840835

GEOPHYSICAL REPORT

ON THE

ALBERT RIVER CLAIMS

GOLDEN MINING DIVISION

BRITISH COLUMBIA

LATITUDE 50° 38'N LONGITUDE 115° 35'W

82J/12E

E.A. SCHILLER

April 20, 1987

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ILLUSTRATIONS

ABSTRACT

This report reviews the geology and mineral potential of the Albert River prospect 75 km. east of Radium Hot Springs, British Columbia.

The claims cover an area with potential for the discovery of gold, tungsten, lanthanum and cerium based on anomalous concentrates of these metals found in stream sediments concentrates and talus gravels.

A program comprising geophysical and geological surveys and diamond drilling to cost $350,000.00 is proposed to explore the claims.

INTRODUCTION

This report reviews the geology and mineral potential of a 60 unit claim block located in the Golden Mining Division, British Columbia (Fig. 1). The claims were staked in 1980 to cover gold and tungsten anomalies uncovered from a reconnaissance heavy mineral stream sediment survey. Since that time geophysical and geological surveys and additional heavy mineral sampling have identified a more wide spread exploration target anomalous in tungsten, gold and rare earth metals.

CLAIM DESCRIPTION AND LOCATION

The Albert River claims consist of six claim groups comprising 88 units located 75 kms. east of Radium Hot Springs, B.C. at latitude 50°38'N and longitude 115°35'W. The claims lie near the west headwaters of Albert River between Tangle Peak and Albert River (Fig. 2). The claims are recorded in the name of Dia Met Minerals Ltd. and registered as follows:

CLAIM UNIT	NUMBER OF UNITS
Dingbat	5
Burb	20
Barbi	18
Ash	20
Chester	20
Zirkon	5

The claims are accessible from B.C. highway #93 eastward via a maintained logging road.

PREVIOUS WORK

The claims have been subject to several periods of investigations since 1980. Principle reports prepared are as follows:

1. Report on Albert River Tungsten Property
   Albert River 82J/12E Golden Mining Division
   by K.E. Northcote & Associates Ltd. and
   Gower Thompson & Associates June, 1983
2. Report on Albert River Tungsten Property
   Albert River 82J/12E Golden Mining Division
   by C. E. Fipke September, 1985
3. Review of Properties held by
   Dia Met Minerals Ltd.
   by E. A. Schiller June, 1986
4. Ground Magnetometer Survey on Albert River
   Tungsten Property
   by P. P. Neilsen December, 1986

GEOLOGY OF CLAIM BLOCK

The claims are underlain by limestone, argillaceous limestone, calcareous argillite and shale of the Middle Cambrian Chancellor Group intruded by pyritic and siliceous rhyolite sills. The strata are isoclinally folded about northwest trending axes with steep west dipping axial planes. A spotted hornfelsic unit shows a skarn effect from a probable buried igneous body. (Fig. 3 & 4)

Quartz-carbonate veins and dykes that range from one to two meters wide cut the basal argillaceous limestone and sills, infilling the axial cleavage planes and the bedding planes. Minor amounts of epidote, chalcopyrite and pyrite and lesser amounts of galena and sphalerite are present in the quartz carbonate.

Moderate amounts of finely dispersed scheelite were found in a marble dyke directly downslope from the highest ground magnetic anomaly in the central part of the claims.

GEOPHYSICAL RESULTS

The claim block was covered by a helicopter borne magnetic survey in 1981 which delineated a modest magnetic anomaly in the central part of the claims and a low magnetic anomaly in the northern part of the claims. A grid was placed over the central anomaly and a ground magnetic survey was conducted to better define the anomaly. The ground survey showed that the airborne anomaly could be divided into a western and a eastern high. According to geophysical consultant P. Nielsen the anomaly is interpreted to be a 550 meter diameter buried intrusive igneous body possibly flanked by two sub-vertical pyrrhoite mineralized bodies.

The more northerly weak airborne magnetic conductor is centered about a highly anomalous scheelite and gold area.

GEOCHEMICAL RESULTS

The heavy mineral concentrates from stream sediments draining the central high magnetic area are strongly anomalous in scheelite containing up to 6.6% W, and weakly anomalous in gold containing up to 600 ppb.

An area in the northern part of the claim group contains a high scheelite anomaly with values up to 12% W, and highly anomalous gold values up to 50,000 ppb.

Subsequent geochemical surveys of talus slope gravels in the vicinity of the principle gold anomaly gave values up to 2800 ppb gold and unexpected anomalous values in lanthanum in excess of 51,700 ppm and cerium in excess of 56,300 ppm.

EXPLORATION PARAMETERS

The Albert River claim block is considered to be an important gold and tungsten exploration target because of the geological and geophysical setting. In addition, the results of recent geochemical sampling indicate a heretofore unrecognized rare earth target because of anomalous amounts of lanthanum and cerium in talus gravels.

The coincidence of a magnetic signature suggesting a buried igneous source and anomalous concentrations of gold, tungsten and rare earth metals places new importance to this prospect.

RECOMMENDATIONS FOR FURTHER WORK

It is proposed that an exploration program be implemented to investigate the source of the anomalous metals in stream sediment concentrates and to ascertain the cause of the magnetic anomaly situated beneath the geochemical anomaly.

