ASSESSMENT REPORT

GEOPHYSICAL SURVEY
MAGNETOMETER

BARB 1, 3, 4

ATLIN MINING DIVISION

KING SALMON LAKE AREA, B.C.

N.T.S. 104K/10

132° 53' W
58° 45' N

OWNER: RON DALE

OPERATOR: CHEVRON CANADA RESOURCES LIMITED

AUTHOR: G. Walton

January 1984

TABLE OF CONTENTS

LIST OF FIGURES

LOCATION AND ACCESS

The BARB claims are situated at 132°53'W and 58°45'N, approximately 2 km north of King Salmon Lake (Figure 1). Access to the property is by float plane from Atlin, B. C., about 100 km to the north. Transportation for this program was provided by helicopter from a base camp at Trapper Lake, 30 km to the southeast.

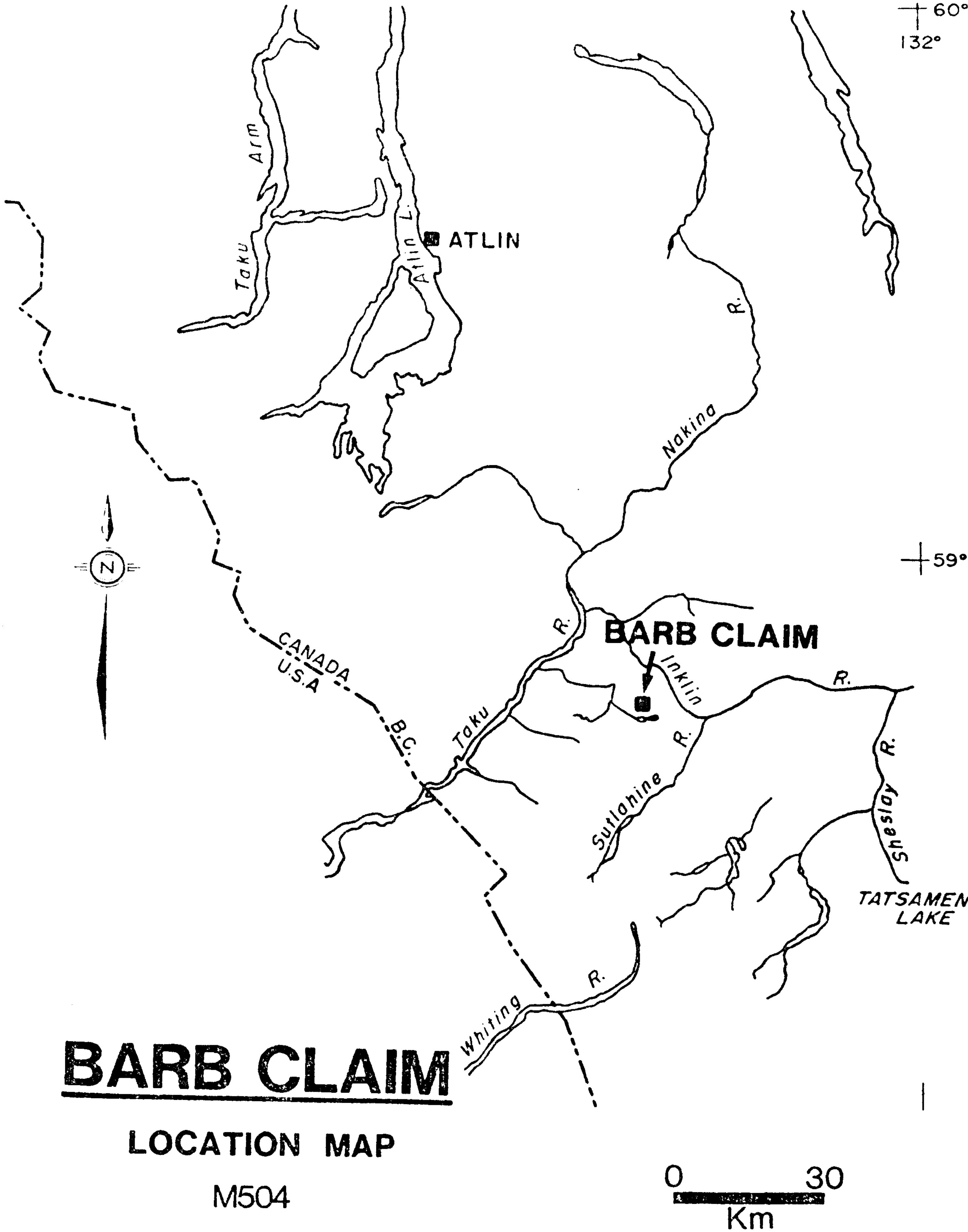
HISTORY

The original showing was called the "BWM" and was first discovered in the early 1930's by prospector, George Bacon who staked the property in 1947 for Cominco. After limited work by Cominco, the property was optioned to Hudson Bay Mining and Smelting in 1949. Further trenching and 943 feet of Ex-size drilling were done during 1950 (described in B.C. Minister of