

84-#692 - 12975
7/85

ASSESSMENT REPORT

GEOLOGICAL, GEOCHEMICAL SURVEYS

GIVER, TAKER CLAIMS

ATLIN MINING DIVISION

LATITUDE 58°17' N

LONGITUDE 132°03' W

NTS 104K/8E

OWNER: CHEVRON MINERALS LTD.

OPERATOR: CHEVRON CANADA RESOURCES LIMITED

Author: Godfrey Walton

August 1984

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,975

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INTRODUCTION

The work on the GIVER and TAKER claims commenced on June 22 and was completed by June 28. Work on the claims consisted of geological mapping and soil geochemistry on a grid which has a base line running north-south and cross lines running east-west. The support for this work was from a base camp at Tatsamenie Lake. A total of 14 field days was spent completing the assessment work.

LOCATION AND ACCESS

The claims are located at latitude 53°17' N and longitude 132°03' W, 4 kilometers east of Tatsamenie Lake. Access to the claim was from the Tatsamenie Lake base camp by helicopter. Supply flights to the base camp were from Dease Lake, British Columbia.

CLAIM STATUS

The pertinent information on the claims are outlined below in the table:

<u>Claim</u>	<u>Record Number</u>	<u>Record Date</u>	<u>Number of Units</u>
GIVER	1967	July 9, 1983	20
TAKER	1968	July 9, 1983	20

The GIVER and TAKER claims adjoin previously staked ground, the FAE claims. These older claims cover a porphyry copper prospect. The claims are just a core that has been kept. The larger block of claims have been dropped.

