



CCH MINERALS LTD.

ASSESSMENT REPORT

GEOLOGICAL AND GEOCHEMICAL SURVEYS

June 22 and June 25, 1981

SNATCH CLAIMS 1 TO 8

SNATCH CLAIMS 21, 23, 25 AND 27

115-P-15

$63^{\circ}46'N$   $136^{\circ}47'W$

MAYO AREA  
YUKON TERRITORY

BRIAN PAUL/DANIEL ROTA  
JANUARY 12, 1982

090962



This report has been examined by  
the Geological Evaluation Unit  
under Section 53 (4) Yukon Quartz  
Mining Act and is allowed as  
representation value in the amount  
of \$ 1,200.

*P. Walker*

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

Erratum..... Page 6 omitted in numbering

090962

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., P.O. BOX 37, MAYO, YUKON, Y0B1M0 |            |           |

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 TO 8, SNATCH 21, 23, 25 AND 27 (YA40486-YA40493, YA40498, YA40500, YA40502, YA40504)

situated at FORTY MILE CREEK Claim Sheet No. 115-P-15, 10

In the MAYO Mining District, to the value of at least \$1227.30

dollars, since the ELEVENTH day of JUNE 19 81,

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

SNATCH 1 TO 8, SNATCH 21, 23, 25 AND 27  
(YA40486 - YA40493, YA40498, YA40500, YA40502 AND YA40504)

ALL FOR ONE YEAR

- The following is a detailed statement of such works (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)

13 SOIL SAMPLES ANALYZED FOR CU, PB, ZN, AG AT \$4.10/SAMPLE \$53.30  
2 GEOLOGIST DAYS AT \$100/DAY \$200.00  
FOOD AND SUPPLIES - 2 MAN DAYS AT \$12.00/DAY \$24.00  
1.5 HELICOPTER HOURS AT \$500/HOUR (CASUAL RATE) \$750.00  
DRAFTING AND INTERPRETATION \$200.00

Sworn before me at MAYO, YUKON TERRITORY  
this 3RD day of JULY 19 81

\$1227.30

\_\_\_\_\_  
Notary Public

Brian Paul Brian Paul  
Applicant.



Looking southeast along the main ridge on BANDER towards the northern apex of the SNATCH GROUP, SNARK and TEE in the background.

## 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 June 22 and 25, 1981 and was done in conjunction with geochemical and geological surveys on the adjoining BANDER group. A geological survey at 1:10000 scale covering the main ridge on the BANDER group was extended into the northern portion of the SNATCH group. In addition, a line of thirteen orientation geochemical samples was collected in the vicinity of silver highs reported in the 1979 program.

An amount totalling twelve hundred 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

### Summary

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 which are 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.

### Bedded Rocks

Schistose metasediments of Precambrian and/or Cambrian age underlie the entire map area. The term "Grit" Division is generally applied to the sequence to which these rocks belong. Six different lithologies have been recognized in the area and these are indicated on the accompanying geological map (711-8/712-3) as units 1A through 1F. These units tend to grade into one another and appear to pinch out rapidly along strike.

As many as three or four different lithologies can be found within the limits of a single outcrop, and intense folding has further obscured the relationships between various units. For these reasons, no attempt has been made to separate the various lithologies on the geological map.

The dominant planer feature within the metasediments is the ( $S_1$ ) schistosity. Bedding or compositional variation ( $S_0$ ) is commonly observed and appears in all instances to be parallel to the schistosity. The schistosities are quite variable in this area, but on the whole the sequence seems to be relatively flat-lying, with dips seldom in excess of 20 degrees. Three dykes have been intruded near parallel to foliation and their trace on the geological map appears to support the concept of an almost flat-lying sedimentary sequence.

The metasedimentary rocks are well exposed as shown in Plate 1, outcropping along the main ridge crest, as well as a number of small "spur" ridges dropping off toward Forty-mile Creek. Quartz-carbonate veins are fairly abundant throughout the sequence, tending to occupy late cross-cutting fractures and other dilatant zones.

The various lithologies of Unit 1 are discussed briefly under the headings below.

#### Quartz-Mica Schist (Unit 1A)

This is by far the most common lithology within the map area. The rocks of this unit are typically light brownish-grey, weather much the same color, and are characterized by alternating quartz and sericite-rich laminae, seldom more than 1 mm in thickness.



Plate 1: Main ridge, BANDER group, showing "Grit" Division sediments in outcrop along and to the west (left) of the ridge crest → JABBERWOCK in the left background.

The brown coloration in these rocks is caused by the oxidation of Fe-rich carbonate, producing limonite. "Grit" Division sequences are generally dominated by quartz-mica schist, and Unit 1A has become more or less a type lithology for the entire division.