Mines, Annual Report, 1950, A75-76). After termination of the Hudson Bay option in 1950 the ground was restaked several times. A small airborne and ground magnetometer survey was done by Newmont Mining Co. Ltd. in 1964.

In the summer of 1981, 1982 and 1983 geological mapping and geochemical sampling was done by Chevron Canada Resources Limited (Chevron Standard Limited) of Vancouver, B. C. A ground magnetometer survey was completed in the latter portion of the 1983 season, a total of 28.5 kilometers.

PRESENT PROPERTY

In 1979, Ron Dale staked the new 20-unit BARB 1 claims in the same area as the previous 8-unit BARB 1-8 claims (Figure 2). Of the eight units in BARB 1-8 all have lapsed except BARB 3 and 4. The property is presently owned by Ron Dale and is under option to Chevron Canada Resources Limited.



BARB CLAIM

LOCATION MAP

M504

FIGURE 1

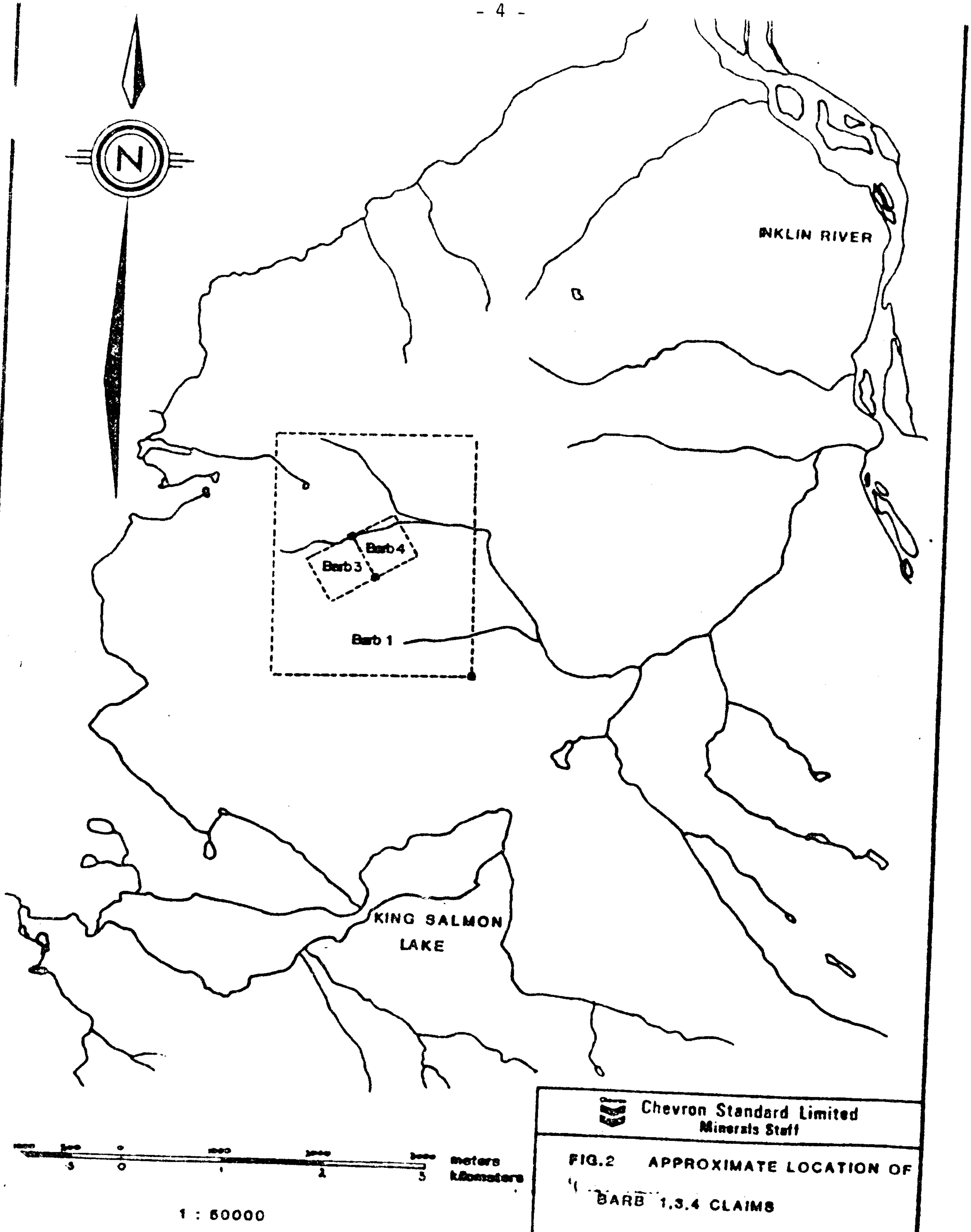
Claims	Record No.	Record Date	No. of Units
BARB 1	737	26 July, 1979	20
BARB 3	15430	12 August, 1970	1
BARB 4	15431	12 August, 1970	1

