

ASSESSMENT REPORT

KELLY 1 CLAIMS

VERNON MINING DIVISION

N.T.S.

82 L/1

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

Lat: 50°09' N  
Long: 118°24' W

Owner: Mr. Dave King

**11,759**

Kelowna, B.C.  
15 December 1983

Authors: C.E. Fipke  
E.R. Capell

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## INTRODUCTION

Mr. Dave King requested C.F. Mineral Research Ltd. to complete a semi orientation heavy mineral study on his Kelly 1 claims (record # 1119) located in the Vernon Mining Division.

## LOCATION AND ACCESS

The Kelly 1 group of claims which comprize 15 units, is presently registered in the name of Mr. Dave King of Vernon, B.C. The claims are located in the Yeoward Creek drainage south west of Yeoward Mountain, 12 kilometers southeast of Hilton, B.C. The claims are accessible via the steep Yeoward Mountain dirt road that runs north from the Kettle River logging road. The Kettle River logging road intersects highway 6 about 28 kilometers south of Hilton, B.C.

## GEOLOGY

The claims area is underlain by limey argillites and assorted volcanics which are in turn underlain by metasediments. According to C.T. Pasioka who reported on a geochemical soil sampling programme in the area, the argillitic rocks are frequently trans-sected by numerous quartz veins of various sizes and attitudes. This dynamic silicification is thought to reflect the nearby presence of a stock or boss of Coast Intrusive of Jurassic age. The quartz veins may vary from minor irregular veinlets varying from 1 m in thickness up to 1½ meters. Mineralization in the form of disseminated to massive knots of arsenopyrite, pyrite, galena and sphalerite have frequently been observed in the quartz veins.

As in most areas of the province, alpine glaciers are thought to have followed the trend of the present drainages (i.e. Yeoward Creek, Monashee Creek and Kettle River) during Pliestocene times.

## METHODOLOGY

Mr. Brent Carr and Mr. Al Carr of Kelowna, B.C. collected seven heavy mineral stream sediment samples on the Kelly 1 claims on September 18/1983. About 9 kilos of -20 mesh sands were collected from 150-250 lbs of gravels at the selected sites indicated on the sample location map, Figure 2.

The bulk samples were transported to the C.F. Mineral Research laboratory in Kelowna, B.C. where the samples were washed, wet

sieved, jigged and submitted to tetrabromoethane and dilute methylene iodide separations, followed by 9 electromagnetic separations. The resultant -35+150 mesh heavy and intermediate paramagnetic fractions were crushed, weighed, vialled and submitted to Nuclear Activation Services of Hamilton, Ontario for nuclear activation geochemical analysis for Sb and As. The -150 mesh +0.5 micron and -35+150 mesh heavy non magnetic fractions were similarly submitted for nuclear activation geochemical analysis for Au-Ba-As-Sb-W.

After completion of the foregoing analysis and irradiation cooling N.A.A. was advised to send the concentrates to the Barringer Research Ltd. laboratory located in Calgary, Alberta, for selected geochemical analysis for Cu-Pb-Zn-Ag-Mo.

### RESULTS

Analytical results are shown on Table 1.

Analysis results for gold are encouraging. In the vicinity of mineralization assays of more than 10,000 p.p.b. are considered to be anomalous. Values obtained for sample A4 in both the -35+150 and the -150 heavy non magnetic fractions were highly anomalous while the -35+150 heavy non magnetic fraction of A5 and the -150 heavy non magnetic fractions of A1, A2 and A6 were also anomalous.

As and Sb clearly concentrate in the heavy paramagnetic portions of the -35+150 mesh fractions and all samples contained possibly anomalous values for these elements. Background values are generally significantly less than 200 p.p.m. As and less than 40 p.p.m. Sb in the heavy paramagnetic concentrates. Sample A4 has moderately anomalous As and Sb values while samples A1, A2, A3 and A5 are weakly to moderately anomalous in both these elements.

Ba and W values for all the samples are at background level.

Results for Cu, Pb, Zn, Ag and Mo are not presently available.

### CONCLUSIONS

The strongly anomalous fine and coarse gold results and the moderately anomalous As-Sb results associated with silicified

locally gold-arsenopyrite-pyrite-galena-sphalerite mineralized limey argillites and associated volcanics underlying the claims indicate the claims overly or partially overly a gold deposit(s).

Further exploratory work should be undertaken particularly upstream from samples A4 and A5 to delineate the source of the gold mineralization.