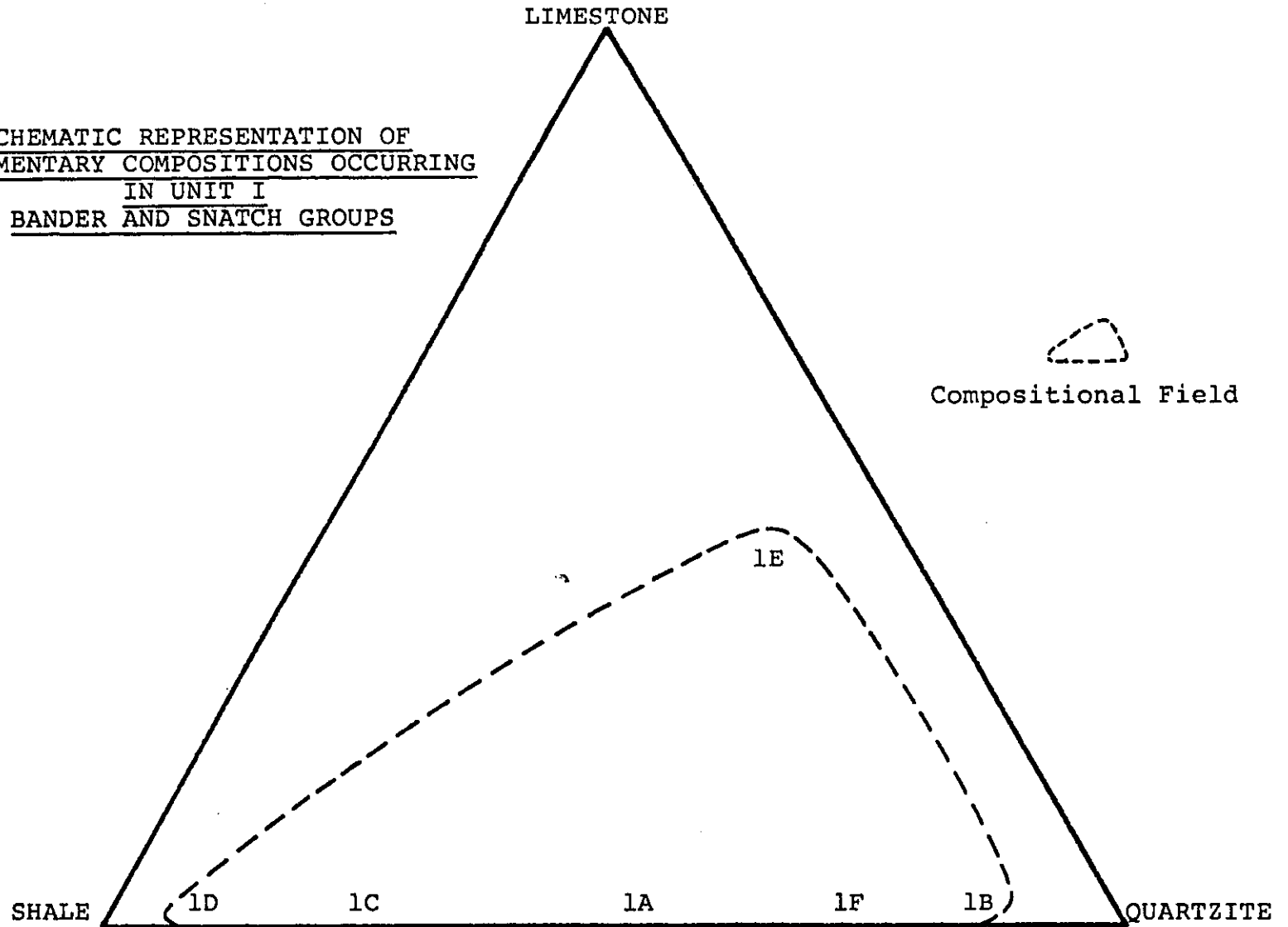
#### Quartz Schist (Unit 1B)

These rocks occur closer to the siliceous end of the spectrum (see diagram, following page) and are harder and more massive than the normal schists. They tend to be fine-grained and because of their hardness, are commonly well-jointed. Foliations can still be observed and are defined by the presence of extremely thin sericite-rich laminae. The rocks are typically pale grey, but weather a light rusty brown similar to the schists of Unit 1A. The silica content of most of the rocks within this unit is high enough that almost all could be described as good quartzites.