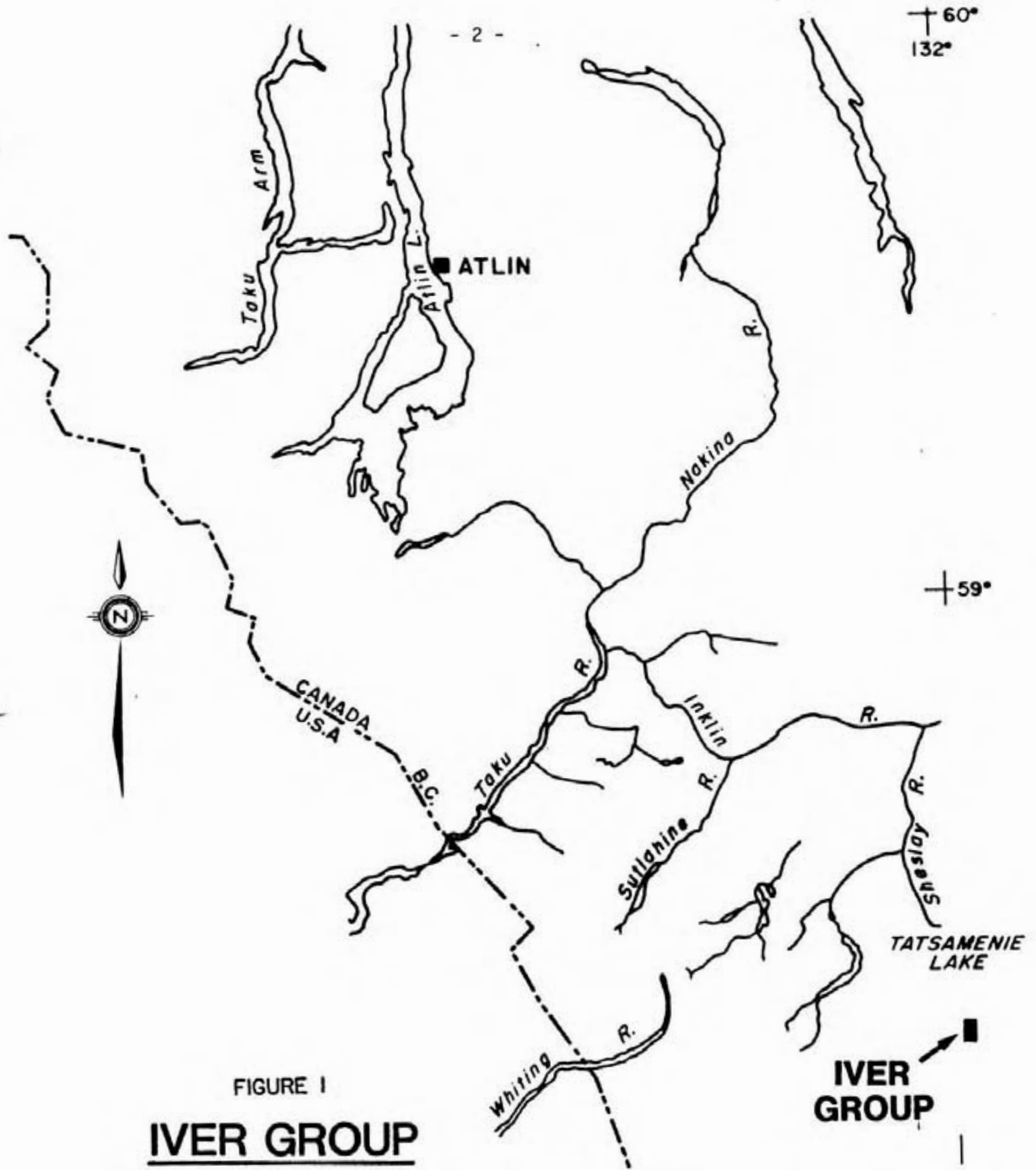


FIGURE 1
IVER GROUP
LOCATION MAP

0 30
Km

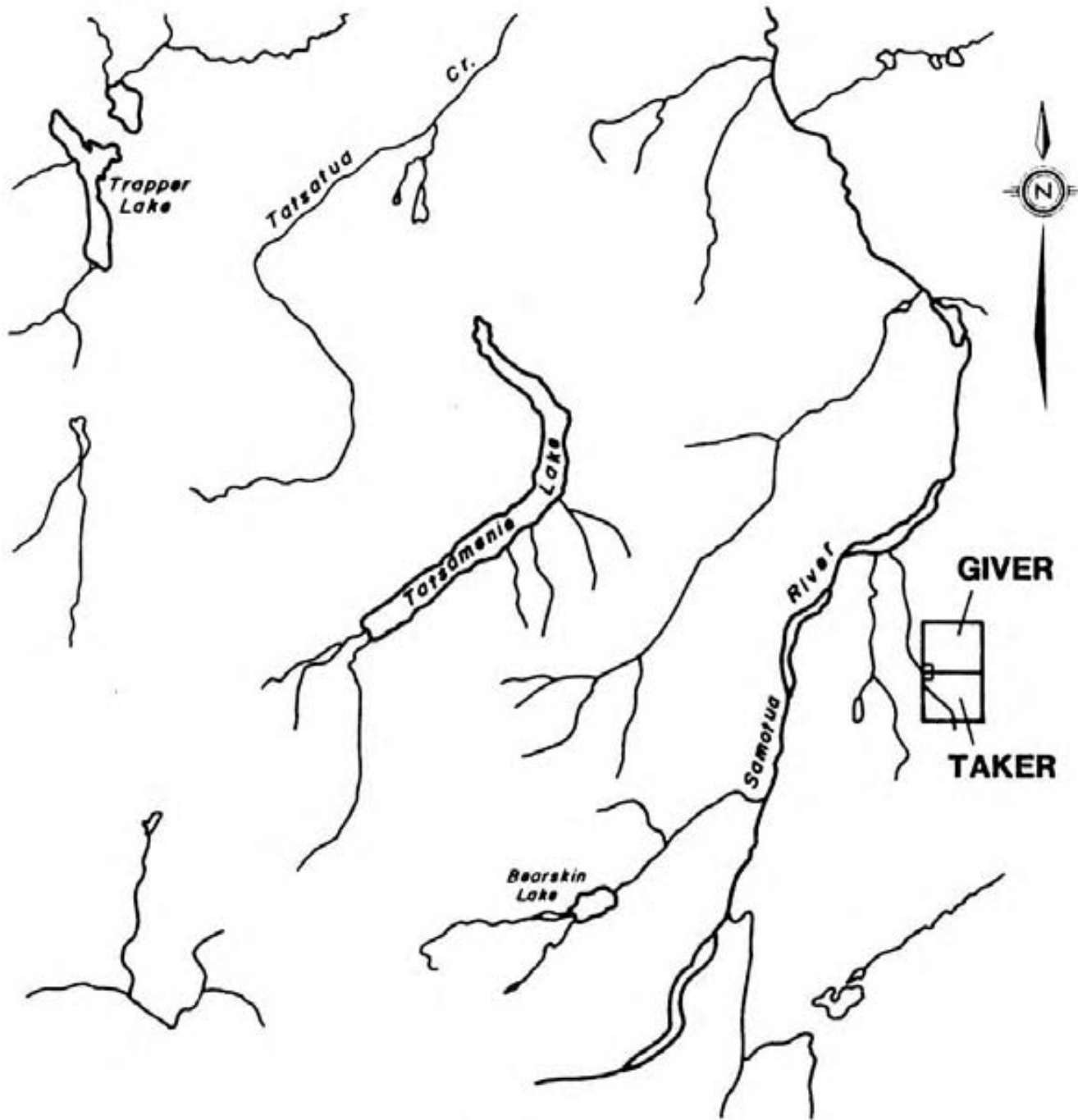


FIGURE 2

IVER GROUP CLAIM MAP

0 10 Km

M 504

been basaltic flows. They are suggestive of flow structures in the basalt and structures that could be interpreted as welded pillow structures. Stratigraphy within the greenstone contain an augite porphyry which has large augite phenocrysts which have been stretched.

