



CCH MINERALS LTD.

ASSESSMENT REPORT



GEOLOGICAL/LITHOGEOCHEMICAL STUDIES

JABBERWOCK GROUP

CLAIMS 40, 42, 44, 45, 47 AND 49 TO 52

SEPTEMBER 11, 1981

115-P-15

63°48'N 136°57'W

Fredericton, N.B.

24 March, 1982

Brian Paul

Daniel Rota

091008

This report has been examined by
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representative work in the amount
of \$ 900 —

R. Watson
Regional Director, 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. P.O. BOX 37 MAYO YUKON Y0B1M0		

OFFICE DATE STAMP

MAKE OATH AND SAY, THAT :-

1. I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein.

2. 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)

JABBERWOCK 40, 42, 44, 46, 47, AND 49 TO 52

YA41183, 185, 187, 189, 190, AND 192 TO 195

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

In the MAYO Mining District, to the value of at least 914.00

dollars, since the ELEVENTH day of SEPTEMBER 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.)

JABBERWOCK 40, 42, 44, 46, 47, 49 TO 53, 62 AND 63

YA41183, 185, 187, 189, 190, 192 TO 196, 205 AND 206

ALL FOR ONE YEAR

**N.B. # 53, 62 AND 63 HAVE LAPSED:
PAYMENT IN LIEU MADE 1
DAY TOO LATE - REFUND
PENDING**

3. 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)

ONE GEOLOGIST DAY AT \$85.00/DAY	85.00	
ONE HOUR HELICOPTER AT \$450.00/HOUR (CASUAL RATE)	450.00	
THREE WHOLE ROCK ANALYSES (MAJOR, MINOR AND TRACE ELEMENTS) AT \$93.00/SAMPLE	279.00	
DRAFTING/INTERPRETATION	100.00	→ \$ 914.00
PAYMENT IN LIEU*	300.00	→ \$ 1214.00

Sworn before me at MAYO, YUKON
this _____ day of SEPTEMBER 19 81

Notary Public

Applicant.

ALL WORK DONE 11/09/81

* YA41196, YA41205 AND YA41206

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Introduction

The JABBERWOCK claim group is comprised of 33 claims which cover an area of 690 hectares above the headwaters of Fortymile Creek. The claims are owned in their entirety by CCH Minerals Ltd. of Toronto, Ontario. During 1981, a limited amount of prospecting was carried out in the southern portion of the claim group, and the presumed parental intrusive (to Sn mineralization) lying to the south of the claim block in Vancouver Creek was briefly examined and sampled.

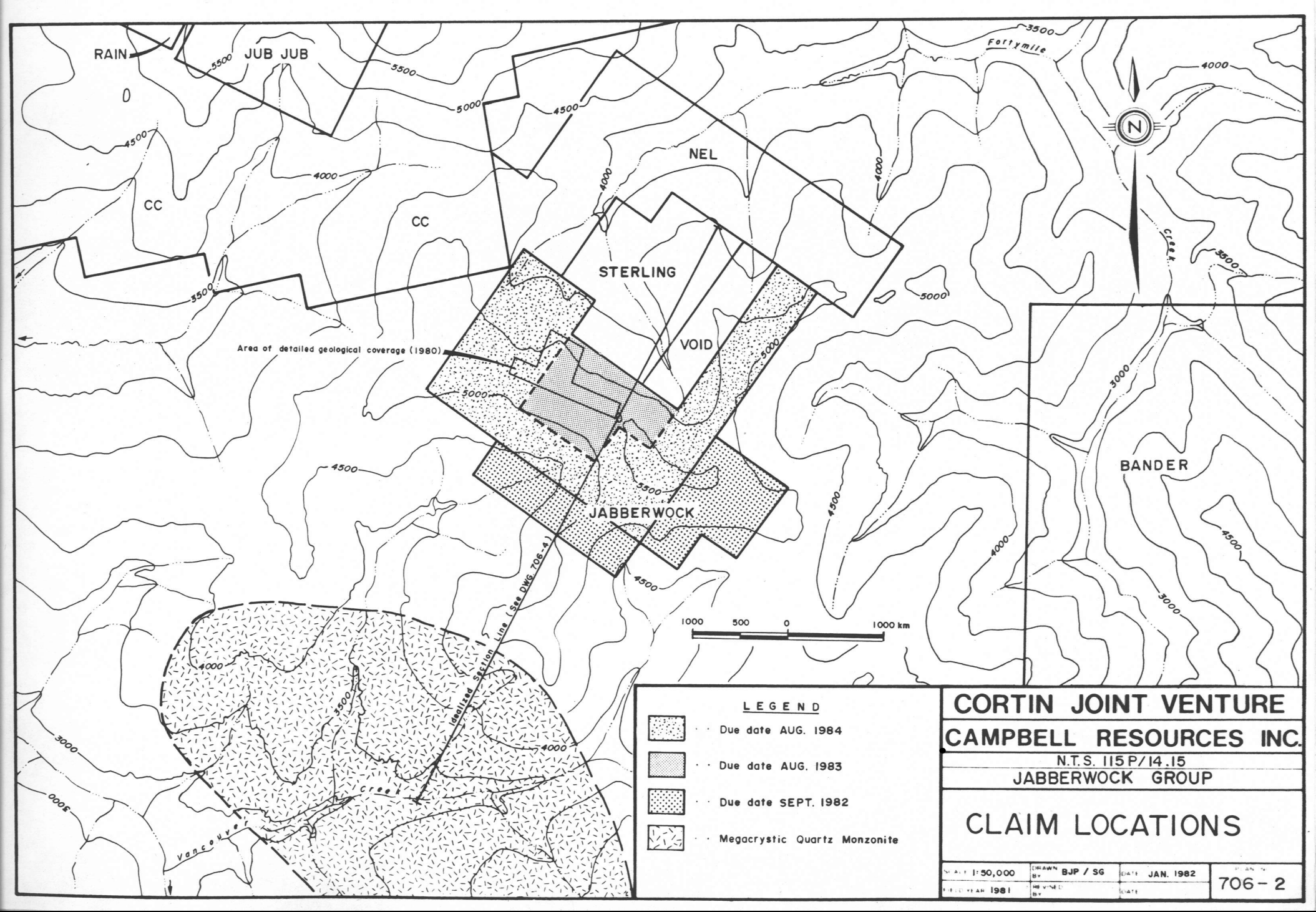
An amount totalling \$900 has been claimed for assessment purposes.