#### Mica Schist, Graphitic Schist (Unit 1C)

Rocks of this unit are more pelitic than the normal schists, grading on occasion into the argillaceous sediments of Unit 1D. The quartz-rich laminae are reduced in number and thickness, resulting in sediments which are extremely fissile. Fresh specimens of these rocks are generally dark grey, but they tend to weather a light, rusty brown in the typical fashion. Much of the mica in these rocks is probably retrograde chlorite after biotite.

SCHEMATIC REPRESENTATION OF  
SEDIMENTARY COMPOSITIONS OCCURRING  
IN UNIT I  
BANDER AND SNATCH GROUPS



### Shale, Slate, Argillite (Unit 1D)

True shales and slates are not common within the area, most rocks of this affinity containing appreciable amounts of quartz. The argillaceous horizons are generally quite thin and run the gamut from soft shales through fissile argillite to more indurated slate. These rocks are usually dark grey or black in color. In Plate 2, rocks of Unit 1D are shown interbedded with quartz schist and quartz-feldspar crystal tuff.

### Limestone, Calcarenite (Unit 1E)

The rocks of this unit consist almost entirely of calcarenite, and horizons of clean limestone are absent nearly altogether. The calcarenites are fine to medium-grained, with abundant granular quartz, yet they react readily to the application of HCL. The rocks are grey when fresh, but weather rather easily to produce a characteristic buff-colored granular surface. These rocks are also quite soft and schistose, with abundant sericite-rich layers throughout. The calcareous rocks of Unit 1E are somewhat more common on the BANDER group than is normally the case in areas of "Grit" Division rocks.

### Quartz-Feldspar Crystal Tuff "Grit" (Unit 1F)

This is the most problematical of all the units, occurring in only a few areas on the BANDER and SNATCH claim groups. Rocks of this unit are essentially quartz-sericite schists, but grade from grit through to quartz pebble conglomerate containing rounded quartz fragments to 10mm in diameter.



Plate 2: Interbedded argillite(1D), quartz schist(1B) and quartz-feldspar crystal tuff(1F), cut by quartz-carbonate veining, in the southeastern corner of the claim group.

More typically, the rocks consist of rounded bluish quartz eyes(3-4 mm), and altered feldspathic fragments(4-8 mm), within a fine-grained matrix of quartz, feldspar, chert and sericite. Rocks typical of Unit 1F are shown in Plates 2, 5 and 6, but the textures are not at all evident from these photographs. The most spectacular outcrops occur in the northern portion of the SNATCH group, where the rocks truly appear to be conglomeratic.

Fragmental rocks of Unit 1F occur sporadically throughout the Mayo-McQuesten area and have been mapped as everything from conglomerate through crystal tuff to even quartz-feldspar porphyry. Earlier reports produced by the Cortin Joint Venture have stressed the tuffaceous nature of these rocks. It appears in the area of the BANDER and SNATCH claims that these rocks more closely resemble conglomeratic sediments and the term "crystal tuff" on the geological map may be somewhat misleading.

### Intrusive Rocks

No intrusive rocks of any sort were mapped in the area of the BANDER and SNATCH claims prior to 1981. At least four narrow intermediate to acid dykes(three distinctive lithologies) were located during the present geological survey. Two additional intrusive rock types were identified west of the BANDER group during reconnaissance stream sediment sampling. The dykes are flat-lying and have been intruded near parallel to the foliation in the enclosing metasediments. Volumetrically unimportant, they serve as marker horizons in an otherwise complicated sedimentary sequence.

All five intrusive types are assumed Cretaceous in age and have been assigned to Unit 14 in concordance with mapping by the Geological Survey of Canada.

The various intrusive types are discussed under the headings below.

#### Feldspathic Dyke Rock (Unit 14A)

Rocks of this unit have been traced as a single flat-lying dyke over one kilometre in the south-central portion of the BANDER group. They also occur in a large rubble patch, and as scattered pieces of float, in the southern area of the claim group. The main dyke is approximately four metres in width and appears conformable with the foliation in the enclosing sediments. Sedimentary rocks in the vicinity of the dyke are not noticeably contact metamorphosed. An olive green color when fresh, possibly due to sericitic alteration, the dyke on its weathered surface is a distinctive reddish-brown. The weathered exterior of the dyke is typically exfoliated and white, carbonate-coated fractures are common. This weathering rind is also extremely thick, so much so that samples of fresh material are often difficult to obtain. Small euhedral phenocrysts of white mica several millimetres in length, and the occasional small feldspar phenocryst are the only visible minerals in an otherwise nondescript rock. Traces of iron sulphide are present in some samples and leucite has been tentatively identified in thin section. Despite the fact that the groundmass contains a high proportion of feldspar (as opposed to quartz) the rocks are generally quite competent and extremely hard. All samples of this particular unit appear to be heavily sericitized.