B) Phyllite

The phyllite is interbedded with the greenstone on this claim block, although in other localities is a discrete unit. The phyllite is chloritic and often occurs as thin, less than 0.5 meter wide "beds". It is light to medium grained and well fractured.

(3) Lower and Middle Jurassic Takwahoni Formation

The Takwahoni Formation occurs in the southeastern area of the TAKER claims. It consists of black shale and conglomerate. The shales are thinly bedded and well fractured. The conglomerate is poorly sorted and contains minor limestone and greenstone clasts. The conglomerate has no distinct layering.

MINERALIZATION AND ALTERATION

There is one main type of mineralization which is iron-carbonate alteration which occurs quite extensively in the greenstones and phyllites. Quartz veining and swears occur within this alteration area.

The main type of mineralization is pyrite within most of the units. The greenstone contains up to 1% pyrite which is probably primary. Pyrite was also observed in the limestone as disseminations and veins with a stockwork of calcite and possibly dolomite veins although the limestone host has been unaltered. A second area of limestone has been cut by quartz veins but the limestone has not been silicified.

GEOCHEMICAL SURVEY

A grid was established to cover some of the soil anomalies that were picked up during the 1983 work. The grid had a base line established in a north-south direction with lines running east and west of this base line. The line spacing was every 200 meters with soil samples being taken every 50 meters along the lines.

The soil development on the property is very good, so good B-horizon soil could be obtained. A total of 215 soil samples were collected mostly from the grid. Some of the 1983 anomalies were resampled to try to repeat the values.

There were a total of 21 rock samples collected during the geological mapping.

The soil samples were collected and placed in gusseted Kraft soil bags and air dried in the base camp. They were then boxed and shipped to Chemex Laboratory in North Vancouver for analysis for gold, antimony and arsenic. The rocks were analyzed for gold, arsenic, antimony and mercury. The analytical procedures are outlined in the Appendix.

CONCLUSION AND RECOMMENDATION

The geological mapping and geochemical survey suggests that there is not a lot of alteration or mineralization on the claims. The one very high geochemical value from 1983 can be related to a small quartz vein which was located and sampled in 1984.

I, therefore, recommend no further work on these claims at this time.

REFERENCE

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

COST STATEMENT
GIVER, TAKER CLAIMS
 June 22 - June 28, 1984

(1) Personnel

	<u>Position</u>	<u>Field Days</u>	<u>Office Days</u>
M. Thicke	Geologist	5	1
T. Zanger	Sampler	1	-
G. Wober	Sampler	4	-
M. Gray	Jr. Geologist	4	1
G. Walton	Supervisor	<u>1</u>	<u>1</u>
		15	3

Average cost per field day \$100. x 15 days	\$ 1,500.00
Average cost per office day \$150. x 3 days	450.00

(2) Geochemical Analysis

Soils - 215 @\$13.95/soil	2,999.25
Rocks - 21 @\$19.75/rock	414.75

(3) Camp Costs

15 man days @\$60/day	900.00
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(4) Helicopter

3.6 hours @\$450.00 including fuel	1,620.00
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(5) Drafting

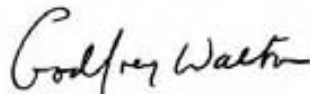
2 days @\$100/day	<u>200.00</u>
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\$ 8,084.00

STATEMENT OF QUALIFICATIONS

I, Godfrey Walton, have worked as a geologist since 1974 in Alberta, British Columbia, Yukon, Northwest Territories and Ontario. I graduated in 1974 with a B.Sc. (Hons) degree from the University of Alberta and was awarded a M.Sc degree from Queens University in January 1978. I have been employed by Chevron on a permanent basis since 1976.

I am a member in good standing with the Canadian Institute of Mining and Metallurgy, the Society of Exploration Geochemists and the Mineralogical Association of Canada. The field work on the HO, HUM claims was carried out under my supervision.