The interpretation by Nielsen that a buried igneous body is the cause of the magnetic anomaly should be tested by way of five - 300 meter holes or by more shallow holes depending on the depth of the pluton. Using a skarn type environment as a model it would be anticipated that mineralization would occur both in the Palaeozoic meta-sediments and in the igneous intrusive.

Detailed magnetic and geological surveys should precede the drilling to pin point optimum exploration targets.

ESTIMATED BUDGET

	$Can.
GEOLOGICAL MAPPING 2 weeks	10,000.00
GEOPHYSICAL SURVEY 1 week	5,000.00
DIAMOND DRILLING (helicopter supported) 1500 meters (150./meter)	225,000.00
HELICOPTER SUPPORT 100 hr. @ $50./hr.	50,000.00
SUPERVISION: - Geologist 30 days @ $350./day	10,500.00
- Technician 40 days @ $200./day	8,000.00
PROVISIONS & ACCOMMODATIONS	5,000.00
	313,500.00
CONTINGENCY	36,500.00
TOTAL BUDGET	$350,000.00

E.A. SCHILLER & ASSOCIATES LTD.

CONSULTING GEOLOGISTS

E.A. SCHILLER, Ph.D., P.Geol.

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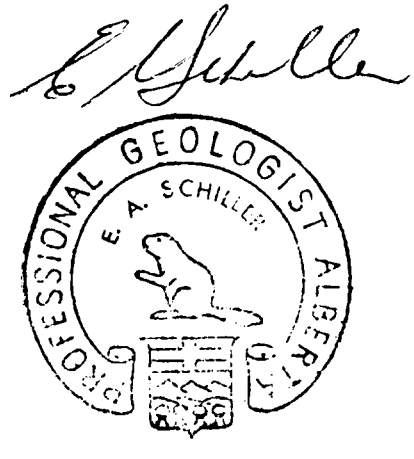
Calgary, Alberta T3A 0G5
Telephone (403) 286-8241

CERTIFICATE

I, EDWARD A. SCHILLER, do hereby certify:

1. THAT I am a consulting geologist with offices at 8 Varview Place, Calgary, Alberta.
2. THAT I graduated in geology from the University of Utah in 1963 with a Doctor of Philosophy Degree.
3. THAT I am a registered professional geologist in the Association of Professional Engineers, Geologist and Geophysicists of Alberta.
4. THAT I have practiced my profession for 25 years.
5. THAT I have no interest direct nor indirect in the mineral claims herein reported nor do I hold securities in any form, direct nor indirect in Dia Met Minerals Ltd.
6. THAT this report dated April 20, 1987 is based on a review of pertinent reports and maps and general knowledge of the Albert River area.
7. THAT I consented the use of this report by Dia Met Minerals Ltd. in a Prospectus or Statement of Material Facts.

DATED at Calgary, Alberta this 20th day of April, 1987.



