE WAS PROBABLY CORRECT.

EL 6470

MAP 2.

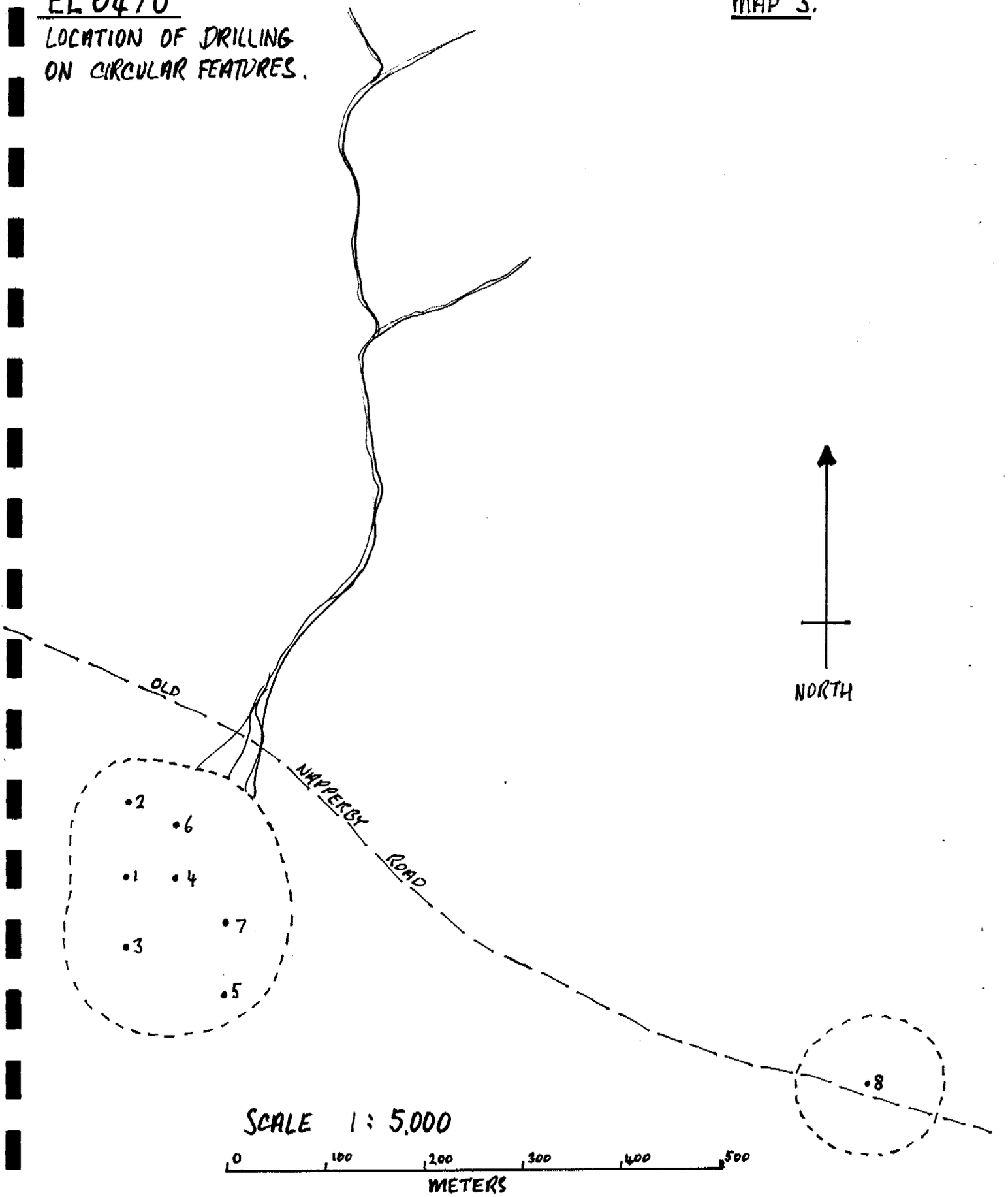
DETAIL FROM 1950 AIRPHOTO SERIES.
NAPPERBY SHEET
RUN 11, NO. 5138



EL 6470

LOCATION OF DRILLING ON CIRCULAR FEATURES.

MAP 3.



3.

EL 6470

DETAILS OF PERCUSSION DRILLING.

DRILL: INGERSOL-RAND ECM-350 MODEL WITH 900 CFM I.R. COMPRESSOR.
OPERATOR: L.A. JOHANNSEN.
SAMPLE: CHIP + DUST SAMPLE COLLECTED BY CYCLONE
SAMPLE ASSESSMENT: PRELIMINARY QUANTITY OF SAMPLES TESTED FOR HEAVY MINERAL FRACTION BY PANNING. (NIL RESULT; NO FURTHER TESTING)
WATER: ALL DRY HOLES, EXCEPT HOLE 4 WET AT 13.5m, BUT NO QUANTITY.