Exploration History

The JABBERWOCK claims were acquired for the Cortin Joint Venture during 1978 by CCH Resources Ltd. on the basis of highly anomalous stream sediment values (tin) in Fortymile Creek. Additional ground was acquired during the fall of 1979.

The STERLING claim group (Silver Standard Mines - Asarco) once covered portions of the existing JABBERWOCK group, and was extensively worked during 1971 and 1972. A silver prospect, it was both trenched and diamond drilled during this initial period of activity.

The NEL claims (Cominco) were staked to the northeast of the existing JABBERWOCK and STERLING claim groups during 1978.







Area of detailed geological coverage (1980)

Uplifted Section Line (See DWG 706-4)



LEGEND

-  · Due date AUG. 1984
-  · Due date AUG. 1983
-  · Due date SEPT. 1982
-  · Megacrystic Quartz Monzonite

**CORTIN JOINT VENTURE
CAMPBELL RESOURCES INC.**

N.T.S. 115P/14.15
JABBERWOCK GROUP

CLAIM LOCATIONS

SCALE 1:50,000	DRAWN BY BJP / SG	DATE JAN. 1982	PROJECT NO. 706-2
FIELD YEAR 1981	REVISION BY	DATE	

These claims were prospected and soil sampled during the following year, and an IP survey was conducted on portions of the claim group during 1980. Tourmaline, arsenopyrite and pyrite bearing breccias carrying accessory amounts of chalcopyrite and cassiterite were discovered in both float and outcrop within the property limits. No work was reported on this claim group during 1981.

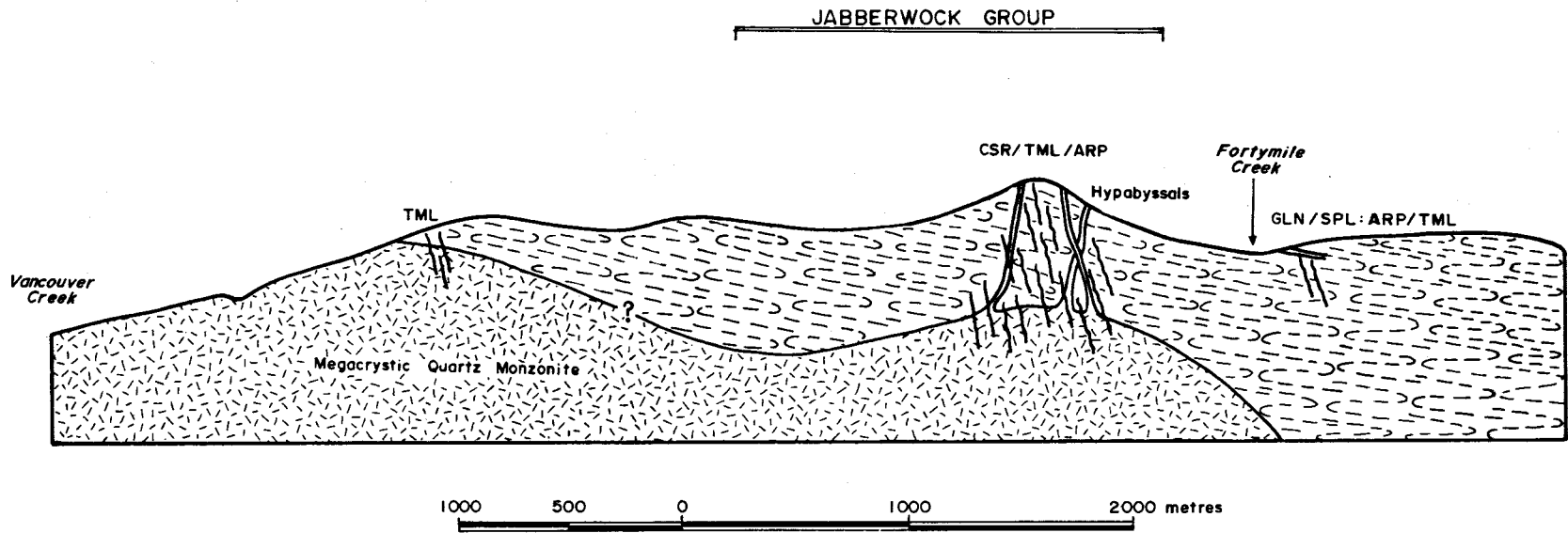
Reconnaissance scale geochemical surveys were carried out on the JABBERWOCK claims during 1978. These were followed up with detailed soil geochemical surveys and geological mapping during the subsequent field season. A limited program of detailed prospecting and geological mapping was conducted in 1980.