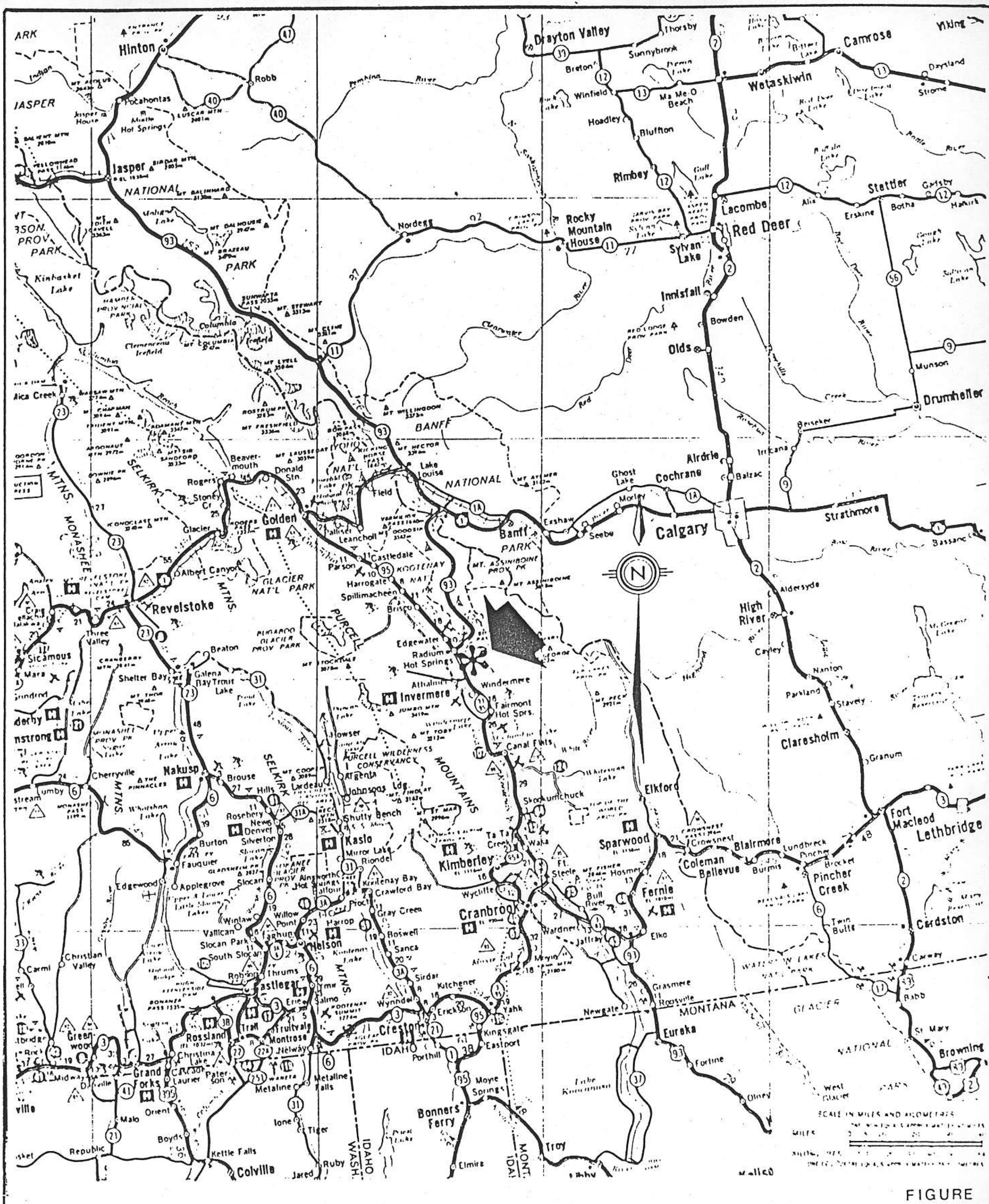


FIGURE 1

DIA MET MINERALS LTD

INDEX MAP

ALBERT RIVER CLAIMS

82 J/ 12 E	50° 37′N 115° 35′W
GOWER; THOMPSON & ASSOCIATES Drawn J.F.B.	K. E. NORTHCOTE AND ASSOCIATES LTD April 30 1983

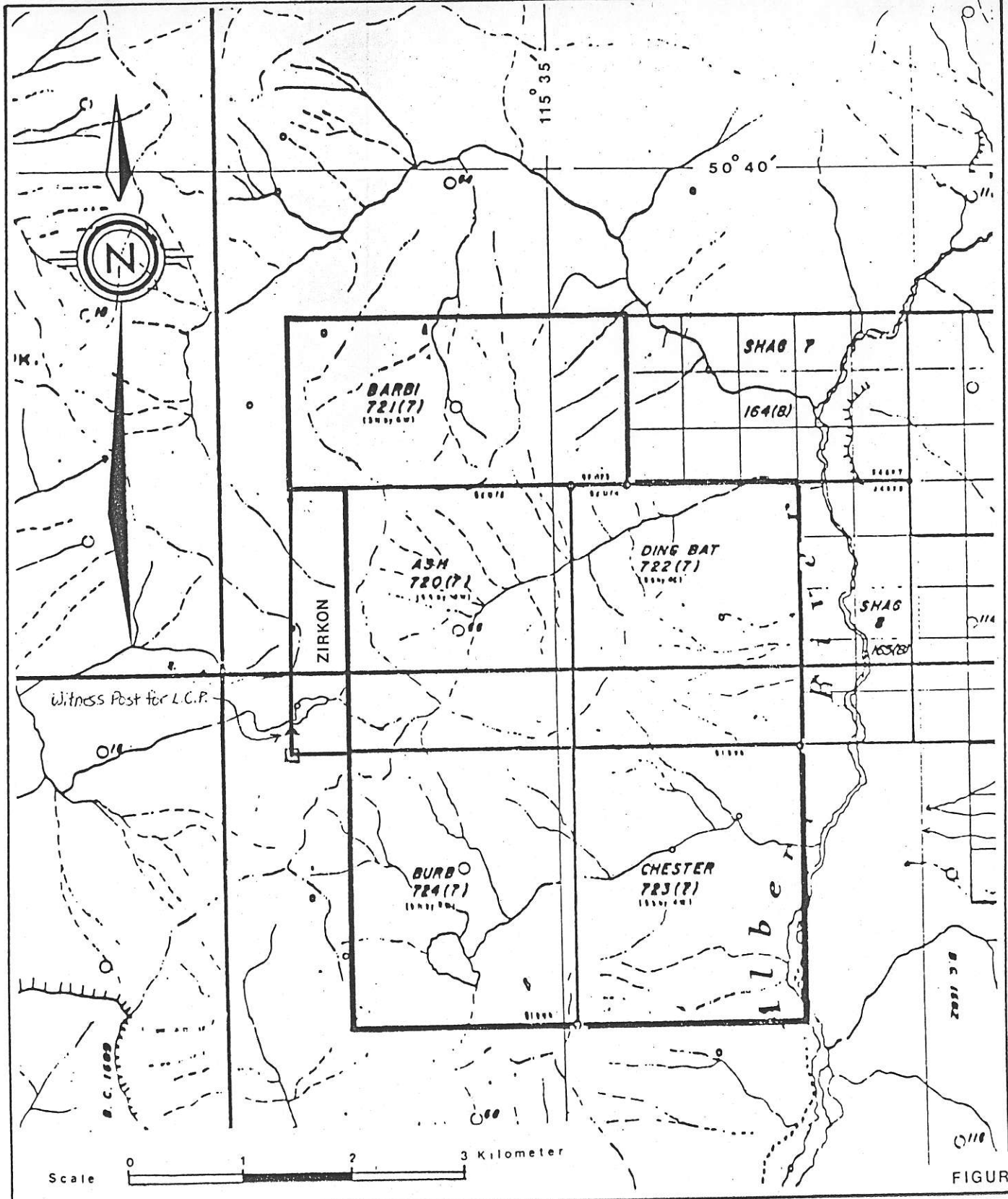
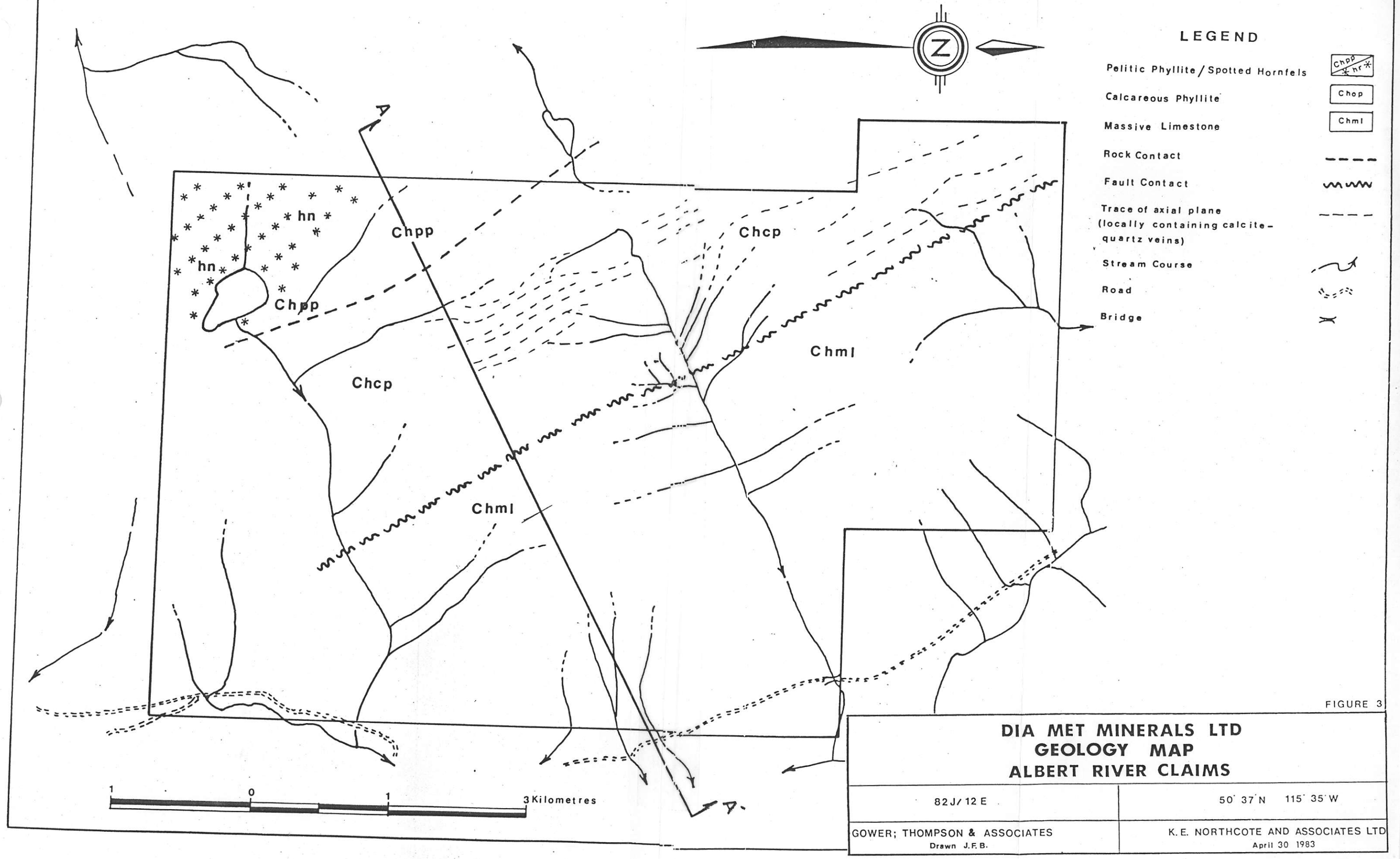


FIGURE 2

DIA MET MINERALS LTD

LOCATION OF ASH, BARBI, DINGBAT, CHESTER, BURB & ZIRKON CLAIMS ALBERT RIVER CLAIMS

82J/12E	50° 37' N 115° 35' W
GOWER; THOMPSON & ASSOCIATES Drawn J.F.B.	K.E. NORTHCOTE AND ASSOCIATES LTD April 30 1983



LEGEND

- Pelitic Phyllite / Spotted Hornfels — Chpp / hn
- Calcareous Phyllite — Chcp
- Massive Limestone — Chml
- Rock Contact
- Fault Contact
- Trace of axial plane (locally containing calcite-quartz veins)
- Stream Course
- Road
- Bridge