HOLE DETAILS:

HOLE NO.	SOIL DEPTH	TOTAL DEPTH	
1.	4m	15m	FINE GRAINED QTZ, BIOTITE SCHIST
2.	2.5m	12m	" " "
3.	2.5m	9m	" " "
4.	3m	18m	" PLUS WATER AT 13.5m IN QTZ VEIN
5.	3m	12m	" QTZ BIOTITE SCHIST
6.	4.5m	12m	" " "
7.	3m	15m	" PLUS CALCRETE
8.	3m	15m	" PLUS QUARTZ

DRILLED AT SMALL FEATURE.

4.

EL. 6470

DETAILS OF EXPENDITURE
(9/5/89 TO 8/5/90)

TRANSPORTATION OF DRILLING EQUIPMENT FROM BAIKAL HOMESTEAD TO EL6470 AND RETURN, 770 Km × 6.00 / Km	4620.00
PERCUSSION DRILLING, 108 m × 25.00/METER	2700.00
SAMPLE COLLECTION (GOLD PROSPECT)	75.00
SAMPLE ANALYSIS (GOLD PROSPECT)	130.00
INFORMAL MAGNETIC VARIATION RECONNOITRE (1.8 HOURS)	45.00
REPORTING AND STATIONERY	130.00
TOTAL	$7700.00

EXPLANATORY NOTES FOR DRILLING SAMPLE RECORD

The Mining Act 1980 requires that holders of Exploration Licences shall, as soon as practicable after drilling, notify the Secretary, Department of Mines and Energy, Darwin, that drill core or cuttings have been taken and of the location of the drill-hole(s). The Act also requires that licensees/drilling sponsors shall not dispose of such core or cuttings except with the approval of and in accordance with any directions of the Secretary.

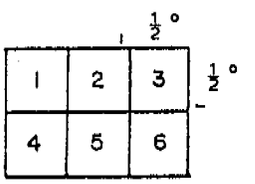
Accordingly, licensees/drilling sponsors are now required to complete a Drilling Sample Record for each drill hole and to submit the completed form to the Geological Survey within one month of completion of the drillhole. However, a drilling program (rotary, percussion, other) devised to sample:

(a) near-surface material, e.g. soil, laterite, etc; and/or
(b) bedrock immediately below surficial cover

and usually consisting of many, relatively-shallow holes, may be summarized in the one Record under Category B. Each deep hole must be reported separately under Category A in the Record. Full details of all drilling activities are additionally required in the Annual Report.

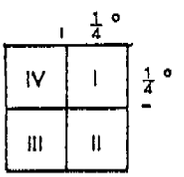
In the case of shallow holes, the locality reference should be the approximate centre point of the area covered by the shallow drilling program. Each locality reference should be given as accurately as possible and obtained from the best source available at the time of drilling. The map references required are the standard 1:250 000 and 1:100 000 sheet names, plus a number from 1 to 6 representing the appropriate, contained 1:100 000 sheet area (½° x ½°); the numbering sequence is as shown below:

1:100 000

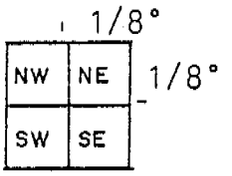


plus references to the appropriate 1:50 000 (¼° x ¼°) and 1:25 000 sheet areas; the standard references are as shown below:

1:50 000



1:25 000



Locality name should be the nearest, prominent geographical feature of common or usual reference, e.g. hill, homestead, dam, well, specific mine, mining centre, etc.

It is appreciated that samples which fall within Category B usually comprise only small percentages of the total amounts of drill-derived material. No obligations shall exist for drilling sponsors to retain and store these samples. However, the NTGS may wish to assume responsibility for the storage of some or all of any retained samples, in the event that they are no longer required by licensees/ drilling sponsors.

Licensees/drilling sponsors must consult with the Geological Survey concerning disposal of drill-hole samples (core and/or cuttings) or submission of them to the Department. No samples will be accepted by the Core Libraries unless Drilling Sample Records have been forwarded previously and prior arrangements have been made with the Geological Survey for their submission. Also, the Geological Survey should receive prior, written advice of the presence of radioactive minerals in any drill materials to be submitted for storage by the Department. This advice should be accompanied by brief, relevant details re:

(1) location, viz. drill interval(s) or sample number(s); and
(2) concentration(s) viz. assay values of the radioactive minerals.

The ultimate aim of these measures is to make sub-surface information available to the mineral industry as accurately, meaningfully and efficiently as possible.

TECH/J