Geology

The JABBERWOCK claims are underlain in their entirety by metasedimentary rocks of the Precambrian and/or Cambrian "Grit" Division. The most common lithologies within the map area are quartz schist and quartz-mica schist, with lesser amounts of argillite, calcareous slate and limestone. The sedimentary sequence is relatively flat-lying, with moderate dips to the north and west and to the east and southeast, respectively, on opposite sides of an (F_3) flexure in the southern portion of the property. Although the dominant planar feature in the metasediments is the (S_1) schistosity, compositional layering (S_0) is frequently observed, being in most cases parallel to (S_1). Small scale nappe folding

related to regional overthrusting is well developed within the sequence, the axial trend of the folds being approximately E/W. The sediments appear to be of low to moderate metamorphic rank.

Intrusive rocks of several varieties have been mapped within the area of the claim group, and all are thought to be of Cretaceous age. At least seven small leucocratic plugs or dykes have been outlined along the main ridge crest. These consist of porphyritic to nonporphyritic, quartzofeldspathic igneous rocks which have been largely altered to an assemblage of quartz and sericite. Within the same area can be found a later generation of biotite/K-feldspar porphyry dykes (lamprophyres) of apparent mafic to intermediate composition. In addition, several small intermediate to acid dykes of unknown affinity occur within the property limits. Some of these hypabyssal rocks, especially the altered leucocratic varieties, are thought to take the form of apophyses to an intrusive mass at depth. Approximately $1\frac{1}{2}$ kilometres southeast of the property limits is a large, six square kilometre stock outcropping along Vancouver Creek. The stock is composed of megacrystic quartz monzonite identical in appearance to the Boulder and Sunshine Creek stocks, and to granitic rocks exposed on the EPD group. Tourmalinized metasediments are present in certain areas along the margins of this quartz monzonite. It would appear to be a good "tin" granite, and might well underlie mineralization exposed to the northwest within the confines of the JABBERWOCK group.



- Quartz vein
- Sheeted vein system
- ARP · Arsenopyrite
- CSR · Cassiterite
- GLN · Galena
- SPR · Sphalerite
- TML · Tourmaline
- "Grit" Division Metasediments
- Quartz Monzonite

CORTIN JOINT VENTURE

CAMPBELL RESOURCES INC.

N.T.S. 115P/14,15
JABBERWOCK GROUP

**IDEALIZED SECTION
VANCOUVER CK. - FORTY MILE CK.**

NO. 31680	DRAWN BY BJP/SG	DATE JAN. 82	706-3
FILE YEAR 1981	REVISED BY	DATE	

Jointing and fracturing within the metasedimentary rocks is common, including a small number of fractures which are mineralized. Brecciation is apparently widespread, usually taking the form of veinlets or larger veins to 1½ metres in width. The breccias, altered intrusive rocks and cassiterite mineralization are usually found in close proximity to one another.

Tin, in the form of cassiterite, occurs in vuggy tourmaline and arsenopyrite bearing breccia veins (to 15cm in width), in "dry" fissures with accessory K-feldspar, and also in vuggy quartz/limonite filled fractures. In addition to these three varieties, cassiterite is also found as large crystals in bull quartz veins within the quartz schists. Most of the occurrences found to date are along the main ridge crest, frequently in the talus slopes. Outcrop and talus slope occurrences of cassiterite are distributed over an area of one square kilometre on the JABBERWOCK claims and present an attractive target for future exploration.

Soil and Stream Geochemistry

Tin, zinc, silver and arsenic have been analyzed in soils over much of the original claim block. Anomalous values in tin (≥ 50 ppm) occur in the talus slopes along the central portion of the main ridge. Anomalously high arsenic values (≥ 500 ppm) occur along the entire ridge, forming a broadly circular area of interest coincident with the high tin values. Within this area of interest in 1979 and 1980,

were located a number of mineralized boulders containing both cassiterite and arsenopyrite. Mineralization was discovered "in situ" only after detailed prospecting of the anomalous areas, indicating the necessity of broad geochemical coverage.

Stream sediment and heavy mineral sampling carried out along Fortymile Creek during 1979 confirmed the original anomalies in this creek.

Lithochemistry

Methods

Three samples were collected from the marginal areas of the Vancouver Creek stock, immediately south of the JABBERWOCK claim group. Large samples weighing several kilograms were taken due to the textural inhomogeneity of the quartz monzonite in this area. The samples were submitted to Barringer Magenta in Calgary, Alberta, where they were analyzed for a selected suite of major and minor elements.

Analyses of most of the major and minor elements were done by induction coupled argon plasma spectrometry, after dissolution of the samples with hydrofluoric acid. Barium and silica were determined by a similar method, after a separate digestion utilizing lithium metaborate fusion. Tin, tungsten, fluorine and boron were done by specific techniques, the first two elements being analyzed by x-ray fluorescence, the latter two by emission spectrometry.

The analytical results are presented on the following two pages, along with the results from additional samples collected within the Mayo-McQuesten area. The results are not yet complete, as checks are currently being run on a number of the problem samples. Of concern are the low major element totals in samples EPD-81-02, JW-81-1 and JW-81-2, where SiO_2 and Ba are thought to be errant. The contents of Cs, Be and Zr in sample SK-80-59 are thought to be low as well.

Discussion

Tin deposits, by and large, tend to be associated with rocks of granitic composition. Much effort has been expended during the past fifteen years in trying to delineate the chemical differences between barren granites and those with associated tin occurrences. No unique major element trends have been discovered, despite a tendency in the "tin" granites towards enrichment in silica and K_2O . Known tin provinces generally contain specialized granites which are enriched in one or more trace elements, such as Sn, F, Li, B or Rb. Such granites are common in some provinces, and relatively rare in others, most notably Cornwall. It should be emphasized that there are many examples of tin bearing granites with no apparent chemical specialization.