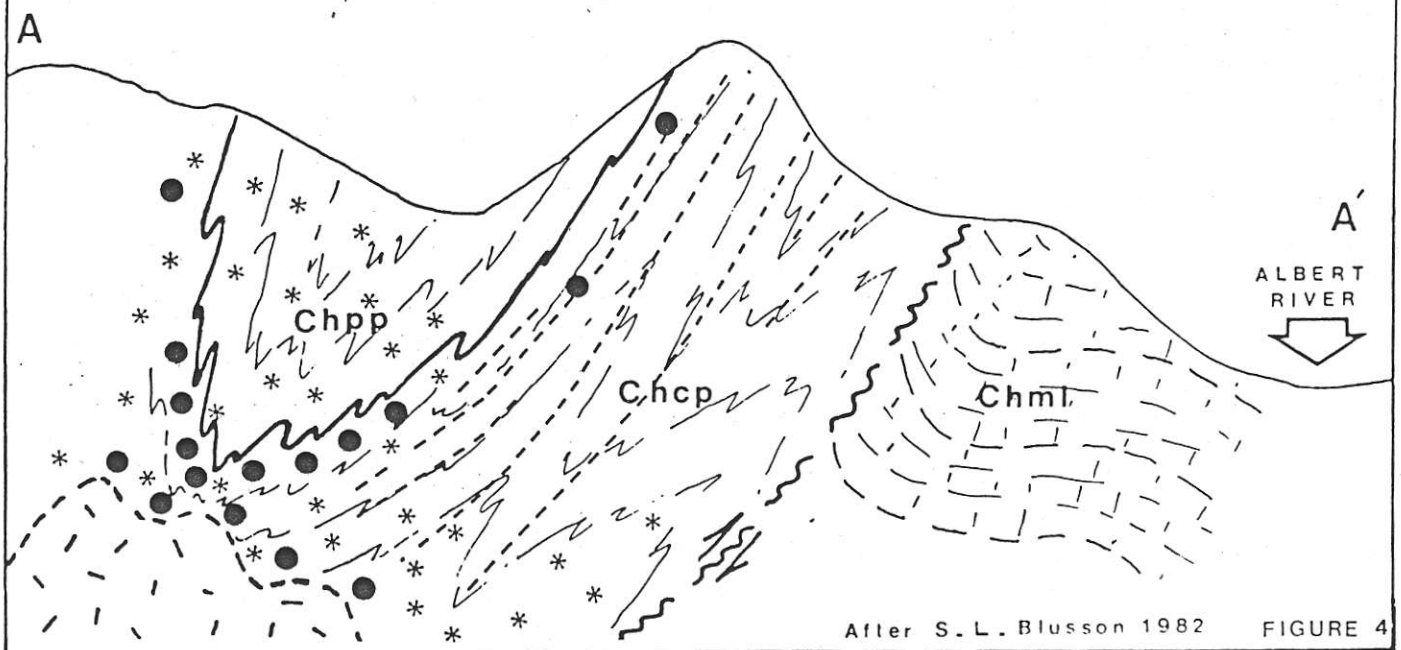
FIGURE 3

DIA MET MINERALS LTD
GEOLOGY MAP
ALBERT RIVER CLAIMS

82J/12E	50° 37' N 115° 35' W
GOWER; THOMPSON & ASSOCIATES Drawn J.F.B.	K.E. NORTHCOTE AND ASSOCIATES LTD April 30 1983

LEGEND

CHANCELLOR	Pelitic Phyllite/Spotted Hornfels	Chpp / hr*
	Calcareous Phyllite	Chcp
	Massive Limestone	Chml
	Intrusive	
	Rock Contact (intrusive)	
	Quartz-Calcite Veining	
(Hypothetical)	Tungsten Mineralization	
	Fault	