REGIONAL GEOLOGY

The BARB claims are situated on the east margin of the Coast Plutonic Complex as mapped by Souther, 1971. Most of the claims are underlain by the Upper Triassic King Salmon Formation which is a mixed assemblage of sediments, andesitic volcanic and volcaniclastic rocks and limestone. On the northeast part of the claims is the Upper Triassic Sinwa limestone which is found along the northeast dipping King Salmon thrust fault. These rocks are intruded by intermediate composition Jurassic plutons and porphyritic dykes that may be Jurassic or Tertiary in age.

Structure in the area is dominated by the NW-trending, NE-dipping King Salmon thrust fault and associated smaller faults. Perpendicular to these faults is another set which trends northeasterly, which offset the King Salmon thrust fault.

Detailed mapping, submitted in an assessment report in September 1983, outlined a number of magnetic skarns in the Sinwa limestone. The magnetite skarn in outcrop were very small; however, there is limited outcrop. A magnetometer survey was proposed to determine if large areas of magnetite rich skarn were located under the covered areas.



Chevron Standard Limited
Minerals Staff

FIG.2 APPROXIMATE LOCATION OF BARB 1,3,4 CLAIMS

FIGURE No	PROJECT No

MAGNETOMETER SURVEY

A magnetometer survey was completed on 19 - 1500 meter long lines with readings taken every 25 meters along the lines. The survey was done using an EDA PPM-300 Total Field Magnetometer, and EDA PPM-400 Base Station Magnetometer, which were coupled in the evenings with an EDA DCU-400 Thermal Printer. All data (readings, stations, time) were stored in the field magnetometer and the raw data were corrected for diurnal variations. These corrected data are displayed on the grid maps (Figures 5 and 6). The values represent the total magnetic field.

The grid is orientated approximately perpendicular to the northwesterly striking King Salmon thrust fault. However, the contoured data indicates the magnetic bodies do not strike in the same orientation. The magnetic highs correlate very well with the known occurrence of magnetite. The magnetic anomalies indicate the bodies are small and narrow with no real continuity, as was found in outcrop. There is no indication of a larger body of magnetite at depth.

To completely define the magnetic bodies, a much more detailed survey is required with lines running perpendicular to the strike of the bodies as indicated by this preliminary survey. This second survey was not done because the best rock geochemical results obtained were not close to ore grade (Figure 4).

The magnetic background on the rest of the grid is quite uniform despite the different rock types. No broad gentle rises were seen as the magnetic highs were approached. The highs appear to be small sharp spikes which help to support the concept that the magnetic bodies have a very limited aerial extent.

CONCLUSIONS AND RECOMMENDATIONS

The results from the magnetometer survey support the geological concept that the magnetite bodies are small and have no aerial extent. There are not enough magnetite bodies to be of economic interest and the best gold values obtained are not ore grade.

At this time no further work is recommended although a more detailed magnetometer survey would delineate the magnetite bodies.

REFERENCES

Souther, J.G. (1971). Geology and mineral deposits of Tulsequah map-area, British Columbia. Geological Survey of Canada Memoir 362, 84 p.

Walton, G. (1983). Assessment report. Geological and Geochemical Survey BARB Claim 1, 3, 4, Atlin Mining Division, 14 p.

1983 EXPLORATION PROGRAM

BARB CLAIMS

KING SALMON LAKE AREA, B. C.

