



CCH MINERALS LTD.

ASSESSMENT REPORT

GEOCHEMICAL SURVEY

SEPTEMBER 18, 1981

SNATCH CLAIMS 1 TO 8

SNATCH CLAIMS 21 AND 23

115-P-15

63°45'N 136°47'W

MAYO AREA
YUKON TERRITORY

Brian Paul/Daniel Rota
January 12, 1982

090963



This report has been examined by
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of \$ 1000 -.

P. Watson

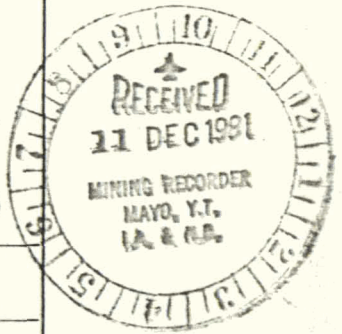
for Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.



Department of Indian Affairs and Northern Development
YUKON QUARTZ MINING ACT

FORM "C" - APPLICATION FOR A CERTIFICATE OF WORK

(This form required in duplicate with sketch showing location of work.)



I (Name)	Brian James Paul	Occupation	Geologist
(Postal Address)	Campbell Resources Inc. A-105 Marine Bldg., 355 Burrard St. Vancouver, B.C. V6C 2G6		

OFFICE DATE STAMP

MAKE OATH AND SAY, THAT:-

- I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein.
- I have done, or caused to be done, work on the following mineral claim(s):
(Here list claims on which work was actually done by number and name)

SNATCH 1 and 2/YA40486 and YA40487

situated at Fortymile Creek Claim Sheet No. 115-P-15
in the Mayo, Y.T. Mining District, to the value of at least One Thousand (\$1,000.00)
dollars, since the Eighteenth(18th) day of September 19 81,

to represent the following mineral claims under the authority of Grouping Certificate No. MA 1086
(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

SNATCH 1 to 8, inclusive/YA40486 to YA40493
SNATCH 21 /YA40498
SNATCH 23 /YA40500

ALL FOR ONE(1) YEAR

- The following is a detailed statement of such work: (Set out full particulars of the work done indicating dates work commenced and ended in the twelve months in which such work is required to be done as shown by Section 53.)

80 Analyses of Pb/Ag @\$3.10 Per Sample	\$248.00
1.1 Hours Helicopter Time @\$450.00 Per Hr.	495.00
One-Half Assistant Day@\$45.00 Per Day	22.50
One-Half Geologist Day@\$95.00 Per Day	47.50
Drafting and Interpretation	200.00
	<u>\$1,013.00</u>

Sworn before me at Vancouver, B. C.
this 10 day of November 19 81

[Signature]
Notary Public.

Brian Paul
Applicant.

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Illustrations

- Bander and Snatch Groups,
Claim Location Map,,.....1:50000.....1981.....Attached

- Bander and Snatch Groups,
Claim Sketch.....½ mile=1"....1981.....Attached

- Map 712-1 - Snatch Group,
Detailed Soil Grid.....1:10001981.....In Pocket

Introduction

The SNATCH claim group lies in an area between Fortymile and May Creeks, covering a small gap between the SNARK group to the east and the BANDER group to the northwest. The claims are owned by CCH Minerals Ltd. of Toronto, Ontario.

The work outlined in this report was carried out on September 18, 1981. Eighty soils were collected in the northern apex of the claim group for lead and silver analyses. An amount totalling one thousand dollars has been claimed for assessment purposes.

Exploration History

No exploration activity is reported in the area of the SNATCH claims prior to 1978. During 1978, several highly anomalous tin stream sediment values were located along the middle sections of Fortymile Creek by CCH Resources Ltd., and the company staked a block of forty claims (in conjunction with the larger BANDER group to the northwest) to cover the probable source area of this tin during July and August of 1979. Soil sampling along the claim lines during the same year outlined a small number of highly anomalous silver values in the northern apex of the claim group. These values were followed up during 1981 with detailed soil geochemistry and a small amount of geological mapping.