After S. L. Blusson 1982 FIGURE 4

DIA MET MINERALS LTD
INTERPRETIVE SECTION A—A'
ALBERT RIVER CLAIMS

82J/12E	50° 37' N 115° 35' W
GOWER; THOMPSON & ASSOCIATES Drawn J.F.B.	K.E. NORTHCOTE AND ASSOCIATES LTD April 30 1983

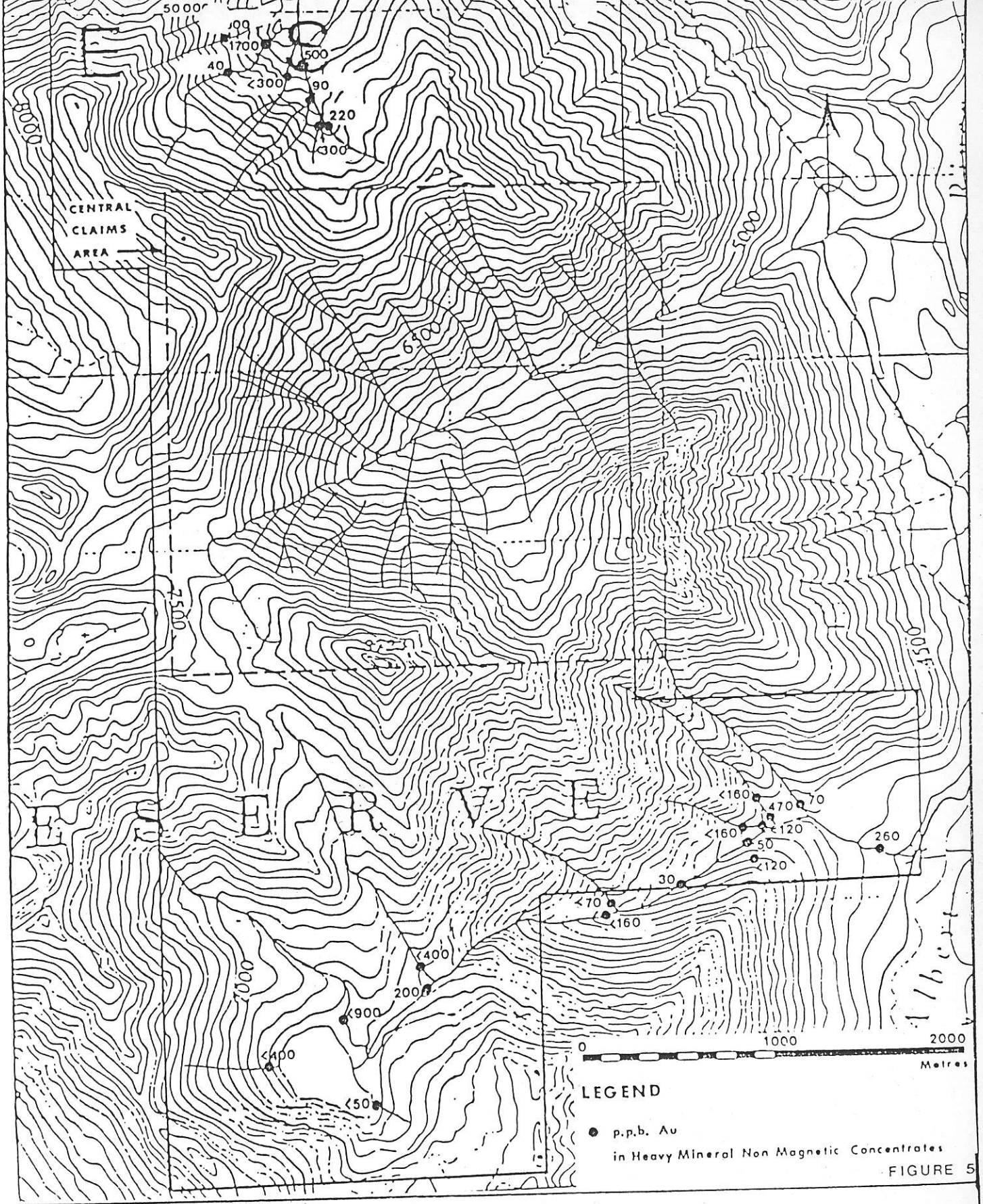


FIGURE 5

DIA MET MINERALS LTD
GEOCHEMICAL RESULTS: GOLD