GODFREY WALTON

APPENDIX A

GEOCHEMICAL PREPARATION AND ANALYTICAL PROCEDURES

1. Geochemical samples (soils, silts) are dried at 50°C for a period of 12 to 24 hours. The dried sample is sieved to -80 mesh fraction through a nylon and stainless steel sieve. Rock geochemical materials are crushed, dried and pulverized to -100 mesh.
2. A 1.00 gram portion of the sample is weighed into a calibrated test tube. The sample is digested using hot 70% HClO₄ and concentrated HNO₃. Digestion time = 2 hours.
3. Sample volume is adjusted to 25 mls. using demineralized water. Sample solutions are homogenized and allowed to settle before being analyzed by atomic absorption procedures.
4. Detection limits using Techtron A.A.5 atomic absorption unit.
 - Copper - 1 ppm
 - Molybdenum - 1 ppm
 - Zinc - 1 ppm
 - *Silver - 0.2 ppm
 - *Lead - 1 ppm
 - *Nickel - 1 ppm
 - Chromium - 5 ppm

*Ag, Pb & Ni are corrected for background absorption.
5. Elements present in concentrations below the detection limits are reported as one half the detection limit, ie. Ag - 0.1 ppm

PPM Antimony:

A 2.0 gm sample digested with conc. HCl in hot water bath. The iron is reduced to Fe ⁺² state and the Sb complexed with I ⁻. The complex is extracted with TOPO-MIBK and analyzed via A.A. Correcting for background absorption 0.2 ppm ± 0.2.

Detection limit: 0.2 ppm

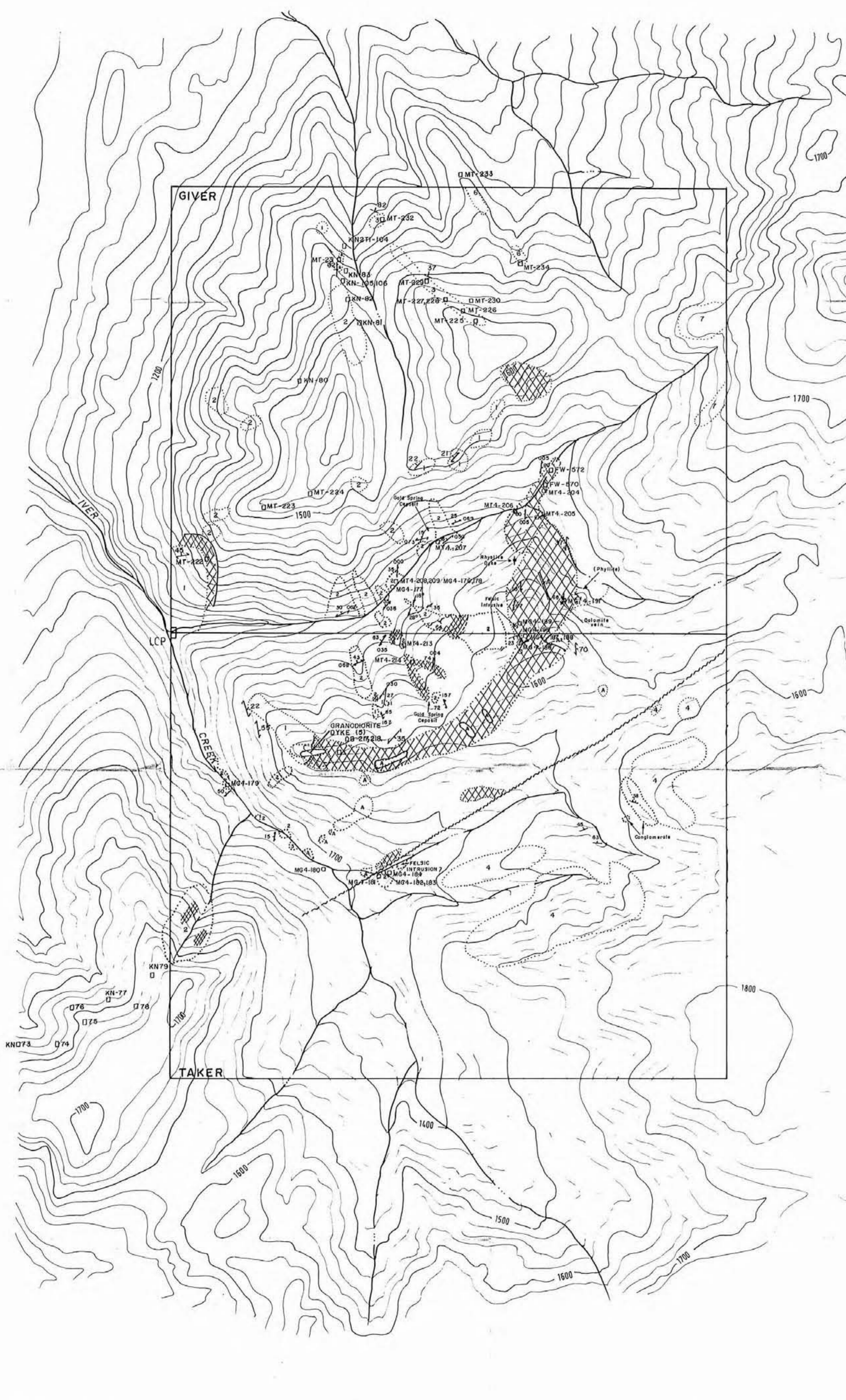
PPM Arsenic:

A 1.0 gram sample is digested with a mixture of perchloric and nitric acid to strong fumes of perchloric acid. The digested solution is diluted to volume and mixed. An aliquot of the digest is acidified, reduced with KI and mixed. A portion of the reduced solution is converted to arsine with NaBH₄ and the arsenic content determined using flameless atomic absorption.