Geology

The BANDER and SNATCH claim groups are underlain by gently dipping metasedimentary rocks of the Precambrian and/or Cambrian "Grit" Division. These rocks have been intruded in several localities by narrow intermediate to acid dykes of probable Cretaceous age. Small scale nappe folding, apparently related to regional overthrusting, is common within the map area. The axial trend of the folds is ENE/WSW indicating that thrusting has occurred in a NNW direction. An (S_2) axial plane cleavage developed parallel to the fold axes is commonly observed, unlike other areas underlain by "Grit" Division rocks where only the compositional layering (S_0) and original schistosity (S_1) can be seen. The metasediments are of low to moderate metamorphic rank, and many of the original sedimentary structures have been preserved. Accessory amounts of galena and arsenopyrite are present in a few of the local quartz veins, but the map area, as a whole, seems to lack significant mineral occurrences.

A more detailed description of the geology within the vicinity of the SNATCH claims has been provided in a companion report. Thin iron and manganese stained, quartz-filled fractures occur in rocks of Unit (1F) adjacent to the area of geochemical coverage, but the relationship of these fractures to soil anomalies in the area is uncertain.

Geochemistry

Methods

Samples were collected from the B soil horizon exclusively. Minus 80 mesh fractions were analyzed for lead and silver by Bondar-Clegg and Co. Ltd. in their Whitehorse laboratory. Both elements were analyzed by atomic absorption spectrometry following standard perchloric acid extraction. Sample lines were tied to Yukon quartz claim post No. 1, YA40486-YA40487 and extended by simple chain and compass; individual samples were collected using geological picks and kraft paper envelopes.

Results

Lead and silver were analyzed in soils on a 25 metre X 25 metre grid covering 3.9 hectares in the northern apex of the claim group. All the work was completed on September 18, 1981. Included with this report is Map 712-1 at 1:1000 scale, showing arbitrarily contoured results for both elements. This map incorporates work done during June of 1981 which is described in a companion report.

A linear geochemical anomaly with lead values ≥ 300 ppm and silver values ≥ 10 ppm slices across the northern half of the grid area. This anomaly has a well-defined trend of $095/275^{\circ}$ and remains open to the west. Anomalous lead and silver values appear coincident, although the silver values produce a more diffuse

anomaly. Since the anomaly trends downhill, some component of downhill dispersion is to be expected.

The SNATCH anomaly is similar to another geochemical high on the west side of May Creek, some two kilometres to the east within the boundaries of the SNARK group. Trenching and double dipole EM surveys on the latter zone during 1980 and 1981 were unsuccessful in locating a bedrock source of lead and silver. A feature common to both localities is the presence of quartz-feldspar crystal tuff, or "grit", of Precambrian and/or Cambrian age. This rock unit is not at all common in the Fortymile Creek-Boulder Creek area and above background levels of lead and silver in the tuff lenses may be contributing to soil anomalies in their vicinity. To date, no geochemical checks have been run on rocks from this unit.

Recommendations for Future Work

The lead-silver soil anomaly outlined during the most recent surveys on the SNATCH group is well worth additional expenditure. This expenditure would take the form of hand trenching on the eastern end of the anomaly (Map 712-1) as well as expanded geochemical coverage to the west of the existing grid. The additional work is recommended despite negative results from hand trenching and double dipole EM surveys on the nearby May Creek anomaly. Ten of the twelve existing SNATCH claims are held in good standing until July, 1983, so that the above work can be conducted at leisure during the 1982 field season. Several samples of quartz-feldspar crystal tuff should be submitted for geochemical analysis to determine if these rocks do indeed carry significant amounts of lead and silver.

STATEMENT OF QUALIFICATIONS

Work on the SNATCH claim group during 1981 was carried out under the direction of D. Rota of Toronto, Ontario.

Mr. Rota is Project Geologist for BILLITON CANADA LTD. Currently seconded to the Cortin Joint Venture, he holds a B.Sc. degree in geology from Laurentian University, Sudbury, Ontario and has practiced his profession continuously for a period of twelve years in a variety of geological environments within Canada.