COST STATEMENT

PERIOD: August 13 to August 20, 1983

1. LABOUR

Name	Position	Field Days	Office Days
G. Walton	Supervisor		1
J. Armstrong	Geophysical Operator	8	
W. Hewgill	Assistant	8	–
	Total	16	1

Average cost per field man day:	$90. x 16 =	$1,440.00
Average cost per office man day:	$150. x 1 =	150.00

2. CAMP COSTS

Total man days: 16 @$60. — 960.00

3. HELICOPTER

2.5 hrs. @$500/hr. incl. fuel — 1,250.00

4. DRAFTING

2 man days @$100. — 200.00

Total $4,000.00

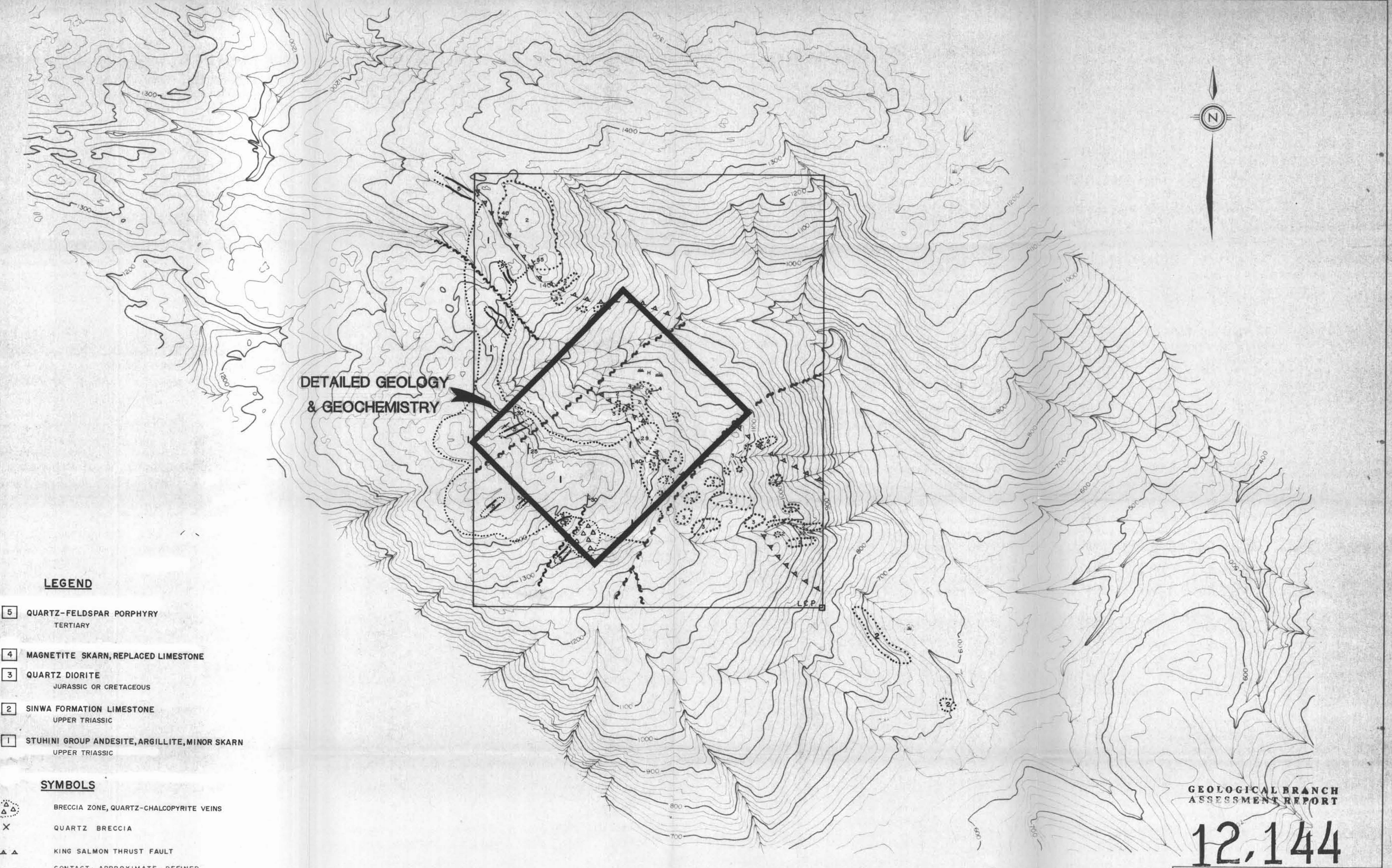
STATEMENT OF QUALIFICATIONS

I, Godfrey Walton, have worked as a geologist in British Columbia, Yukon, Northwest Territories, Alberta and Ontario since 1973. A B.Sc. (Hons. Geology) was received in 1974 from the University of Alberta and followed by a M.Sc. degree in geology from Queen's University in 1978. I am currently employed as a geologist with Chevron Canada Resources Limited of Vancouver, B. C.