Detection limit: 1 ppm

F.A. - A.A. GOLD COMBO METHOD

For low grade samples and geochemical materials 10 gram samples are fused with the addition of 10 mg of Au-free Ag metal and cupelled. The silver bead is parted with dilute HNO_3 and then treated with aqua regia. The salts are dissolved in dilute HCl and analyzed for Au on an atomic absorption spectrophotometer to a detection of 5 ppb.



SAMPLE	Hg (ppm)	As (ppm)	Sb (ppm)	Au (ppb)
MG4-179	10	5	0.8	45
180	50	22	2.2	45
181	110	270	0.7	35
182	20	11	2.0	45
183	20	24	14.2	45
184	160	>10000	220.0	2700
185	20	130	3.4	55
186	20	280	4.8	30
187	20	17	6.0	45
188	20	15	3.0	45
189	20	7	1.0	45
190	10	10	1.4	45
191	20	20	1.8	45
213	30	11	1.3	45
214	20	12	0.7	45
MT4-204	40	12	1.4	5
205	30	27	1.8	5
206	10	3	0.6	5
207	70	14	1.1	5
208	170	2	0.4	7500
209	20	4	0.5	80

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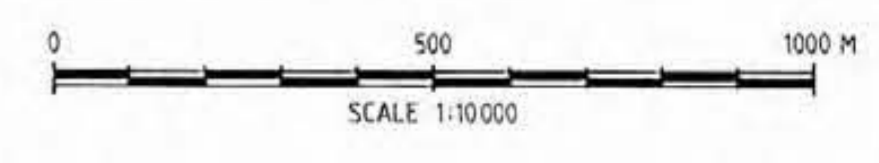
SAMPLE	Ag (ppm)	As (ppm)	Sb (ppm)	Au (ppb)
KN211-73	0-1	9	2-2	5
74	0-1	3	1-4	45
75	0-1	5	0-6	45
76	0-1	10	3-8	45
77	0-1	5	2-6	45
78	0-1	5	1-4	45
79	0-1	17	1-0	5
80	0-1	25	1-2	15
81	0-1	4	1-0	45
82	0-2	9	1-4	45
83	0-1	11	1-8	5
104	0-1	10	0-0	10
105	1-4	11	19-6	45
106	0-2	71	5-0	15

SAMPLE	Ag (ppm)	As (ppm)	Sb (ppm)	Au (ppb)
MT-222	0-1	20	0-2	5
MT-223	0-1	6	0-1	20
MT-224	0-1	19	0-1	5
MT-225	0-1	45	0-8	5
MT-226	0-1	100	4-2	5
MT-227	0-1	105	7-0	5
MT-228	0-1	11	1-4	5
MT-229	0-6	29	2-0	15
MT-230	0-1	60	6-0	5
MT-231	0-6	70	4-8	55
MT-232	0-1	110	2-8	5
MT-233	0-5	40	2-0	5
MT-234	1-0	210	28-0	5
DB-217	0-1	3	3-6	45
218	0-1	6	0-8	10
FW 570	0-1	10	1-4	45
572	0-1	9	0-2	5

TERTIARY & QUATERNARY
7 BASALT
CRETACEOUS & TERTIARY
6 QUARTZ-FELDSPAR PORPHYRY
POST MIDDLE JURASSIC ?
5 GRANODIORITE

LOWER & MIDDLE JURASSIC
4 SANDSTONE, SILTSTONE & SILTY SHALE
PRE-UPPER TRIASSIC
3 BANDED CHERT
2 VOLCANIC TUFF
1 CHLORITIC PHYLLITE, SILICEOUS PHYLLITIC SILTSTONE
PERMIAN
A LIMESTONE

--- DRAINAGE
- - - CONTACT: DEFINED, ASSUMED.
--- LINEAR
/ 30 FOLIATION WITH DIP
/ 30 BEDDING WITH DIP
--- OUTCROP BOUNDARY
XXXXX QUARTZ CARBONATE ALTERATION
A A BRECCIA
□ ROCK SAMPLE