The geochemical survey described in this report was conducted by the author, Brian Paul, a geologist with BILLITON CANADA LTD. with the assistance of Evan L. Jones of Vancouver, British Columbia. Mr. Paul has been involved as a member of the Cortin Joint Venture since May, 1979. He holds a B.Sc.(Hons.) degree in geology from the University of Western Ontario and is currently completing the requirements for an M.Sc. degree in geology from the University of Manitoba. He is a member of the Canadian Institute of Mining and Metallurgy, the Geological Association of Canada and the Mineralogical Association of Canada.

STATEMENT OF EXPENDITURES

80 soils analyzed for Pb and Ag @ \$3.10/sample	\$ 248.00
1/2 Assistant day @ \$45.00/day	22.50
1/2 Geologist day @ \$95.00/day	47.50
1.1 hours helicopter @ \$450.00/hour	495.00
Drafting & Interpretation	<u>200.00</u>
	\$1,013.00

The above work was carried out on September 18, 1981.

Vancouver, B.C.
January 12, 1982

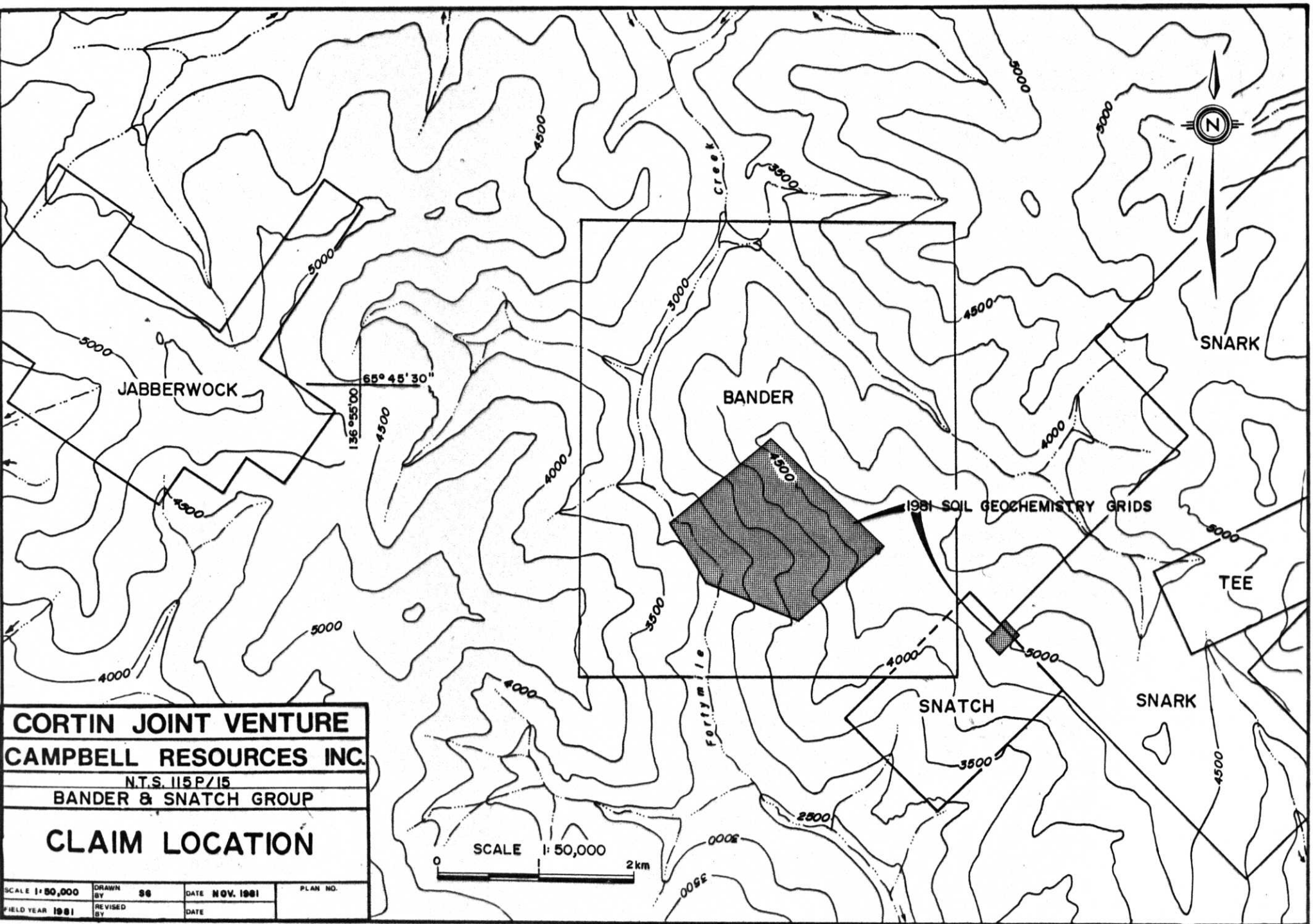
Brian Paul

Brian Paul
Geologist - Curtin J.V.

LIST OF CLAIMS

<u>GRANT NUMBERS</u>	<u>CLAIM NAMES</u>	<u>LOCATION</u>	<u>CLAIM SHEET NO.</u>
YA40486-YA40493	SNATCH 1-8	FORTYMILE CREEK	115-P-15
YA40498	SNATCH 21	FORTYMILE CREEK	115-P-15
YA40500	SNATCH 23	FORTYMILE CREEK	115-P-15

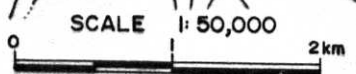
ASSESSMENT has been filed for the above claims, sufficient to hold these claims until July 24, 1983, for which this report is representation.