I am a member of the Canadian Institute of Mining and Metallurgy, Exploration Geochemists and Mineralogical Association of Canada.

The work on the BARB claims was carried out under my supervision.

GODFREY WALTON



LEGEND

5 QUARTZ-FELDSPAR PORPHYRY
TERTIARY

4 MAGNETITE SKARN, REPLACED LIMESTONE

3 QUARTZ DIORITE
JURASSIC OR CRETACEOUS

2 SINWA FORMATION LIMESTONE
UPPER TRIASSIC

1 STUHINI GROUP ANDESITE, ARGILLITE, MINOR SKARN
UPPER TRIASSIC

SYMBOLS

BRECCIA ZONE, QUARTZ-CHALCOPYRITE VEINS

QUARTZ BRECCIA

KING SALMON THRUST FAULT

CONTACT APPROXIMATE, DEFINED

OUTCROP

BEDDING SHOWING DIP

PHOTO LINEARS

SWAMP

H HELICOPTER LANDING

GEOLOGICAL BRANCH
ASSESSMENT REPORT

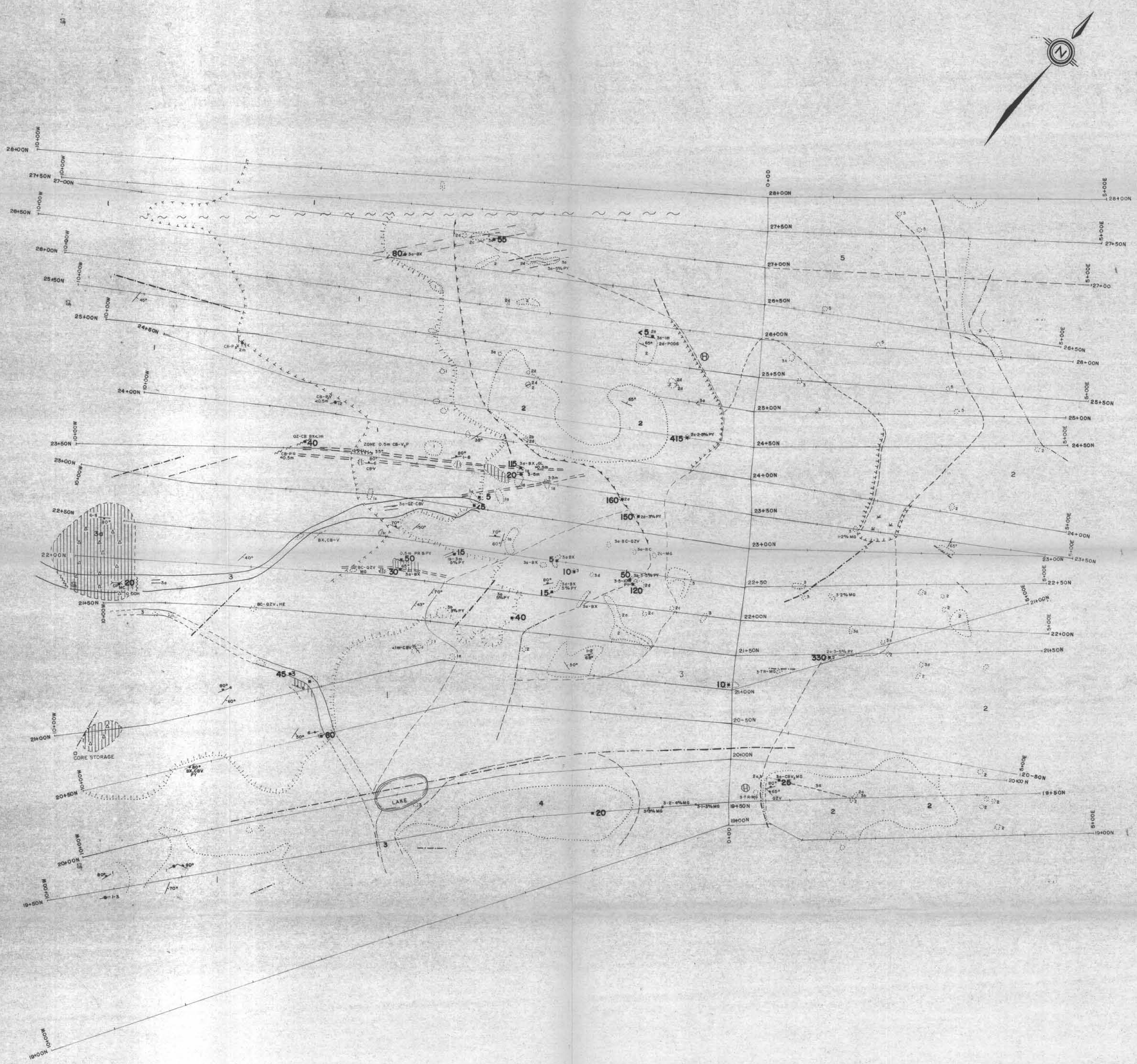
12,144

Chevron Standard Limited
Minerals Staff

BARB CLAIMS

GEOLOGY

FIGURE No. 3 PROJECT No. M514
OCT/82 1:10,000
K.S. G-3



LEGEND

CENOZOIC PLEISTOCENE

- 5 GLACIAL TILL

MESOZOIC JURASSIC AND/OR CRETACEOUS

POST MIDDLE JURASSIC

- 4 QUARTZ DIORITE - LIGHT GRAY, INEQUIGRANULAR, MEDIUM GRAINED WITH 15-20% HORNBLENDE-BIOTITE
- 3 QUARTZ DIORITE PORPHYRY - FINE TO MEDIUM GRAINED FELDSPAR, HORNBLENDE-BIOTITE, MINOR QUARTZ PHENOCRYSTS
  - 3a QUARTZ FELDSPAR PORPHYRY
  - 3b QUARTZ FELDSPAR BIOTITE PORPHYRY

TRIASSIC

UPPER TRIASSIC

SINWA FORMATION

- 2 LIMESTONE - WHITE, LIGHT GRAY, WEATHERING THICK BEDDED, MINOR NARROW CHERT BEDS, RARE INTERFORMATIONAL BRECCIA
  - 2a STRONG PERVASIVE BROWN DOLOMITIZATION