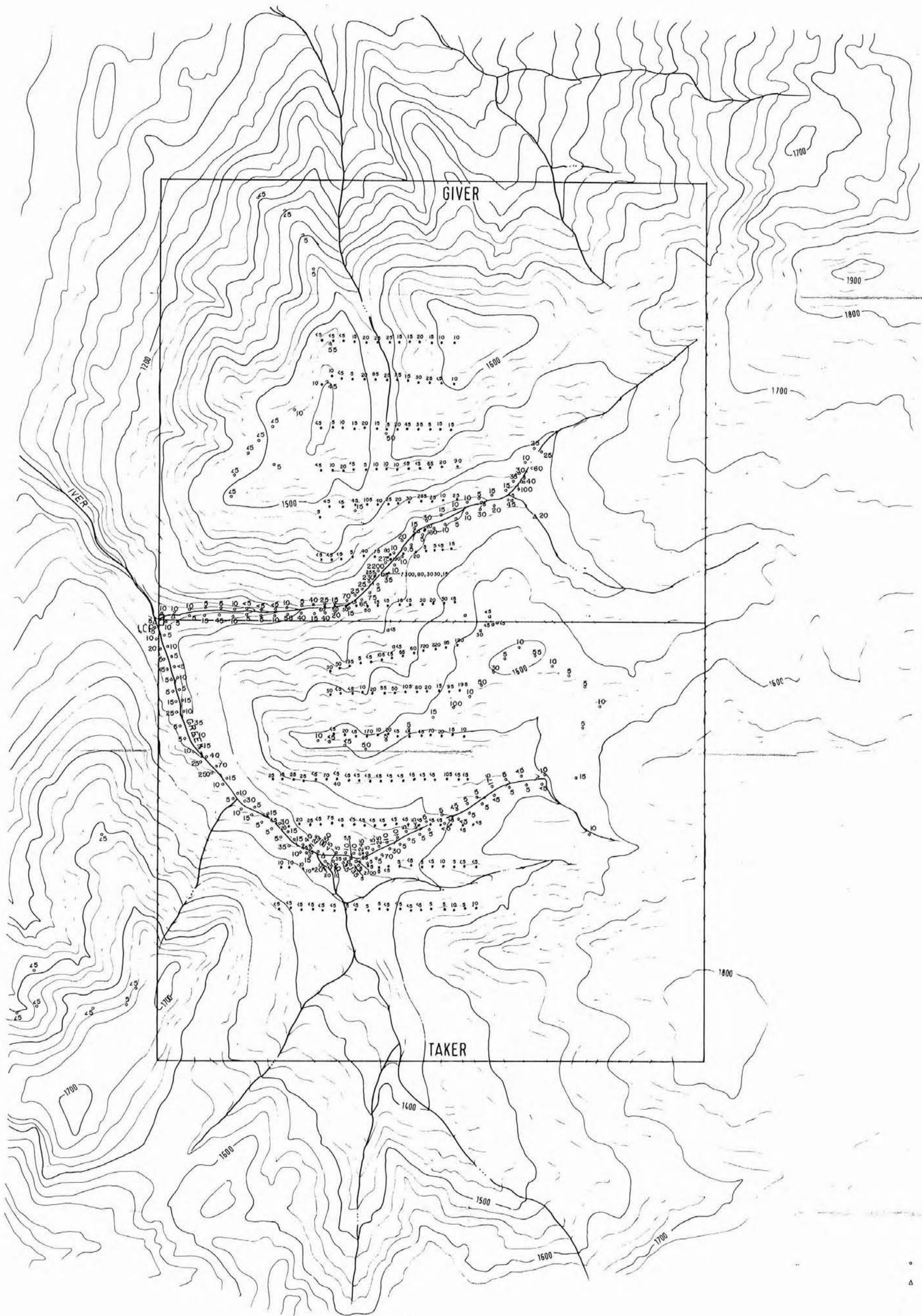


Chevron Canada Resources Limited
Minerals Staff

**GIVER AND TAKER CLAIM GROUP
GEOLOGY**

FIGURE No. 3 PROJECT No. M 504

DATE NOV. 1983	REVISIONS	SCALE 1:10000
N.S. 104 K		FILE No.
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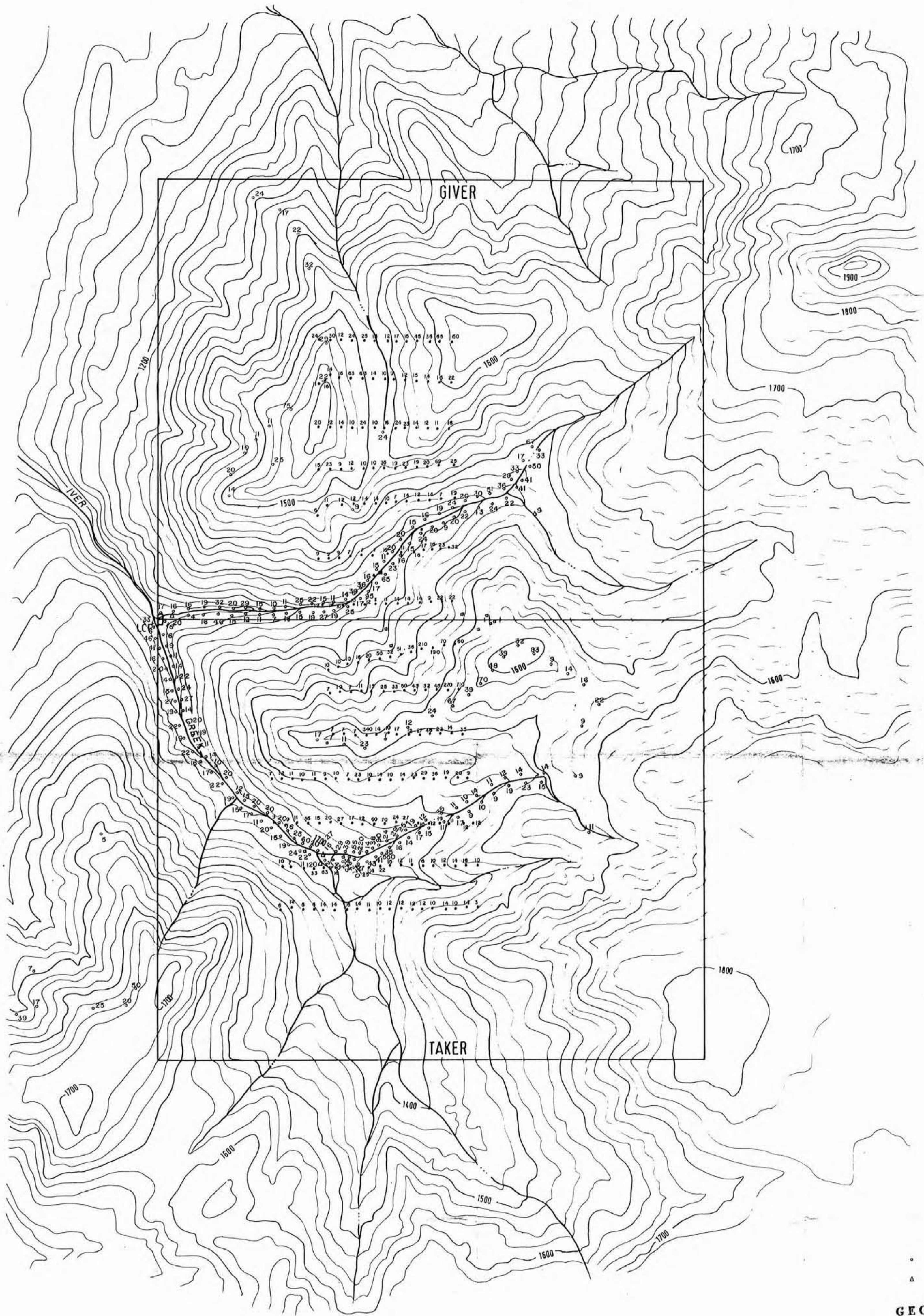
○ SOIL SAMPLE
△ SILT SAMPLE

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0 500 1000 M
SCALE 1:10000

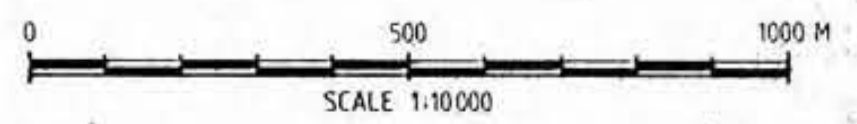
 Chevron Canada Resources Limited Minerals Staff			
GIVER AND TAKER CLAIM GROUP SOIL & SILT GEOCHEMISTRY Au - ppb			
FIGURE No. 4	PROJECT No. M 504		
DATE NOV 1983	REVISION:	SCALE 1:10000	FILE No.
DRAWN BY: 104 K			C-229
COMPLETED BY:			