As a rule, tin granites are easily identified, as they contain significant zones of fracturing and/or alteration, as well as associated mineralization. For this reason,

CHEMICAL ANALYSES OF GRANITIC ROCKS
FROM THE MAYO-MCQUESTEN AREA (I)

	APLITE PORPHYRY	MEGACRYSTIC QRZ MZN	MEGACRYSTIC QRZ MZN	QRZ MZN	MEGACRYSTIC QRZ MZN	APLITE
	SK-80-35	SK-80-55	SK-80-59	SK-80-89	EPD-81-01	EPD-81-02
SiO ₂ , wt. %	75.30 (74.35)	68.60 (71.38)	71.70 (68.80)	64.90 (67.01)	69.90 (70.00)	64.50 (69.66) *
Al ₂ O ₃	14.20 (14.02)	14.10 (14.67)	15.60 (14.98)	15.10 (15.59)	14.80 (14.82)	14.10 (15.23)
TiO ₂	0.22 (0.22)	0.41 (0.43)	0.74 (0.71)	0.47 (0.49)	0.70 (0.70)	0.37 (0.40)
Fe ₂ O ₃	1.77 (1.75)	2.73 (2.84)	4.40 (4.22)	3.98 (4.11)	3.74 (3.75)	2.02 (2.18)
MnO	0.05 (0.05)	0.07 (0.07)	0.09 (0.09)	0.07 (0.07)	0.05 (0.05)	0.04 (0.04)
MgO	0.30 (0.30)	0.57 (0.59)	1.03 (0.99)	1.59 (1.64)	0.81 (0.81)	0.41 (0.44)
CaO	1.07 (1.06)	1.57 (1.63)	2.58 (2.48)	3.52 (3.63)	2.10 (2.10)	0.50 (0.54)
Na ₂ O	3.15 (3.11)	2.78 (2.89)	2.72 (2.61)	2.47 (2.55)	2.75 (2.75)	1.83 (1.98)
K ₂ O	5.22 (5.15)	5.18 (5.39)	5.28 (5.07)	4.61 (4.76)	4.93 (4.84)	8.61 (9.30)
P ₂ O ₅	< 0.06 -	0.10 (0.10)	0.17 (0.16)	0.14 (0.14)	0.18 (0.18)	0.09 (0.10)
	101.28 (100)	96.11 (100)	104.31 (100)	96.85 (100)	99.86 (100)	92.47 (100)
Li, ppm	15	37	15	7	12	11
Rb	430	465	355	168	140	288
Cs	24	26	14*	6	11	13
Be	8	11	5*	5	8	5
Sr	80	168	330	555	284	216
Ba	302	1080	1750	2530	1490	1430*
Pb	-	-	-	-	15	40
Th	-	-	-	-	51	59
Zr	56	67	12*	49	58	39
Sn	< 3	< 3	35	5	5	< 3
W	< 4	< 4	3700	< 4	< 4	< 4
F	1040	2250	2410	712	1530	1050
B	11	33	6	9	18	22
Cu	3	2	2	4	2	< 1
Zn	19	27	43	51	53	45
Mo	1	1	2	1	-	-
Y	46	49	46	16	31	32
K/Rb	101	92	123	228	286	248
Rb/K ₂ O	82	90	67	36	29	33
K/(Csx100)	18	17	31	64	36	55
K/Ba	173	40	25	15	27	50
Ba/Rb	0.7	2.3	4.9	15.0	10.6	5.0
Ba/Sr	3.8	6.4	5.3	4.6	5.2	6.6
Rb/Sr	5.4	2.8	1.1	0.3	0.5	1.3
Mg/Li	121	93	414	1370	407	225
Zr/Sn	-	-	0.3	9.8	11.6	-

* data being rechecked

CHEMICAL ANALYSES OF GRANITIC ROCKS
FROM THE MAYO-MCQUESTEN AREA (II)