No classification is possible at the present time, although the rocks of Unit 14A are almost certainly intermediate to acid in composition. More than one dyke may be present, as evidenced by the additional occurrences of rubble in the southern portion of the claim group. An outcrop of the main dyke is illustrated in Plates 3 and 4.

#### Biotite Lamprophyre (Unit 14B)

Dyke rocks of this composition are found in two localities on the BANDER group. Their ground trend suggests that they are more or less conformable with the bedded rocks, although they are seen on occasion, cross-cutting foliation in the enclosing sediments. Intermediate to near mafic varieties are known. The rocks are generally fine-grained and grey in color, containing greater than 5% chloritized biotite in the form of small phenocrysts. The dykes, which are occasionally foliated, vary in width from one-half to three metres and small clots of iron sulphide are present in most specimens.

Lamprophyric dyke rocks are found throughout the Mayo-McQuesten area and are among the youngest intrusive phases within this area.

#### Inclusion-Rich Biotite Lamprophyre (Unit 14C)

These rocks, which have again been intruded parallel to the foliation in the enclosing sediments, are essentially biotite-feldspar porphyries. They consist of a fine-grained, dark grey groundmass, with generally greater than 10% biotite as small euhedral phenocrysts to one millimetre in size.



Plate 3: Feldspathic dyke rock, Unit 14A, intruded almost parallel to the foliation in the enclosing sediments → hammer and fieldbook for scale in mid-photo.



Plate 4: A closeup of the dyke in the preceding plate, showing the characteristic reddish weathering divisions every 10 cm on the hammer handle.

Quartz is occasionally present as a phenocryst phase as well. The rocks weather reddish-brown, and both arsenopyrite and pyrrhotite (to 1%) have been noted as constituent phases. The most noticeable feature of these rocks is the presence of abundant angular to sub-rounded inclusions of quartz, quartz-mica schist and mildly skarned calcarenite. The fragments occur in all sizes, the largest being somewhat less than a centimetre and a half in diameter.

#### Quartz Microdiorite (Unit 14D)

This unit occurs as rubble in an area west of Fortymile Creek. The rocks are fine-grained and nondescript, containing a few small phenocrysts of biotite. Pyrite-bearing fractures are common and, as a result, the rocks weather a light, rusty orange.

#### Granite Porphyry (Unit 14E)

Rocks of this unit are found as rubble in the same locality as those of 14D. A quartz-eye porphyry of granitic composition, the rock is composed of euhedral quartz phenocrysts, as well as phenocrysts of an unidentified greenish-black mafic mineral, both within a fine-grained, grey groundmass of quartz, plagioclase and potassium feldspar. Weathered specimens of this unit are white in color.

#### Structure

A summary of the deformation affecting rocks in the vicinity of the BANDER and SNATCH claims is provided on the following page.

DEFORMATION AFFECTING ROCKS IN THE AREA  
OF THE BANDER AND SNATCH CLAIMS

S<sub>0</sub> compositional layering

F<sub>1</sub> tight isoclinal folding???

S<sub>1</sub> 1st foliation (schistosity),  
generally parallel to  
compositional layering:  
parallel to axial surfaces  
of isoclinal folds???

F<sub>2</sub> nappe folding related to  
regional overthrusting

S<sub>2</sub> fracture cleavage (parting)  
parallel to axial surfaces  
of nappe folds

F<sub>3</sub> broad open folding related  
to the intrusion of Cretaceous  
igneous rocks

jointing/fracturing: related  
to F<sub>3</sub>

The dominant planar feature in the metasedimentary rocks of the area is the ( $S_1$ ) foliation or schistosity. Bedding and compositional layering ( $S_0$ ) are commonly observed and in all cases appear parallel to the primary schistosity.

Small scale nappe folding related to regional overthrusting occurs throughout the area of the two properties. The axial trend of these folds is ENE/WSW, indicating that thrusting occurred in a NNW direction. An ( $S_2$ ) axial plane cleavage developed parallel to the fold axes is commonly observed, unlike other areas of "Grit" Division rocks where only the compositional layering ( $S_0$ ) and the primary schistosity ( $S_1$ ) can be seen (Plates 5 and 6).

The schistositities are quite variable within the map area, but on the whole the sequence seems to be relatively flat-lying, with dips seldom in excess of  $20^\circ$ . Three dykes have been intruded near parallel to foliation and their trace on the geological map seems to support the concept of an almost flat-lying sedimentary sequence.