TABLE 1

NUCLEAR ACTIVATION SERVICES 08-NOV-83 REPORT 2059 REF. FILE 3255-

SAMPLE	BA %	W PPM	W PPM	AU PPB	AU PPB
A-1 -35+150 IP	--	--	--	--	--
A-2 -35+150 IP	--	--	--	--	--
A-3 -35+150 IP	--	--	--	--	--
A-4 -35+150 IP	--	--	--	--	--
A-5 -35+150 IP	--	--	--	--	--
A-6 -35+150 IP	--	--	--	--	--
A-7 -35+150 IP	--	--	--	--	--
A-1 -35+150 HP	--	--	--	--	--
A-2 -35+150 HP	--	--	--	--	--
A-3 -35+150 HP	--	--	--	--	--
A-4 -35+150 HP	--	--	--	--	--
A-5 -35+150 HP	--	--	--	--	--
A-6 -35+150 HP	--	--	--	--	--
A-7 -35+150 HP	--	--	--	--	--
A-1 -35+150 HN	0.03	--	16	--	5300
A-2 -35+150 HN	0.05	--	29	--	5900
A-3 -35+150 HN	0.06	--	5	--	7500
A-4 -35+150 HN	0.19	--	8	--	140000
A-5 -35+150 HN	0.13	--	6	--	26000
A-6 -35+150 HN	0.04	--	8	--	2400
A-7 -35+150 HN	0.04	--	4	--	7100
A-1 -150 HN	--	6	--	40000	--
A-2 -150 HN	--	7	--	64000	--
A-3 -150 HN	--	3	--	9700	--
A-4 -150 HN	--	12	--	59000	--
A-5 -150 HN	--	<6	--	3300	--
A-6 -150 HN	--	20	--	43000	--
A-7 -150 HN	--	4	--	2000	--

## NUCLEAR ACTIVATION SERVICES 03-NOV-83 REPORT 2059 REF. FILE 3255-

SAMPLE	AS PPM	AS PPM	SB PPM	SB PPM	BA %
A-1 -35+150 IP	33	--	8	--	--
A-2 -35+150 IP	47	--	8	--	--
A-3 -35+150 IP	64	--	9	--	--
A-4 -35+150 IP	89	--	12	--	--
A-5 -35+150 IP	44	--	5	--	--
A-6 -35+150 IP	14	--	3	--	--
A-7 -35+150 IP	11	--	2	--	--
A-1 -35+150 HP	360	--	72	--	--
A-2 -35+150 HP	420	--	96	--	--
A-3 -35+150 HP	420	--	98	--	--
A-4 -35+150 HP	470	--	110	--	--
A-5 -35+150 HP	410	--	73	--	--
A-6 -35+150 HP	180	--	46	--	--
A-7 -35+150 HP	200	--	43	--	--
A-1 -35+150 HN	--	120	--	20	--
A-2 -35+150 HN	--	71	--	23	--
A-3 -35+150 HN	--	110	--	23	--
A-4 -35+150 HN	--	270	--	26	--
A-5 -35+150 HN	--	130	--	23	--
A-6 -35+150 HN	--	23	--	19	--
A-7 -35+150 HN	--	31	--	17	--
A-1 -150 HN	130	--	9	--	0.13
A-2 -150 HN	57	--	9	--	0.16
A-3 -150 HN	52	--	4	--	<0.04
A-4 -150 HN	210	--	11	--	0.34
A-5 -150 HN	3	--	1	--	<0.09
A-6 -150 HN	4	--	9	--	<0.20
A-7 -150 HN	11	--	6	--	<0.10

APPENDIX A

STATEMENT OF EXPENDITURES: KELLY 1 CLAIMS

Contract salaries of Brent Carr and Al Carr including 4 wheel drive rental and meals and accomodation expenses	\$375.00
Topographic map purchases	\$ 3.75
Heavy Mineral processing seven $\pm$ 9.0 Kg samples (A1-A7) through multistage washing sizing semigravity concentration; processing 3000 gms of -35+60 and all ( $\pm$ 2500 gms) of -60 mesh concentrates through a tetrabromoethane and a methylene iodide separation using double +0.5 micron filtration, completing 9 electro-magnetic separations on the resultant -35 mesh intermediate and heavy specific gravity fractions @ \$71.00 each	\$497.00
Weighing 63 resultant fractions to $\pm$ 0.02 gm tare accuracy @ 0.50¢ each	\$ 31.50
Precrushing, vialing, tare weighing to 0.001 gm accuracy 28 of above concentrates	\$ 68.25
Prepaid courier charge to Hamilton, Ontario	\$ 21.00
Au-As-Sb-Ba-W geochem analysis by nuclear activation, Hamilton	\$290.50
Report wiring by geologists R. Capell and C. Fipke	\$300.00
Typing, copying, and report materials	\$ 71.00
	<u>\$1,658.00</u>

Please apply any excess credits granted to the P.A.C. Account of Mr. Dave King.