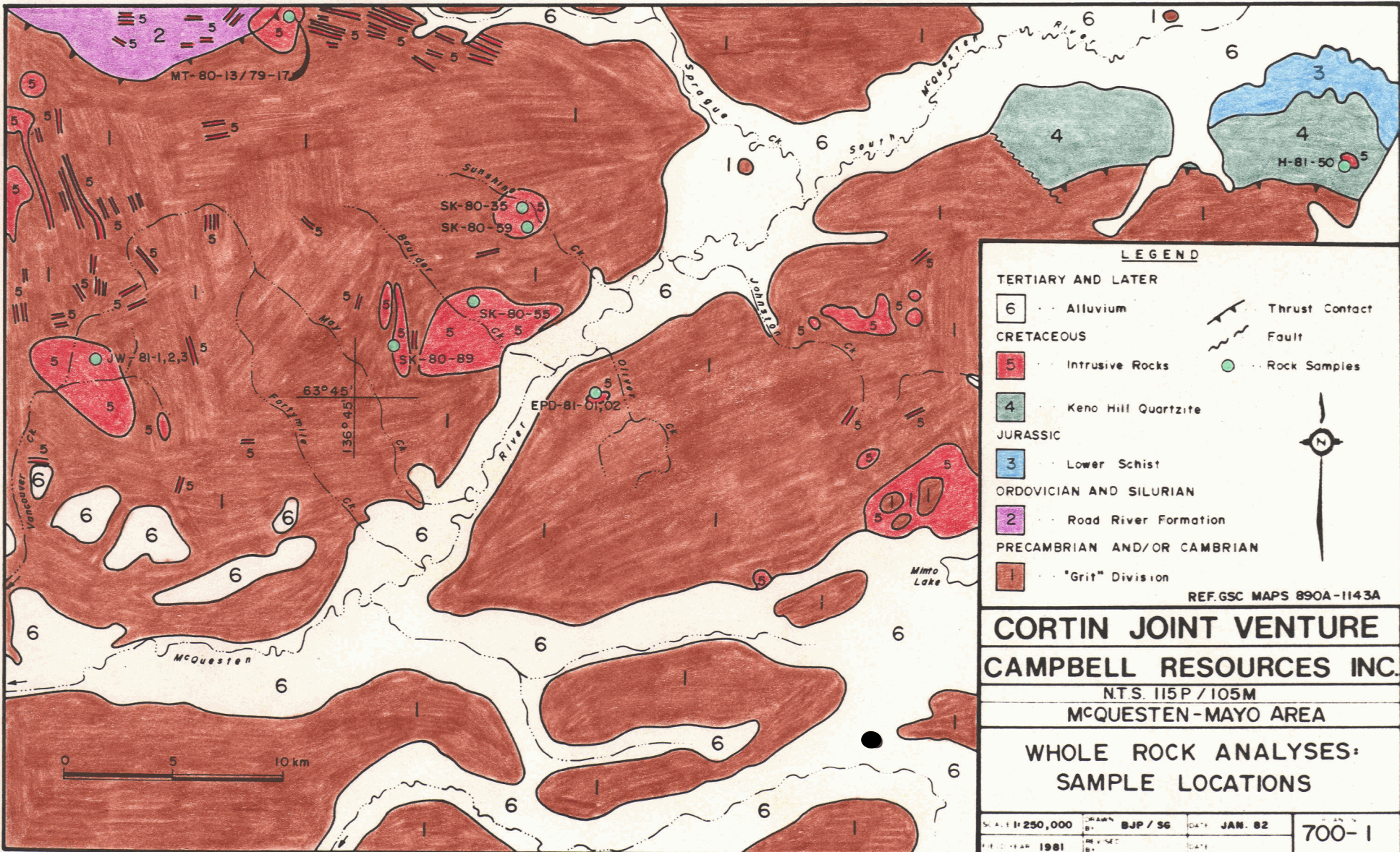
	MEGACRYSTIC QRZ MZN	APLITE	F-MG QRZ MZN	F-MG GRANITE	BIOTITE QRZ MZN
	JW-81-1	JW-81-2	JW-81-3	H-81-50	MT-80-13/ MT-79-17
SiO ₂ , wt. %	66.40 (71.68)*	67.00 (73.26)*	69.50 (72.52)	70.80 (73.44)	66.70 (65.28)
Al ₂ O ₃	13.70 (14.79)	13.20 (14.43)	13.60 (14.19)	14.60 (15.14)	15.10 (14.78)
TiO ₂	0.39 (0.42)	0.21 (0.23)	0.35 (0.37)	0.15 (0.16)	0.61 (0.60)
Fe ₂ O ₃	2.17 (2.34)	1.26 (1.38)	2.33 (2.43)	1.22 (1.27)	5.07 (4.96)
MnO	0.04 (0.04)	0.02 (0.02)	0.04 (0.04)	0.03 (0.03)	0.11 (0.11)
MgO	0.56 (0.60)	0.31 (0.34)	0.53 (0.55)	0.46 (0.48)	2.47 (2.42)
CaO	1.53 (1.65)	0.56 (0.61)	0.98 (1.02)	1.64 (1.70)	4.29 (4.20)
Na ₂ O	2.99 (3.23)	2.69 (2.94)	2.68 (2.80)	3.30 (3.42)	2.22 (2.17)
K ₂ O	4.74 (5.12)	6.20 (6.78)	5.74 (5.99)	4.21 (4.37)	5.44 (5.32)
P ₂ O ₅	0.12 (0.13)	<0.06 -	0.09 (0.09)	<0.06 -	0.17 (0.17)
	92.64 (100)	91.45 (100)	95.84 (100)	96.41 (100)	102.18 (100)
Li, ppm	8	6	13	4	7
Rb	182	385	420	108	204
Cs	15	11	11	5	11
Be	10	7	8	6	7
Sr	168	80	112	192	445
Ba	701*	390*	424	824	1490
Pb	-	-	-	-	-
Th	-	-	-	-	-
Zr	60	42	56	42	56
Sn	<3	<3	<3	<3	5
W	<4	<4	<4	<4	<4
F	1370	376	760	309	1310
B	74	14	9	9	19
Cu	1	2	7	2	19
Zn	15	11	18	190	37
Mo	2	1	2	2	3
Y	29	27	35	13	27
K/Rb	216	134	113	324	221
Rb/K ₂ O	38	62	73	26	38
K/(Csx100)	26	47	43	70	41
K/Ba	56	132	112	42	30
Ba/Rb	3.9	1.0	1.0	7.6	7.3
Ba/Sr	4.2	4.9	3.8	4.3	3.4
Rb/Sr	1.1	4.8	3.8	0.6	0.5
Mg/Li	422	312	246	693	5852
Zr/Sn	-	-	-	-	11.2

* Data being rechecked

lithogeochemical prospecting is of use only in relatively unexplored areas. Stream geochemical surveys have proved remarkably effective in the Mayo-McQuesten area, and geochemical characterization of the granitic rocks has not been required. Still, a detailed petrological examination of the granitic rocks was long overdue, for which the present study makes some amends.