An ( $F_3$ ) fold, the McQuesten Antiform, supposedly passes through the southern portion of the BANDER group, but no evidence for this folding was uncovered during the present survey.

Jointing and fracturing is well developed in rocks of the metasedimentary sequence, occurring in a wide variety of orientations. These fractures are often filled with quartz-carbonate veins as shown in Plate 2.



Plate 5: Parting, or fracture cleavage ( $S_2$ ) in rocks of Unit 1F.  
Crenulations affect the original ( $S_1$ ) foliation.



Plate 6: Axial plane cleavage( $S_2$ ), again in rocks of Unit 1F → typical of the small scale, isoclinal "nappe" folding in this area. Both the bedding( $S_0$ ) and the original foliation( $S_1$ ) have been affected by the fold in the photograph.

### Alteration

The "Grit" Division metasediments are of low to moderate metamorphic rank. No alteration or metamorphism is associated with the Cretaceous dyke rocks, with the exception of Unit 14A. The feldspathic rocks of this unit appear well sericitized in all outcrop localities.

### Mineralization

The area of the BANDER and SNATCH claim groups appears devoid of significant mineral occurrences. Arsenopyrite and galena were noted as constituents of quartz-carbonate veins in two localities on the BANDER group. Thin iron and manganese-stained, quartz-filled fractures, occur in rocks of Unit 1F in the northern portion of the SNATCH group, 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 copper, lead, zinc and silver by Bondar-Clegg and Co. Ltd. in their Whitehorse laboratory. All the elements were analyzed by atomic absorption spectrometry following standard perchloric acid extraction. The sample line was tied to Yukon quartz claim post No. 1, YA40486-YA40487 and extended by simple pace and compass; individual samples were collected using a geological pick and kraft paper envelopes.

### Results

A line of thirteen soil samples was collected in the vicinity of several silver highs located during a 1979 geochemical survey. The sampling was completed in its entirety on June 23, 1981. Included with the report is Map 712-1 (SNATCH group, detailed soil grid) at 1:1000 scale showing results for the four analyzed elements. The lead and silver values have been incorporated into a contour map which includes results from an additional survey performed later on during the field season and described in a companion report.

Subdued values in copper and zinc occur along the entire line, while lead and silver reach highs of 450 ppm and 37.5 ppm respectively. The latter highly anomalous values were in confirmation of the 1979 results and prompted further sampling during September of 1981, the results of which are indicated on Map 712-1. The resulting lead-silver anomaly in this area is considered significant and additional sampling and hand trenching are anticipated during 1982.

### Recommendations for Future Work

Anomalous lead and silver values in several of the soil samples collected during June of 1981 necessitated additional sampling in the northern portions of the SNATCH group. This sampling was done during September of the same year and resulted in the discovery of the significant E-W trending anomaly shown on Map 712-1. Hand trenching on the eastern end of the anomaly and expanded geochemical coverage to the west of the existing grid are suggested for 1982. This additional work is recommended despite negative results from hand trenching and double dipole EM surveys on the nearby, nearly identical, May Creek anomaly. Ten of the twelve existing SNATCH claims are now held in good standing until July, 1983, so that the above work can be conducted at leisure during the 1982 field season.

### 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 geological and geochemical work described in this report was conducted by the author, Brian Paul, a geologist with BILLITON CANADA LTD. currently working out 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

|  |               |
|--|---------------|
| 13 Soil samples analyzed for Cu,Pb,Zn,Ag<br>@\$4.10/sample | \$ 53.30      |
| 2 Geologist days @\$100.00/day                             | 200.00        |
| Food and Supplies: 2 man-days @\$12.00/day                 | 24.00         |
| 1.5 Hours Helicopter @\$500.00/hour<br>(casual rate)       | 750.00        |
| Drafting and Interpretation                                | <u>200.00</u> |
|  | \$1,227.30    |