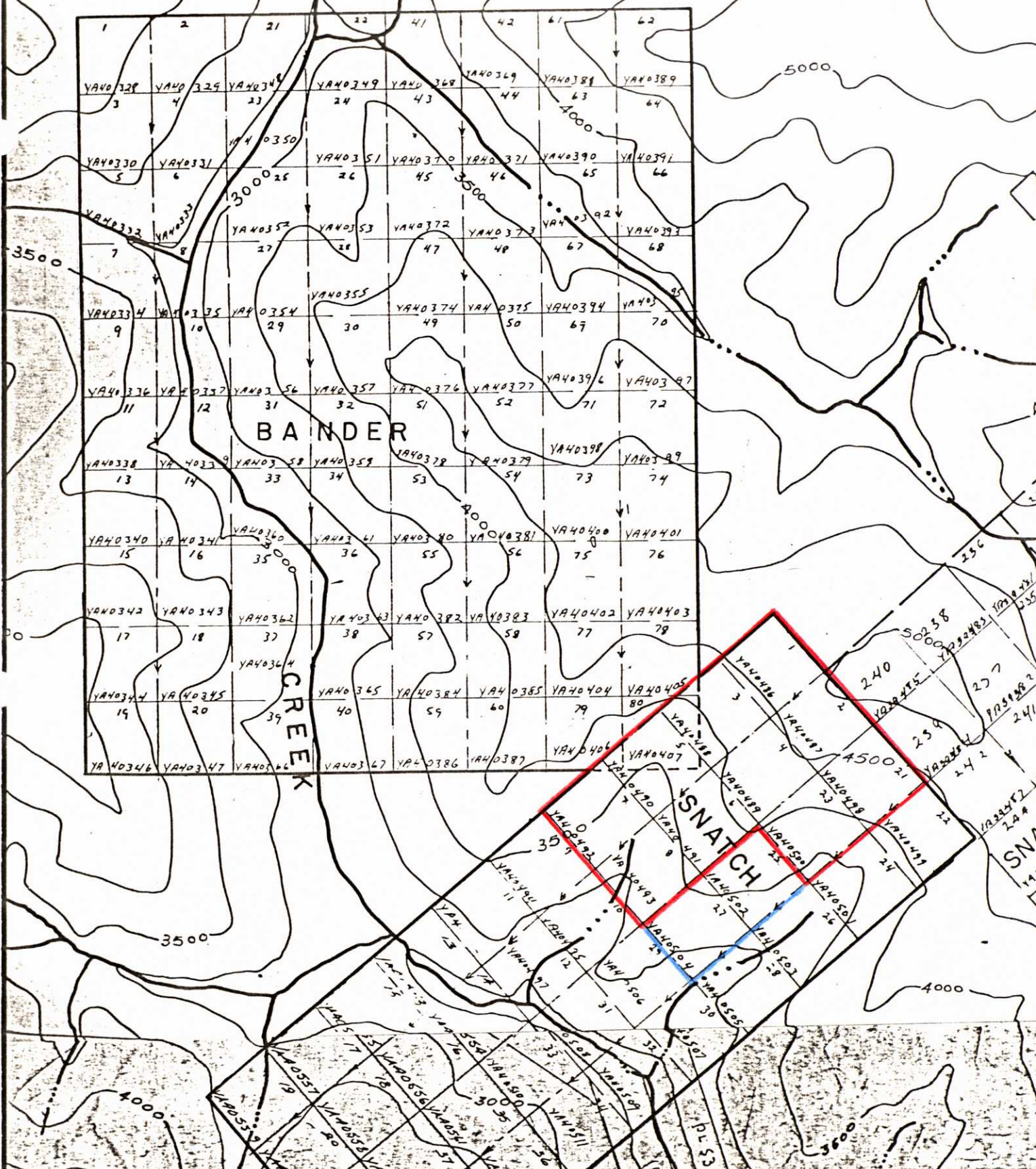


CORTIN JOINT VENTURE
CAMPBELL RESOURCES INC.
 N.T.S. 115P/15
BANDER & SNATCH GROUP

CLAIM LOCATION

SCALE 1:50,000	DRAWN BY 88	DATE NOV. 1981	PLAN NO.
FIELD YEAR 1981	REVISED BY	DATE	

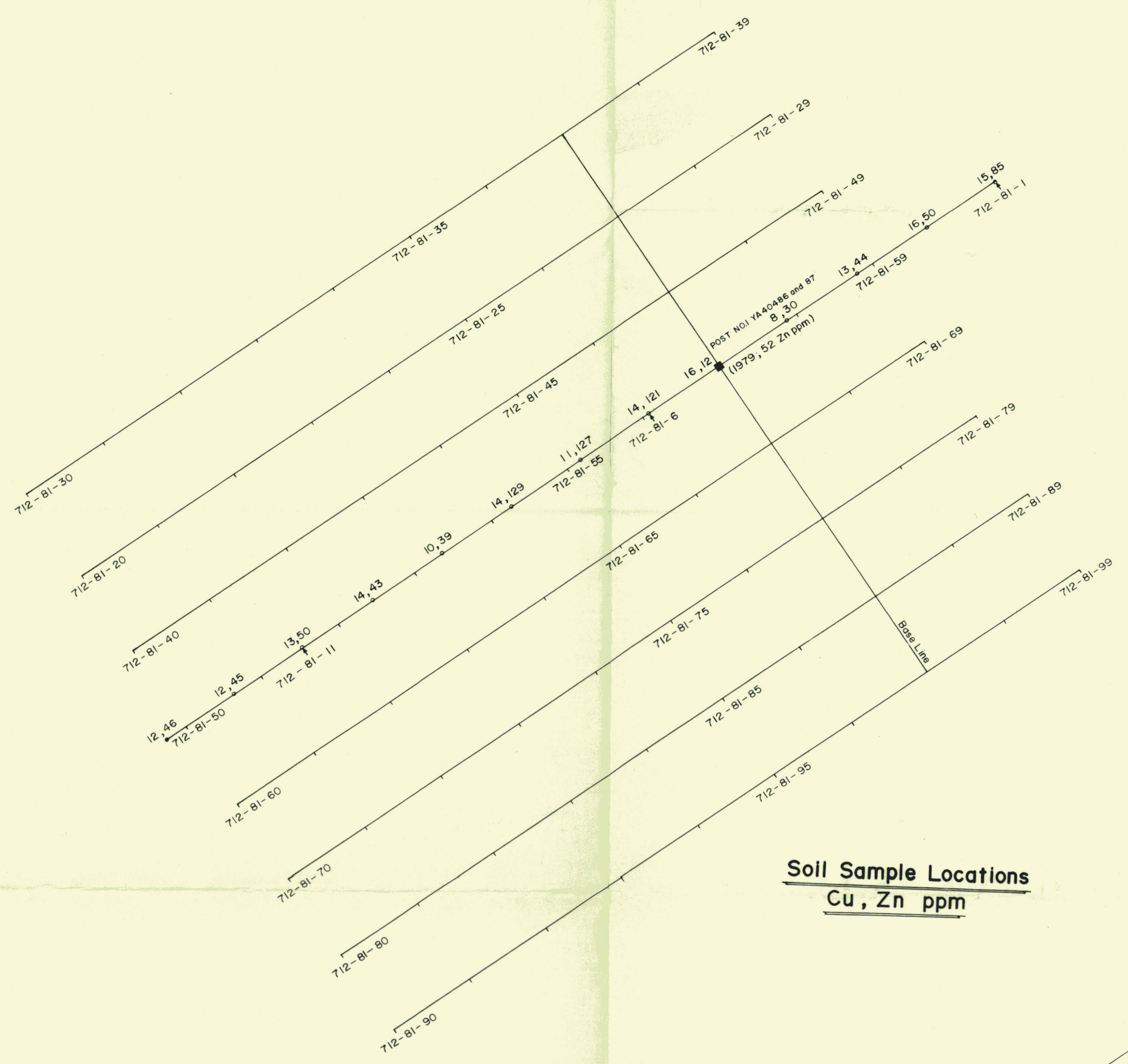
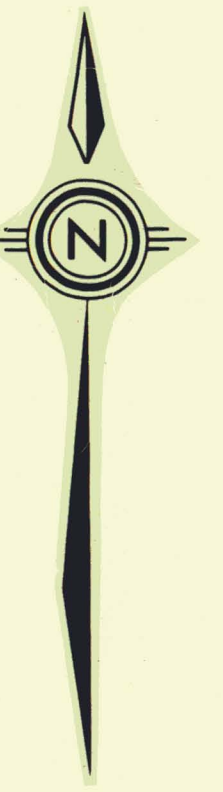




CORTIN JOINT VENTURE
CAMPBELL RESOURCES INC.
 115-P-10.15
 Bander & Snatch Groups