Eleven samples were assembled from selected intrusive bodies in the Mayo-McQuesten area, as shown on Map 700-1. The sample suite is biased in that the intrusive bodies, without exception, are granitic in composition and have associated tin occurrences. A comparison with other intrusive rocks in the area is difficult, as the data base is quite limited. Major and minor element contents in six composite samples of granitic rocks from the Keno Hill area are briefly discussed in a recent publication by the Geological Survey of Canada (Gleeson and Boyle, 1980). Major element analyses of the quartz monzonite body occurring at the Sheelite Dome tungsten prospect are reported in a paper by Kuran et al (1982). K/Ar dating on the latter intrusive yielded a minimum age of 90 m.y., consistent with age dates of 78 to 122 m.y. reported for granitic rocks in the Keno Hill area (Sinclair et al, 1980).

Only a brief examination of the data has been possible, but several points are worth mentioning. The rocks are chemically dissimilar and the trace element contents appear to coincide with the most attractive granites. The intrusive



LEGEND

- TERTIARY AND LATER**
 6 Alluvium
- CRETACEOUS**
 5 Intrusive Rocks
- JURASSIC**
 4 Keno Hill Quartzite
 3 Lower Schist
- ORDOVICIAN AND SILURIAN**
 2 Road River Formation
- PRECAMBRIAN AND/OR CAMBRIAN**
 1 "Grit" Division
- Thrust Contact
 Fault
 Rock Samples
- REF.GSC MAPS 890A-1143A

CORTIN JOINT VENTURE
CAMPBELL RESOURCES INC.

N.T.S. 115P/105M

MCQUESTEN-MAYO AREA

**WHOLE ROCK ANALYSES:
 SAMPLE LOCATIONS**

SCALE: 1:250,000	DRAWN BY: BJP / SG	DATE: JAN. 82	700-1
REVISED YEAR: 1981	REVISED BY:	DATE:	

rocks collected from the Sunshine Creek, Boulder Creek and Vancouver Creek stocks are apparently the most highly differentiated. Less attractive would appear to be the quartz monzonite body exposed on the EPD group, and the least differentiated intrusives seem to be the MAHTIN and Fortune Creek granites, and the Molar granodiorite. For comparative purposes, the average major and rare element contents of specialized granites in association with tin deposits (after Tischendorf, 1977) have been tabulated on an accompanying page. Several of the more highly differentiated examples from the present survey have many of the chemical attributes of an "acceptable" tin granite. Of particular note are the Sn-W results from sample SK-80-59. If the analyses (35ppm Sn, 0.37% W) are correct, this sample will almost certainly contain accessory tungsten mineralization, probably in the form of scheelite.

The presence in the area of Mt. Haldane of stream sediments with anomalous amounts of Mo, significant occurrences of scheelite and cassiterite, an aplite porphyry dyke system, quartz veining and peripheral low-temperature vein deposits of Pb and Zn indicated that the area might conceivably host a Mo-W-Sn stockwork deposit. Intrusive rocks associated with deposits of this type are characterized by high silica contents (>74%), less than 1% CaO, high B, F, Rb/K₂O, Li, Nb, Sn and U, and anomalously low Ba, Sr and Zr. Sample H-81-50, collected from the Fortune Creek basin, bears little resemblance to the ideal, meaning that a molybdenum system is unlikely in this particular area.

MAJOR AND RARE ELEMENT CONTENT OF SPECIALIZED
GRANITOIDS IN ASSOCIATION WITH TIN DEPOSITS

(after Tischendorf, 1977)

SiO ₂	73.38 ± 1.39 (%)	MnO	0.045 ± 0.040
TiO ₂	0.16 ± 0.10	MgO	0.47 ± 0.56
Al ₂ O ₃	13.97 ± 1.07	CaO	0.75 ± 0.41
Fe ₂ O ₃	0.80 ± 0.47	Na ₂ O	3.20 ± 0.61
FeO	1.10 ± 0.47	K ₂ O	4.69 ± 0.68
F	3700±1500 (ppm)	Be	13±5
Rb	580±200	W	7±3
Li	400±200	Mo	3.5±2
Sn	40±20		

Lithogeochemical results aside, the granitic rocks examined during the present study can all be considered tin granites in that they are associated in one form or another with tin mineralization. All are granitoid in composition, with textures ranging from aplite and aplite porphyry through hypidiomorphic granular varieties to megacrystic quartz monzonite and pegmatite. Greisen zones are relatively common along the margins of the Sunshine Creek, Boulder Creek and Vancouver Creek stocks and greisen bordered quartz veins are present on Mt. Haldane. Tourmalinization is associated with the Sunshine Creek, Boulder Creek and Vancouver Creek intrusive bodies, as well as the MAHTIN quartz monzonite and the mineralized vein system on the EPD group. The only intrusive rocks which look particularly unattractive in the field are those of the Molar granodiorite and MAHTIN quartz monzonite.

A relatively high initial $^{87}\text{Sr}/^{86}\text{Sr}$ ratio*, probably typical of granitic rocks in the Mayo-McQuesten area, was obtained from the quartz monzonite intrusive at the Scheelite Dome prospect (Kuran et al, 1982).

These high initial ratios are thought to be the result of the assimilation of radiogenic strontium from the sialic crust in which the magmas were generated and ultimately arose. Quartz monzonite compositions, peraluminous geochemistry and high initial strontium isotope ratios are all typical of "S-type" granites derived from the ultrametamorphism

* 0.7121.