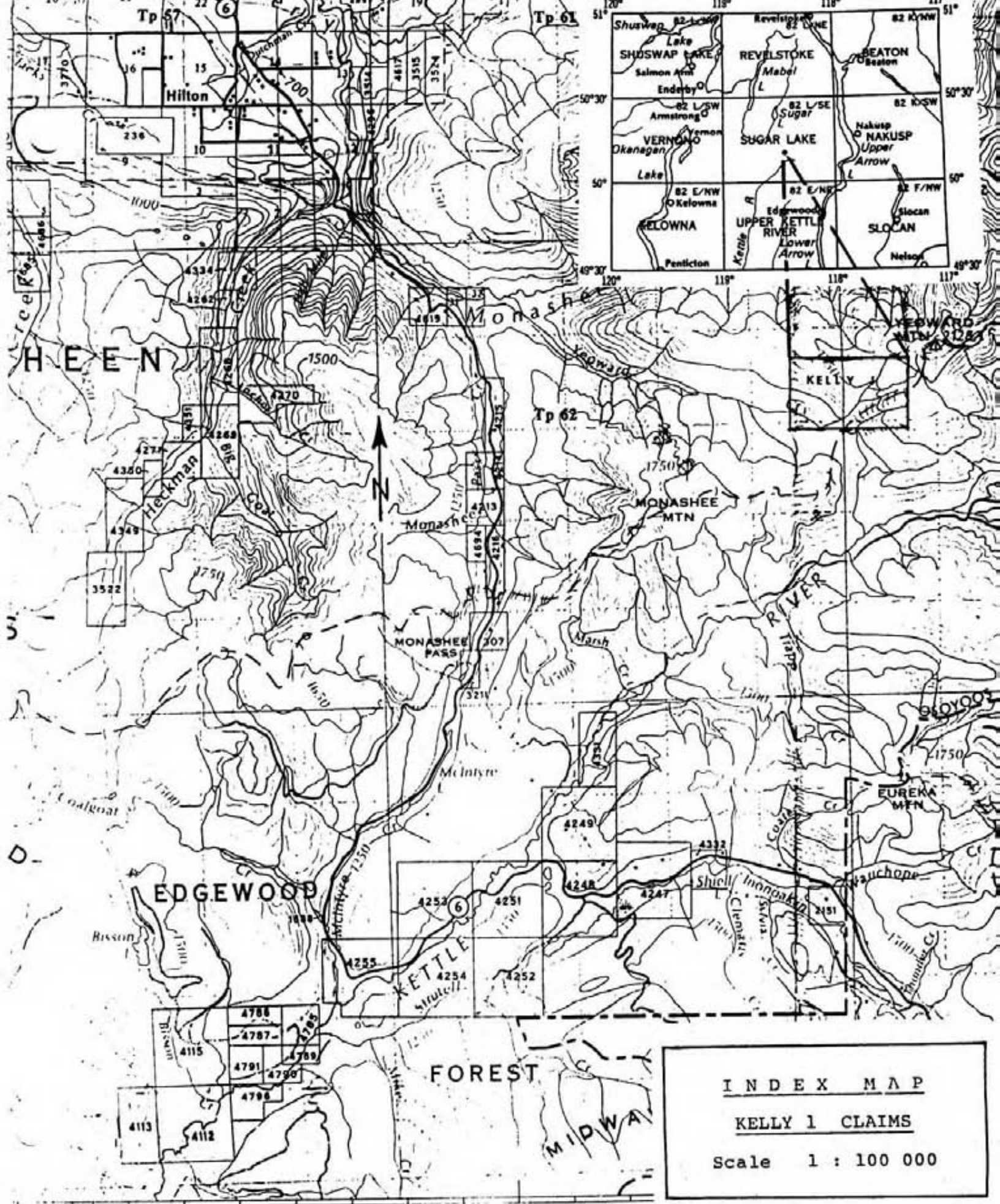


APPENDIX B

STATEMENT OF QUALIFICATIONS

Mrs Rosemary Capell is a 1965 BSc graduate of University College of Rhodesia. Between 1966 and 1975 Mrs Capell worked for Anglo American in Rhodesia chiefly on base metal geochemistry.