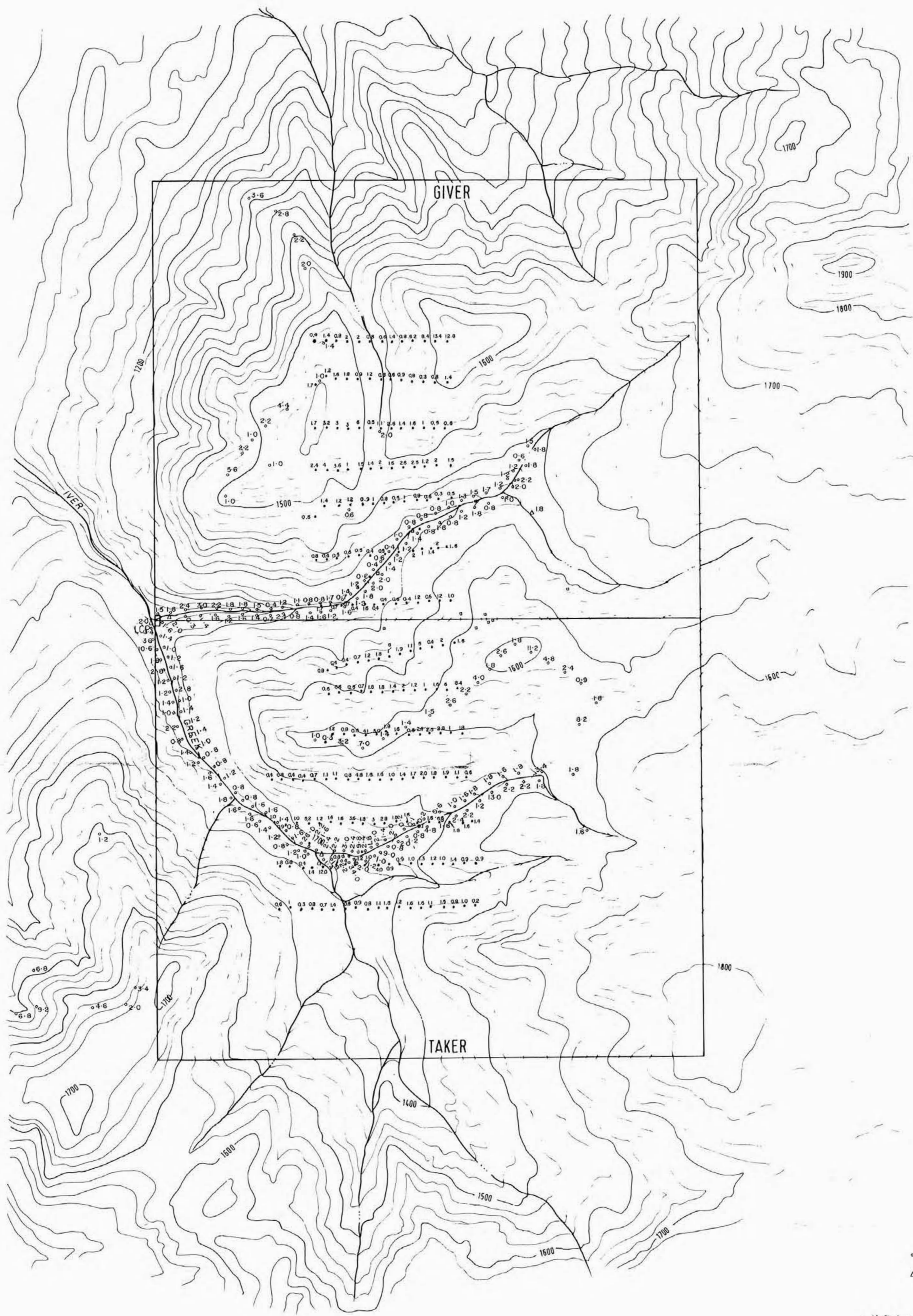
- SOIL SAMPLE
- ▲ SILT SAMPLE

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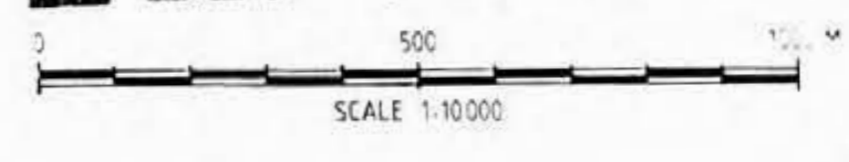
 Chevron Canada Resources Limited Minerals Staff		
GIVER AND TAKER CLAIM GROUP SOIL & SILT GEOCHEMISTRY		
As - ppm		
FIGURE No 5	PROJECT No M 504	
DATE NOV, 1983 ⁰⁴	REVISIONS	SCALE 1:10,000
NTS No 104 K		FILE No
COMPILED BY		C-230




- SOIL SAMPLE
- △ SILT SAMPLE

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 Chevron Canada Resources Limited Minerals Staff	
GIVER AND TAKER CLAIM GROUP	
SOIL & SILT GEOCHEMISTRY	
Sb - ppm	
FIGURE No. 6	PROJECT No. M 504
DATE: NOV. 1983	SCALE: 1:10000
MAP No. 12,975	C-228