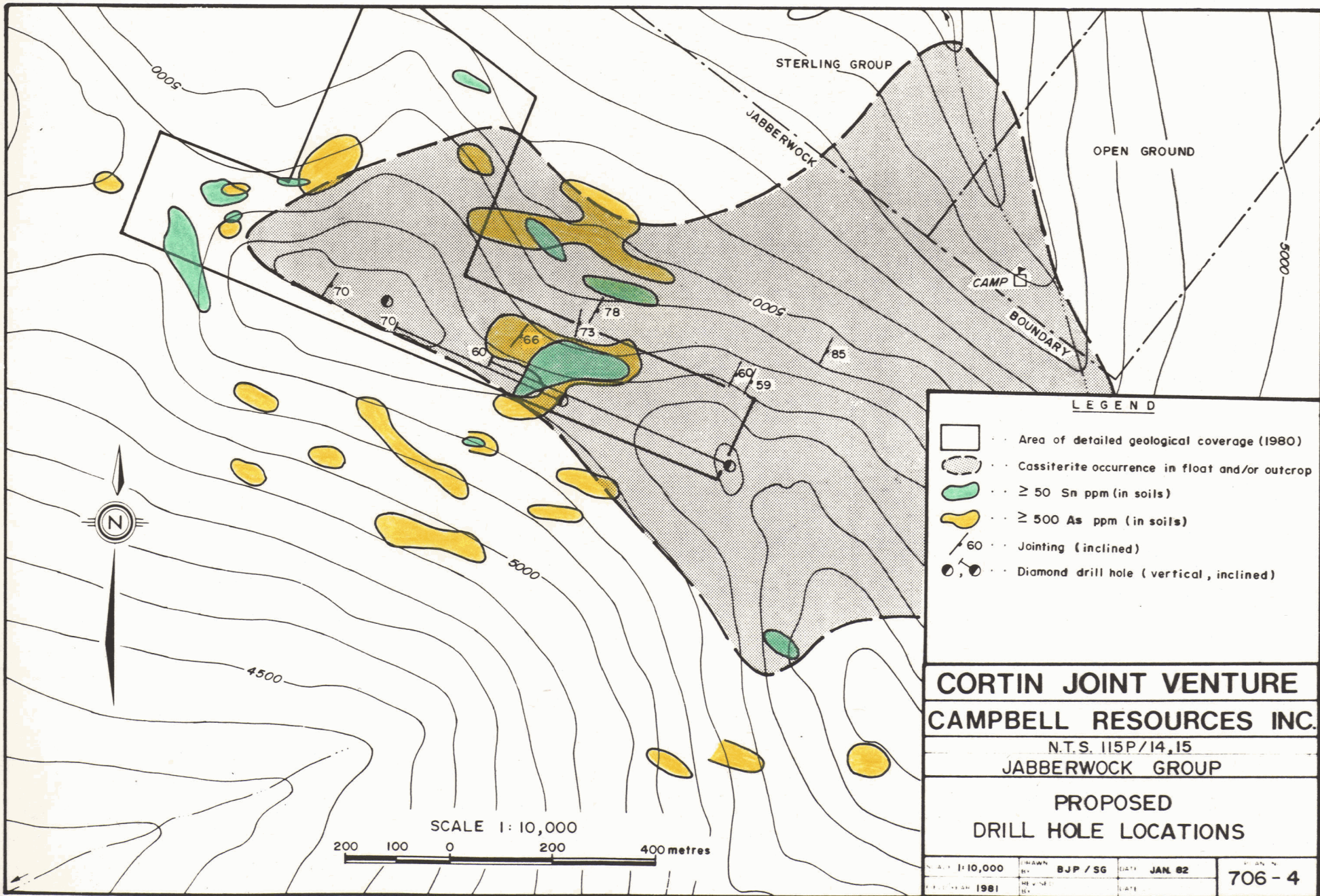
of crustal rocks. These rocks are, in all likelihood, the source of the lithophile elements tin and tungsten.

Recommendations for Future Work

Almost all of the surface work on the JABBERWOCK claims was completed as of August, 1980. The presence of mineralization along the central portions of the main ridge is encouraging enough that a modest program of diamond drilling is proposed prior to the end of the 1983 season. Since the showings at surface appear to be of very low grade, we would be hoping to intersect a more intensely mineralized, sheeted vein system or stockwork at depth. The possibility of a granitic hosted tin deposit at depth cannot be ruled out either. Subsurface information is essential, even if a well-defined drill target is not in existence at surface.

Approximately 750 to 900 metres of diamond drilling are recommended in three deep holes. At least one of these holes should be drilled vertically in the area of enhanced surface geochemistry, while the remaining holes can be drilled at steep angles across the dominant fracture trend. Tentative locations for the three drill holes are shown on Plan 706-4.

The surface showings on the JABBERWOCK group look attractive at the moment and every effort should be made to test the property at depth. Should no drilling be done during the coming field season, a small amount of surface work is recommended in order to hold the peripheral claims in the south.



LEGEND

- Area of detailed geological coverage (1980)
- Cassiterite occurrence in float and/or outcrop
- ≥ 50 Sn ppm (in soils)
- ≥ 500 As ppm (in soils)
- 60 Jointing (inclined)
- Diamond drill hole (vertical, inclined)

**CORTIN JOINT VENTURE
CAMPBELL RESOURCES INC.**

N.T.S. 115P/14,15
JABBERWOCK GROUP

**PROPOSED
DRILL HOLE LOCATIONS**

SCALE 1:10,000	DRAWN BY: BJP / SG	DATE: JAN 82	DRAWN BY: 706 - 4
1981	REVISED BY:	LATE	

References

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- Boyle, R.W. and Gleeson, C.F. (1980): The lithogeochemistry of the Keno Hill District, Yukon Territory: GSC Paper 77-31, 19 pp.
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STATEMENT OF QUALIFICATIONS

The work described in the present report was carried out under the direction of D. Rota of Toronto, Ontario. Mr. Rota, a Project Geologist with Billiton Canada Ltd., was seconded to the Cortin Joint Venture during the 1981 season. He holds a B.Sc. degree in geology from Laurentian University in Sudbury, Ontario and has practiced his profession continuously for a period of twelve years in a variety of geological environments within Canada.