The above work was carried out on June 22 and June 25, 1981

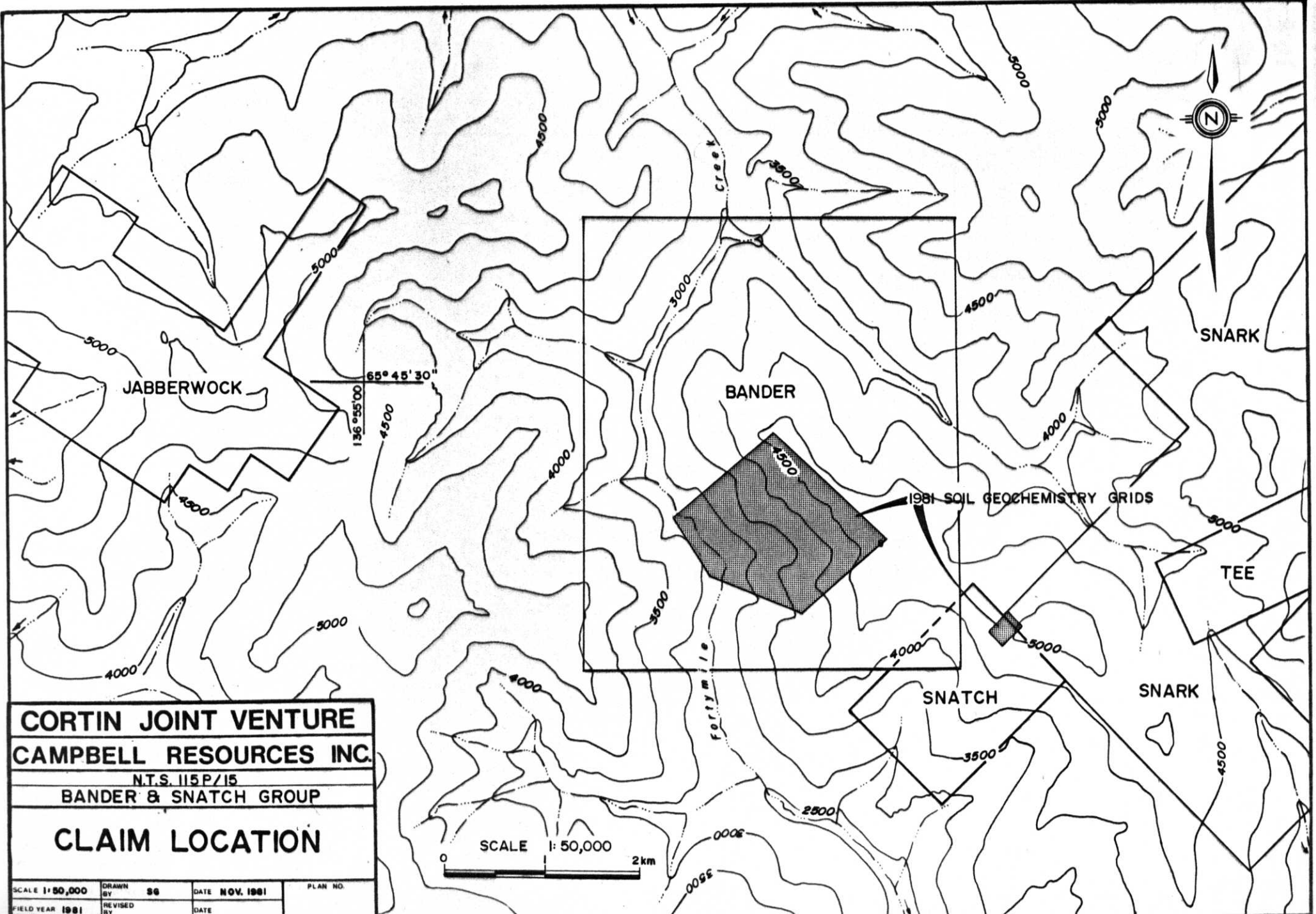
Vancouver, B.C.  
January 12, 1982.

Brian Paul  
Geologist-Cortin J.V.

LIST OF CLAIMS

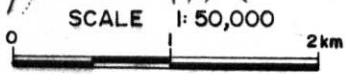
| <u>GRANT NUMBERS</u> | <u>CLAIM NAMES</u> | <u>LOCATION</u> | <u>CLAIM SHEET NO.</u> |
|----------------------|--------------------|-----------------|------------------------|
| YA40486-YA40493      | SNATCH 1-8         | Fortymile Creek | 115-P-15               |
| YA40498              | SNATCH 21          | Fortymile Creek | 115-P-15               |
| YA40500              | SNATCH 23          | Fortymile Creek | 115-P-15               |
| YA40502              | SNATCH 25          | Fortymile Creek | 115-P-15               |
| YA40504              | SNATCH 27          | Fortymile Creek | 115-P-15               |