ALBERT RIVER CLAIMS

82 J/ 12 E	50° 37' N 115° 35' W

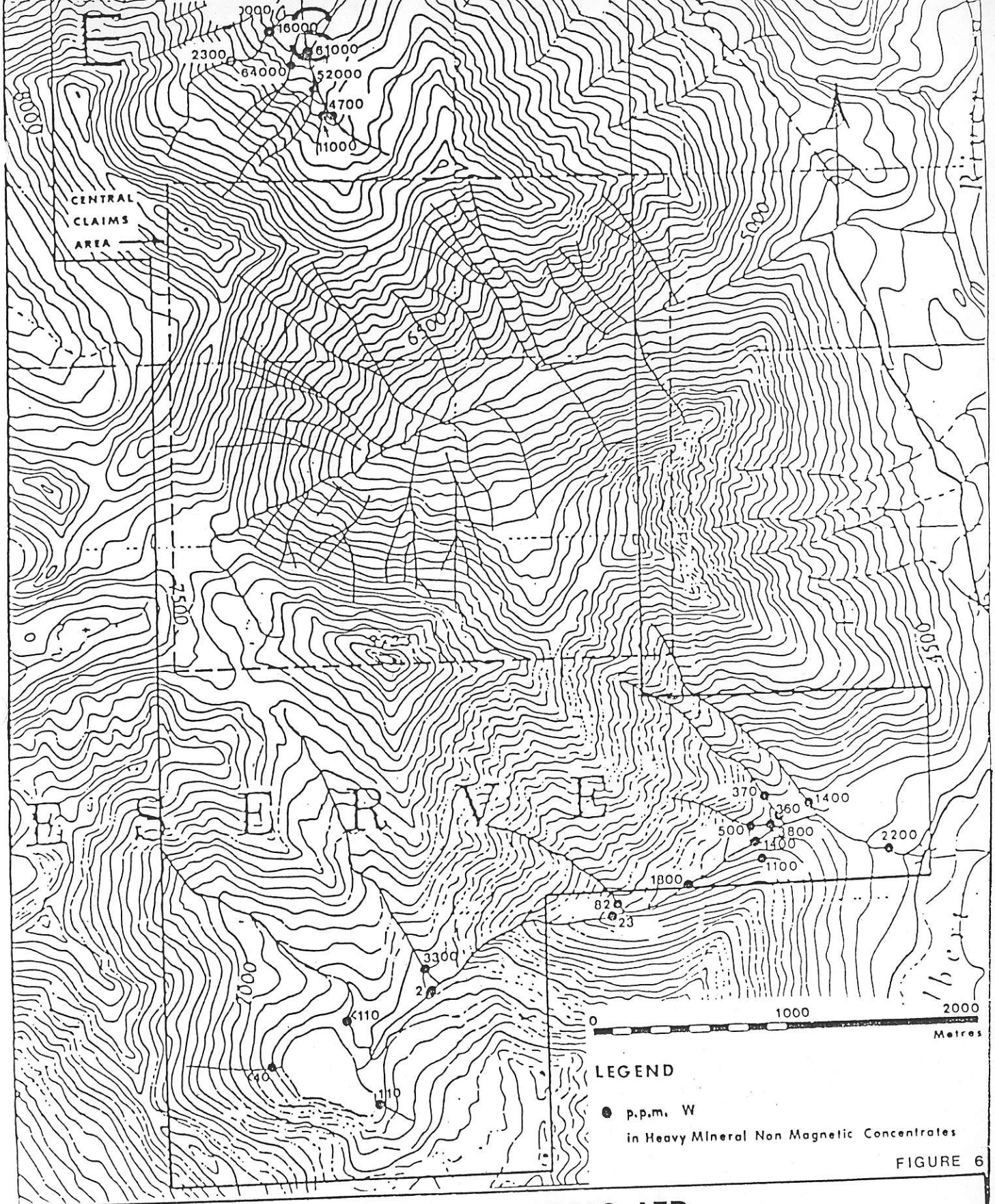


FIGURE 6

DIA MET MINERALS LTD
GEOCHEMICAL RESULTS: TUNGSTEN
ALBERT RIVER CLAIMS

82J/12E	50° 37'N 115° 35'W

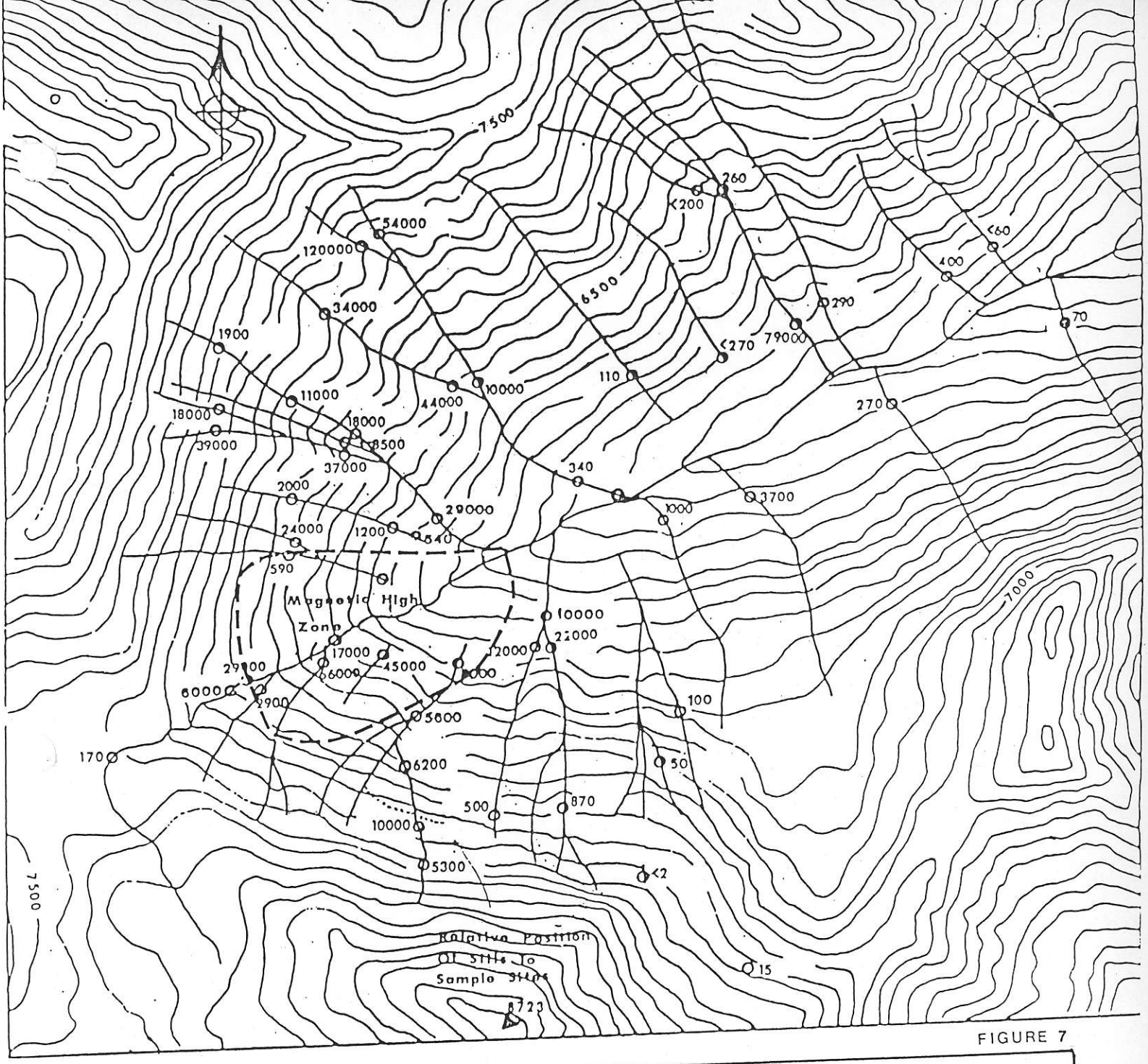


FIGURE 7

DIA MET MINERALS LTD
GEOCHEMICAL RESULTS: TUNGSTEN