The field work on this project was carried out by Brian Paul, also an employee of Billiton Canada Ltd. Mr. Paul has been associated with the Cortin Joint Venture since May of 1979. He holds a B.Sc. (Hons) degree 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

3 Whole Rock Analyses (Major, Minor and Trace Elements) @ \$93.00/sample	\$ 279.00
1 Geologist Day @ \$85.00/day	\$ 85.00
1 Hour Helicopter @ \$450.00/hour (Casual Rate)	\$ 450.00
Drafting and Interpretation	\$ 100.00
	<hr/>
	\$ 914.00

The above work was completed on September 11, 1981.

Fredericton, N.B.
24 March, 1982

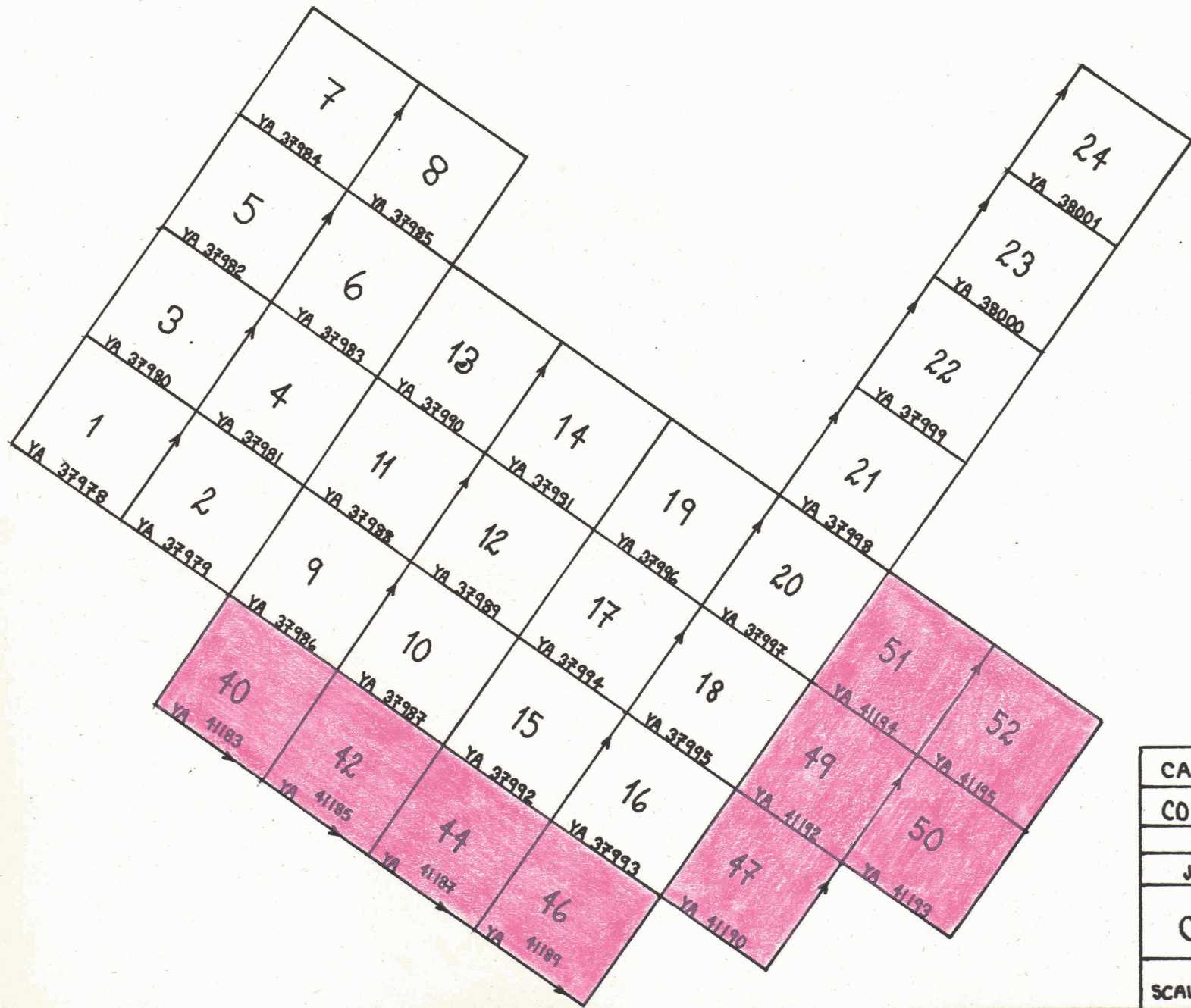
Brian Paul

Brian Paul
Geologist,
Billiton Canada Ltd.,
Cortin Joint Ventrue.

LIST OF CLAIMS

Claim Numbers	Grant Number	Location	Renewal Date
Jabberwock 11,12,13,14 and 19	YA37988 to 991, 996	headwaters, Fortymile Ck	18 August, 1983
Jabberwock 1 to 10, 15 to 18 and 20 to 24	YA37978 to 987, 992 to 995, 997 to 979, 38000,001	headwaters, Fortymile Ck	18 August, 1984
Jabberwock 40,42,44,46,47 and 49 to 52	YA41183,185,187,189,190 and 192 to 195	headwaters, Fortymile Ck	24 September, 1982

Assessment work has been filed on Jabberwock claims 40,
42,44,46,47 and 49 to 52 sufficient to hold these claims
until September 24, 1982, for which this report is representation.



CAMPBELL RESOURCES INC.	
CORTIN JOINT VENTURE	
NTS 115P-15	
JABBERWOCK GROUP	
CLAIM SKETCH	
SCALE 1:20000	24/03/82