  - 2b INTERFORMATIONAL BRECCIA - NARROW BEDS. UP TO 10cm WHITE & BLACK CHERT CLASTS
  - 2c SKARN - EPIDOTE, DIOPSIDE, TREMOLITE IN CALCITE MATRIX, TREMOLITE OFTEN ASSOCIATED WITH MASSIVE MAGNETITE
  - 2d MAGNETITE - MASSIVE ZONES OFTEN ASSOCIATED WITH TREMOLITE. MINOR BLEBBY PYRITE NEAR CONTACTS

STUHINI GROUP

KING SALMON FORMATION

- 1 CALCAREOUS SILTSTONE AND SHALE - BROWN WEATHERING THICK BEDDED CALC-SILICATE SKARN NEAR INTRUSIVES, MINOR NARROW BEDS TUFFS, MINOR LIMESTONE
  - 1a SKARN - PALE GREEN, FINE GRAINED CALC-SILICATE, MINOR EPIDOTE IN FRACTURES
  - 1b SKARN - FINE GRAINED, DARK GREEN DIOPSIDE AND EPIDOTE
  - 1c LIMESTONE - DARK GRAY, THIN BEDS

SYMBOLS

- CONTACTS - APPROXIMATE, DEFINED
- FAULT - ASSUMED, DEFINED
- TOPOGRAPHIC LINEAMENT - ASSUMED FAULT
- 70° BEDDING - STRIKE & DIP - INCLINED AND VERTICAL
- 80° 2 JOINTS, FRACTURES, STRIKE & DIP - INCLINED AND VERTICAL AND DENSITY PER FOOT
- OUTCROP
- OUTCROP - AREA WITH >50% OUTCROP AND NEAR BEDROCK FLOAT
- BRECCIA - GOSSAN IN BRECCIA WITH QUARTZ-CARBONATE VEINING
- GOSSAN - FRACTURED WITH MINOR QUARTZ-CARBONATE VEINING
- BREAK IN SLOPE
- Ⓗ HELICOPTER PAD
- CREEK
- KING SALMON CREEK THRUST FAULT APPROX. DEFINED
- ■20 ROCK SAMPLE GEOCHEMISTRY (ppb Au)

PY - PYRITE
MG - MAGNETITE
BX - BRECCIATED
CP - CHALCOPYRITE
PR - PYRRHOTITE
HE - HEMATITE
LI - LIMONITE
MS - SPECULARITE
MC - MALACHITE
QZ - QUARTZ
CB - CARBONATE
V - VEINLETS
BC - BRECCIATED-CRACKLED
BL - BLEACHED
P - PERVASIVE
X - FLOAT
TR - TRACE