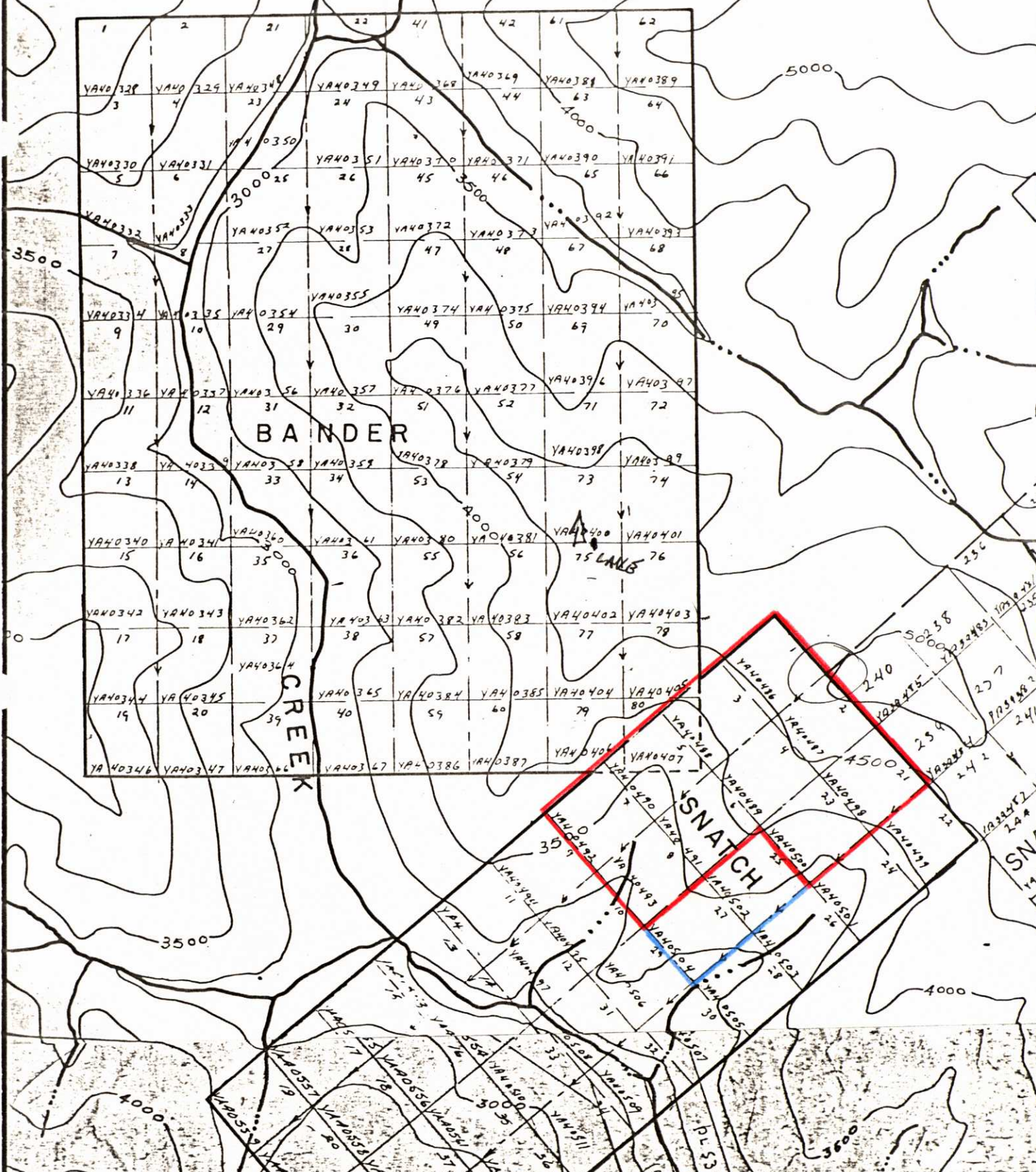
Assessment has been filed for the above claims, sufficient to hold these claims until July 24, 1982, for which this report is representation.