ALBERT RIVER CLAIMS
CENTRAL CLAIMS AREA

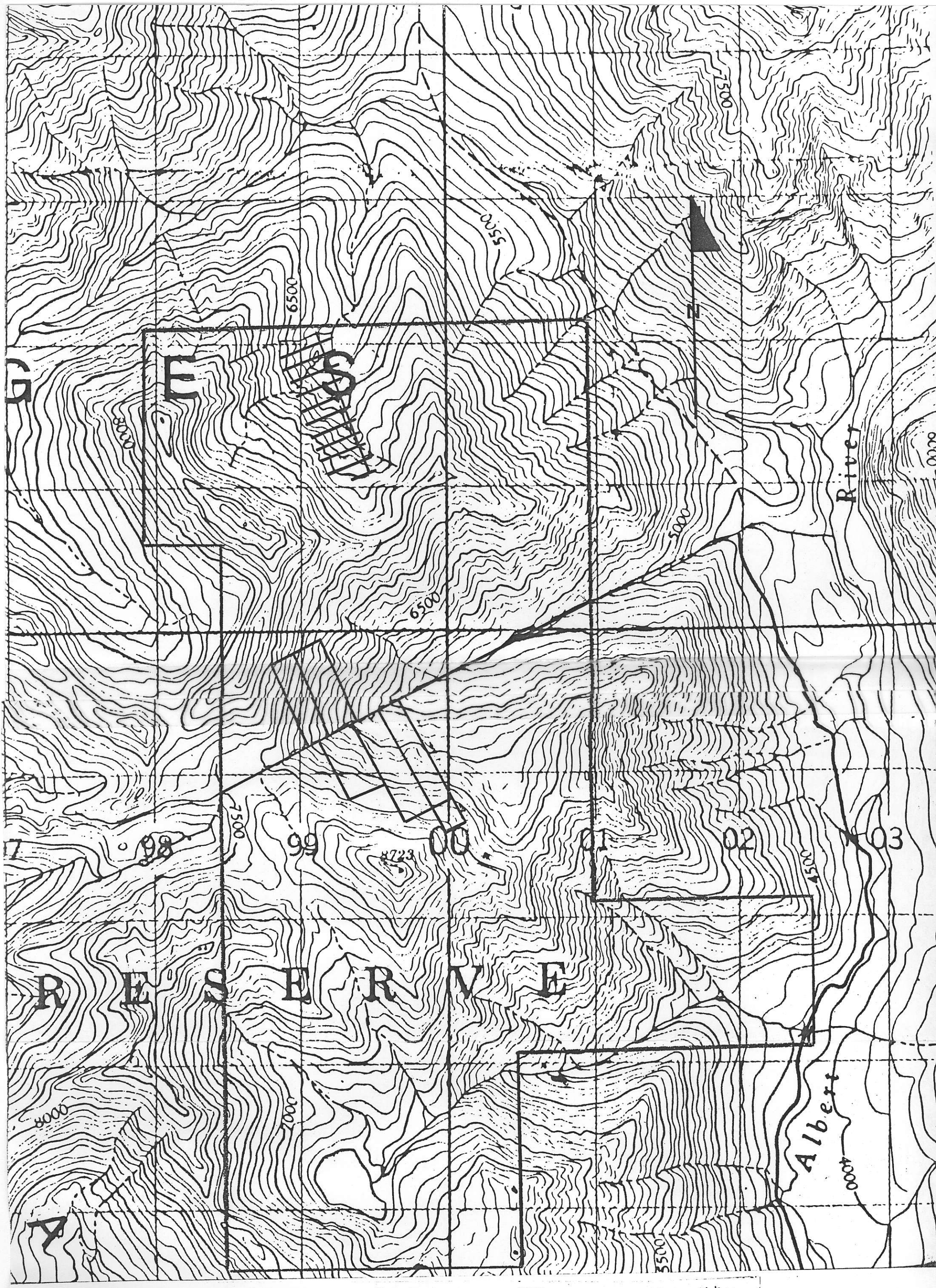
82J/12E	50° 37'N 115° 35'W

0 500 1000
Metres

LEGEND

O p.p.m. W
In Heavy Mineral Non Magnetic Concentrates

Estimated Regional Threshold = 220 p.p.m. W
based on n = 610 results



ALBERT RIVER CLAIMS

Magnetic Grid Location Map