0 50 100m

GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,144

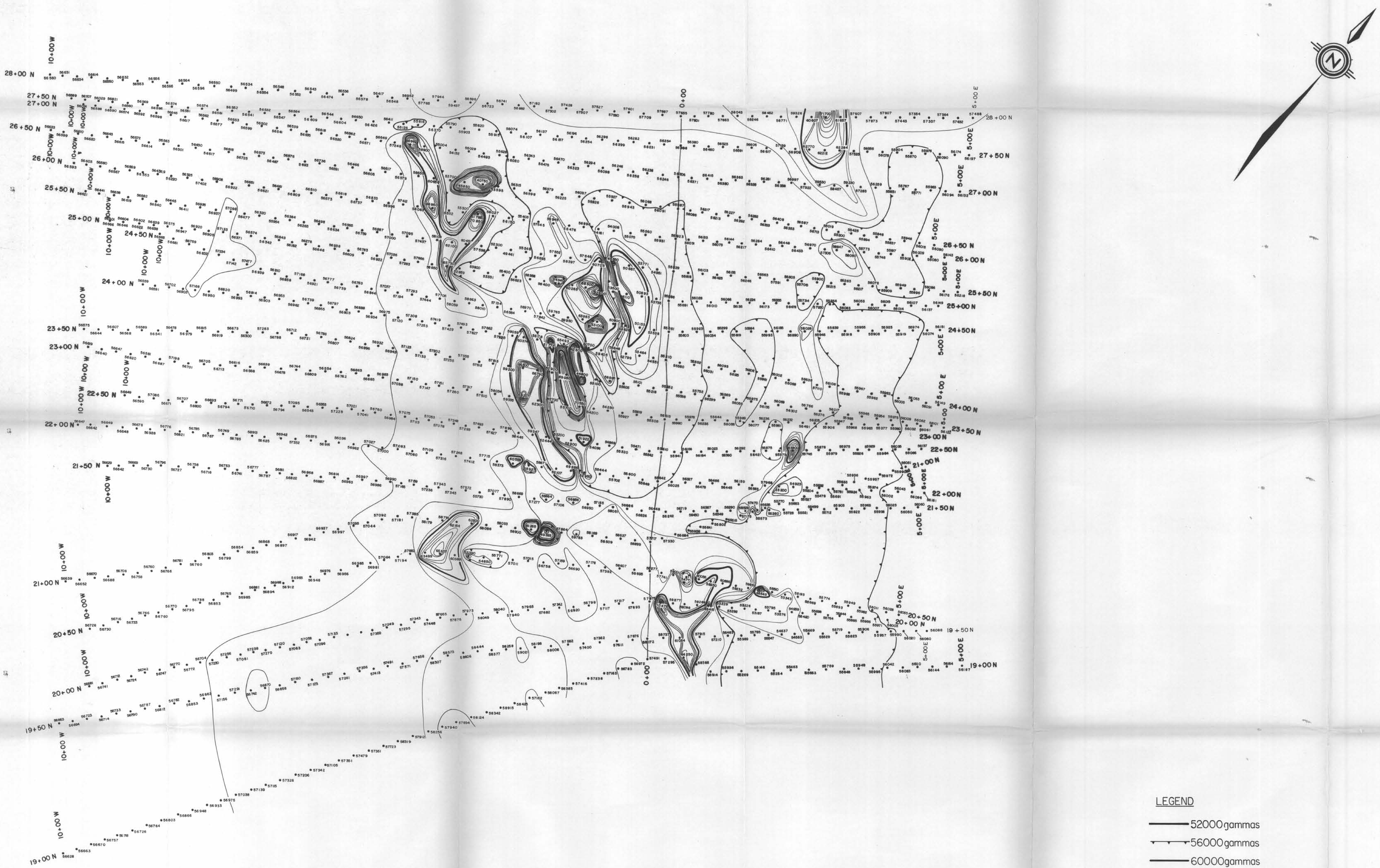
Chevron

Chevron Canada Resources Limited
Minerals Staff

BARB CLAIMS

GEOLOGY & ROCK GEOCHEM.