CLAIM SKETCH

SCALE 1"=50,000	DRAWN BY DFN	DATE JULY 6, '81	PLAN NO. CS-1
FIELD YEAR	REVISED BY	DATE	



Soil Sample Locations
Cu, Zn ppm



Ag ppm

- Red: ≥ 20.0 Ag ppm
- Orange: ≥ 10.0 < 20.0 Ag ppm
- Yellow: ≥ 5.0 < 10.0 Ag ppm
- Green: ≥ 3.0 < 5.0 Ag ppm



Pb ppm

- Red: ≥ 1000 Pb ppm
- Orange: ≥ 500 < 1000 Pb ppm
- Yellow: ≥ 300 < 500 Pb ppm
- Green: ≥ 100 < 300 Pb ppm

LEGEND

- June 1981 soil sample location
- September 1981 soil sample location
- Trend of geochemical anomaly

Base line samples flagged; others are not flagged
All soil samples - 80 mesh

090963

CORTIN JOINT VENTURE
CAMPBELL RESOURCES INC.

N.T.S. 115 P / 15
SNATCH GROUP

DETAILED SOIL GRID

SCALE 1:1000	DRAWN BY BJP/SG	DATE NOV. 1981	PLAN NO.
FIELD YEAR 1981	REVISED BY	DATE	712-1