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

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



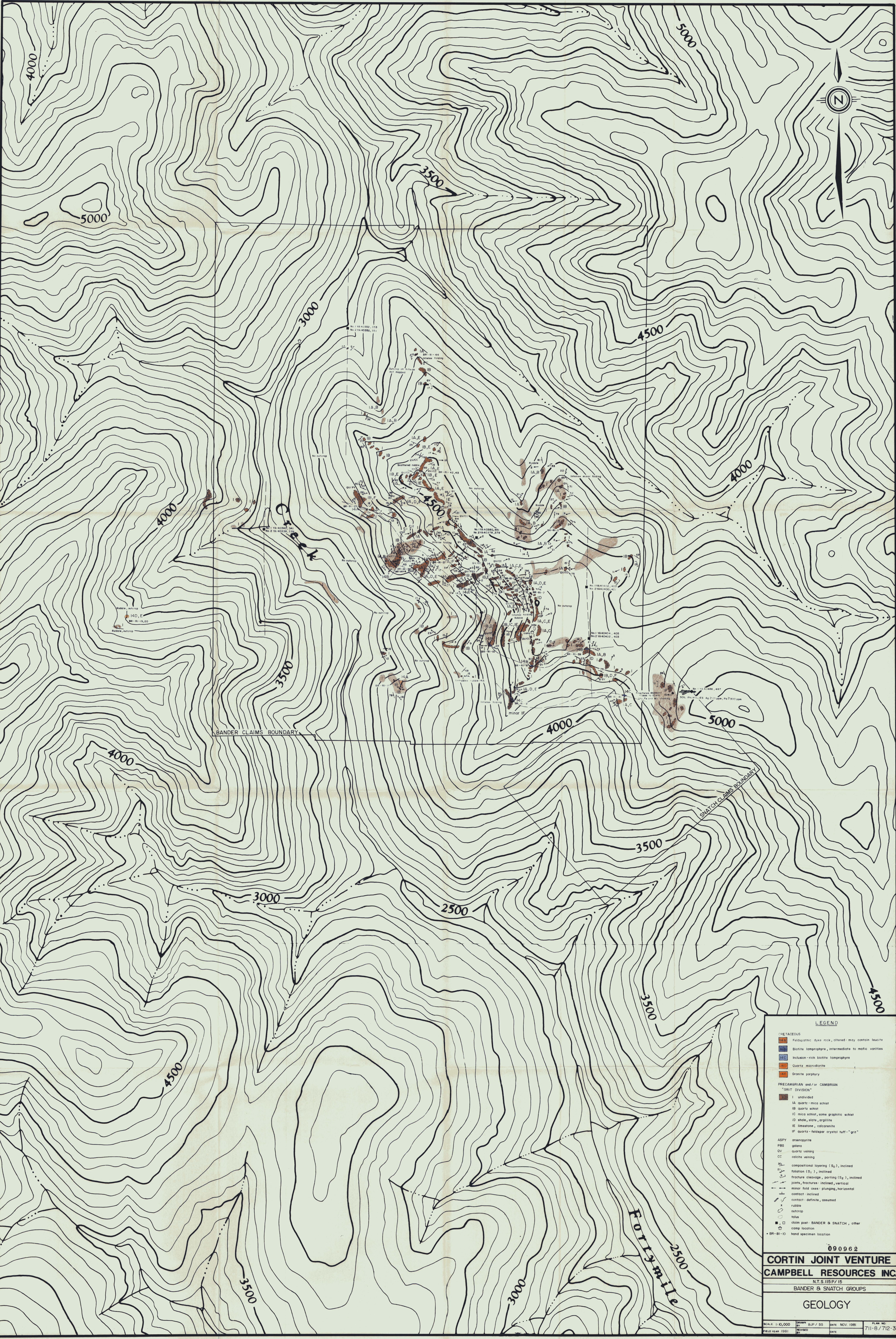


**CORTIN JOINT VENTURE**  
**CAMPBELL RESOURCES INC.**  
 115-P-10, 15  
 Bander & Snatch Groups

CLAIM SKETCH

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





BANDER CLAIMS BOUNDARY

SNATCH CLAIMS BOUNDARY

LEGEND

- RETACEOUS
  - 1 Feldspathic dyke rock, altered; may contain laurite
  - 2 Biotite lamprophyre, intermediate to mafic varieties
  - 3 Inclusion-rich biotite lamprophyre
  - 4 Quartz microdiorite
  - 5 Granite porphyry
- PRECAMBRIAN and/or CAMBRIAN "GRIT DIVISION"
  - 1 undivided
  - IA quartz-mica schist
  - IB quartz schist
  - IC mica schist, some graphitic schist
  - ID shale, slate, argillite
  - IE limestone, calcarenite
  - IF Quartz-feldspar crystal tuff - "grit"
- ASPY arsenopyrite
- PBS galena
- OV quartz veining
- CC calcite veining
- compositional layering (S<sub>0</sub>), inclined
- foliation (S<sub>1</sub>), inclined
- fracture cleavage, porring (S<sub>2</sub>), inclined
- joints, fractures, inclined, vertical
- minor fold axes: plunging, horizontal
- contact: inclined
- contact: definite, assumed
- scarp
- outcrop
- talus
- claim post: BANDER & SNATCH, other
- camp location
- BR-BI-ID hand specimen location

090962

CORTIN JOINT VENTURE  
CAMPBELL RESOURCES INC.

N.T.S. 1:150,000  
BANDER & SNATCH GROUPS

GEOLOGY

SCALE: 1:100,000  
FIELD YEAR: 1981  
DATE: NOV. 1981  
REVISED: [blank]  
PLAN NO.: 711-B/712-3