FIGURE No. 4		PROJECT No. M-514	
DATE SEPT.1983	REVISIONS		SCALE 1 : 25,000
NTS No.			FILE No. G4
COMPILED BY			



LEGEND

52000 gammas

56000 gammas

60000 gammas

NOTE:

CONTOURS AT 1000 gamma INTERVALS

0 50 100 m

GEOLOGICAL BRANCH
ASSESSMENT REPORT

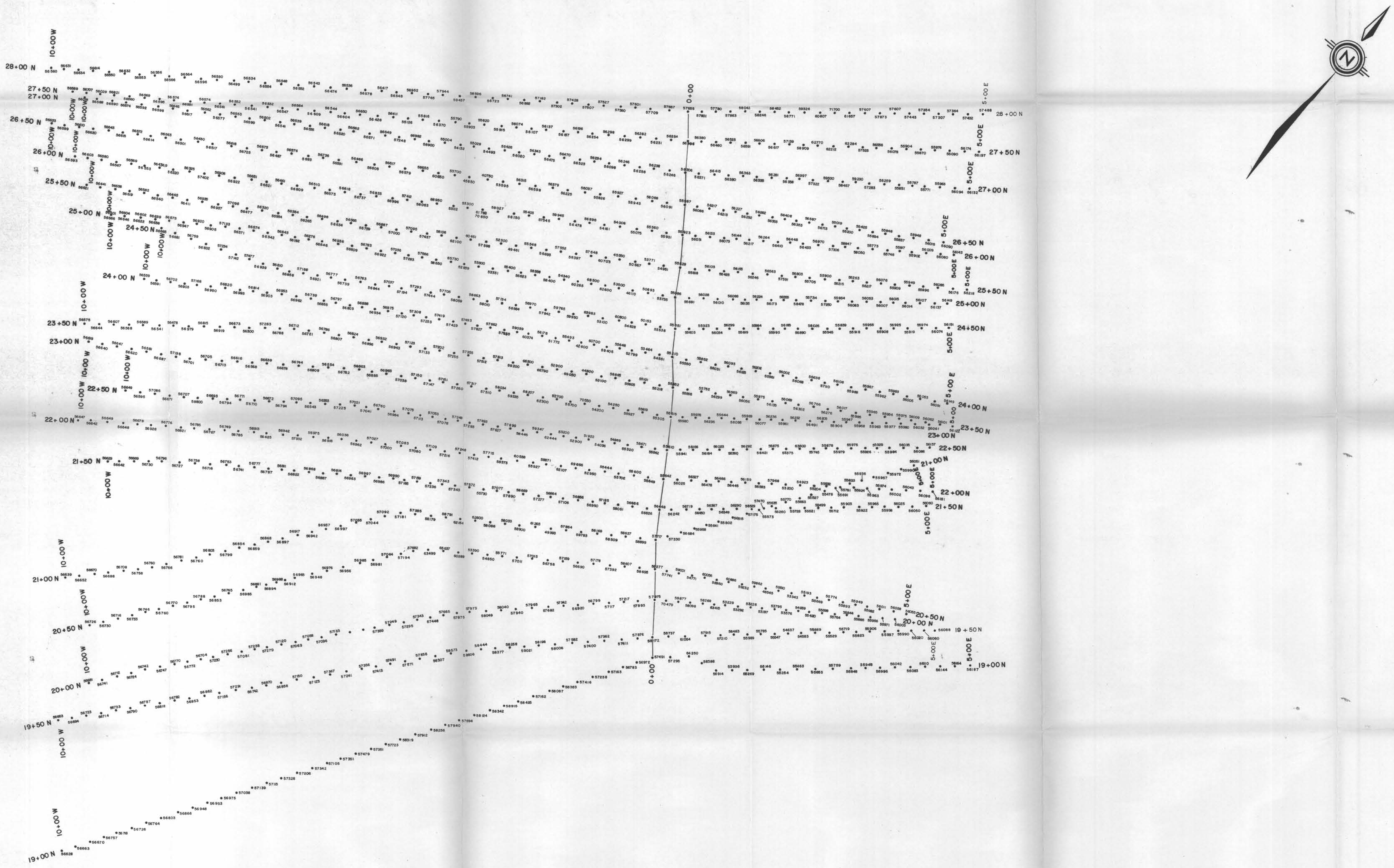
12,144

Chevron Canada Resources Limited
Minerals Staff

BARB CLAIMS

MAGNETOMETER SURVEY

FIGURE No.		PROJECT No.	M 514
DATE SEPT. 1983	REVISIONS		SCALE 1:2500
NTS No.			FILE No.
COMPILED BY G.W.			P-1



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,144

Chevron Canada Resources Limited
Minerals Staff

BARB CLAIMS

FIGURE No.		PROJECT No.	M 514
DATE SEPT. 1983	REVISIONS		SCALE 1:2,500
NTS No.			FILE No. P-2
COMPILED BY G.W.			