C. Fipke is a BSc Honors Geology graduate of the University of British Columbia. Between 1970 and 1977, C. Fipke worked as a geologist involved to a large extent in heavy mineral exploration and research for Kennecott Copper in New Guinea, Samedan Oil in Australia, Johannesburg Consolidated Investments in Southern Africa and Cominco Ltd. in Brazil and British Columbia. C. Fipke and L.M. Fipke organized C. F. Mineral Research Ltd. in 1977. Currently the C.F. Mineral Research heavy mineral laboratory which employes 25 to 35 people is involved in heavy mineral exploration and processing on behalf of many international companies.



I N D E X M A P  
K E L L Y 1 C L A I M S  
 Scale 1 : 100 000

To Christian Valley - 56 km

FIGURE 1

KELLY 1 CLAIMS

SAMPLE SITES

Sample # and site      A3 •

Scale 1 : 50,000

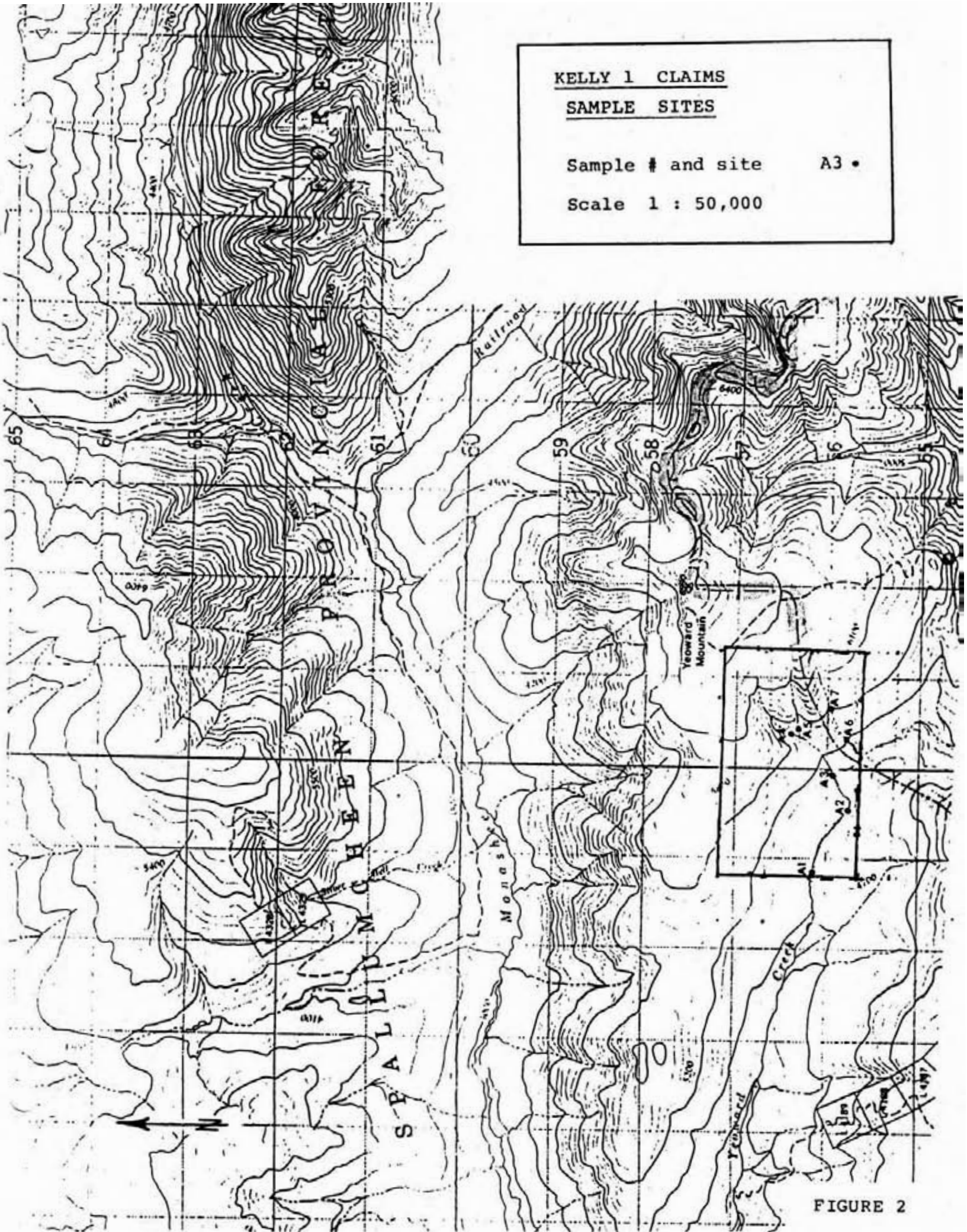


FIGURE 2