

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

1975 ASSESSMENT REPORT

BOB GROUP CLAIMS

BONNET PLUME RIVER AREA

YUKON TERRITORIES

NTS 106 C/10

64° 33' NORTH LATITUDE

133° 00' WEST LONGITUDE



AUGUST 6, 1975

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

\$ 3062.91

[Signature]

Resident Geologist or
~~Resident Mining Engineer~~

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

[Signature]

B.R. BAXTER
Supervising Mining Recorder

Commissioner of Yukon Territory

3062.91

K.R. PRIDE

090025

090025

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GEOLOGICAL AND GEOPHYSICAL REPORT
ON THE BOB GROUP OF MINERAL CLAIMS
SITUATED AT 64° 34' N. LAT, 133° 00' W. LONG

LOCATED CLAIMS ON WHICH ASSESSMENT CREDITS ARE REQUESTED:
IN THE MAYO MINING DIST. OF THE YUKON TERRITORIES

CLAIM	RECORD NO.	DATE RECORDED	ASSESSMENT	AMOUNT
BOB #1	Y 96447	August 27, 1974	Credit	\$400.00
BOB #2	Y 96448	August 27, 1974	4 years	400.00
BOB #3	Y 96449	August 27, 1974	4 years	400.00
BOB #4	Y 96450	August 27, 1974	4 years	400.00
BOB #5	Y 96451	August 27, 1974	4 years	400.00
BOB #6	Y 96452	August 27, 1974	4 years	400.00
BOB #7	not available	July 29, 1975	4 years	400.00
BOB #8	" "	July 29, 1975	4 years	400.00
BOB #9	" "	July 29, 1975	4 years	400.00
BOB #10	" "	July 29, 1975	4 years	400.00
BOB #11	" "	July 29, 1975	4 years	400.00
BOB #12	" "	July 29, 1975	4 years	400.00
BOB #13	" "	July 29, 1975	4 years	400.00
BOB #14	" "	July 29, 1975	4 years	400.00
BOB #15	" "	July 29, 1975	4 years	400.00
BOB #16	" "	July 29, 1975	4 years	400.00
BOB #17	" "	July 29, 1975	4 years	400.00
BOB #18	" "	July 29, 1975	4 years	400.00
BOB #19	" "	July 29, 1975	4 years	400.00
BOB #20	" "	July 29, 1975	<u>4 years</u>	<u>400.00</u>
			80 claim years	8,000.00

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

SUMMARY

The Bob group, consisting of 20 claims, is located in the Bonnet Plume River area within the Mayo Mining District, 115 miles N.NE. of MAYO in the Yukon Territories. The claims were staked in August of 1974 and July of 1975 to protect areas of significant lead and zinc sulphide mineralization, occurring within a Lower Cambrian Sekwi Formation dolomite unit. A preliminary program involving geological mapping on a scale of 1000 feet/inch, detailed prospecting and a six (6) line mile and geophysical I.P. survey was conducted during the last two weeks in July, 1975. The main showings occur in algal stromatolitic portions of the dolomite where ferrodolomitization has increased the primary porosity, providing open spaces for sulphide deposition. Coarse sphalerite, galena and pyrite occur in these porous stromatolitic zones as elongate discontinuous bands. The resulting texture resembles the zebra textures found in many algal stromatolitic dolomites characteristic of supra^atidal environments.

INTRODUCTION

A. TENURE - OWNERSHIP

The Bob group consisting of 20 claims served 100% by Cominco, were staked in August, 1974 and July, 1975. Assessment work will be required by August 27, 1975.

<u>CLAIM</u>	<u>RECORD NO.</u>	<u>STAKED BY</u>	<u>DATE RECORDED</u>	<u>RECORDED HOLDER</u>
BOB #1	Y 96447	A.B. Mawer	August 27, 1974	Cominco Ltd.
BOB #2	Y 96448	A.B. Mawer	August 27, 1974	Comonco Ltd.
BOB #3	Y 96449	A.B. Mawer	August 27, 1974	Cominco Ltd.
BOB #4	Y 96450	A.B. Mawer	August 27, 1974	Cominco Ltd.
BOB #5	Y 96451	A.B. Mawer	August 27, 1974	Cominco Ltd.
BOB #6	Y 96452	A.B. Mawer	August 27, 1974	Cominco Ltd.
BOB #7	not available	M. Taylor	July 29, 1975	Cominco Ltd.
BOB #8	" "	M. Taylor	July 29, 1975	Cominco Ltd.
BOB #9	" "	M. Taylor	July 29, 1975	Cominco Ltd.
BOB #10	" "	M. Taylor	July 29, 1975	Cominco Ltd.
BOB #11	" "	M. Taylor	July 29, 1975	Cominco Ltd.
BOB #12	" "	M. Taylor	July 29, 1975	Cominco Ltd.
BOB #13	" "	K.R. Pride	July 29, 1975	Cominco Ltd.
BOB #14	" "	K.R. Pride	July 29, 1975	Cominco Ltd.
BOB #14	" "	K.R. Pride	July 29, 1975	Cominco Ltd.
BOB #15	" "	K.R. Pride	July 29, 1975	Cominco Ltd.
BOB #16	" "	K.R. Pride	July 29, 1975	Cominco Ltd.
BOB #17	" "	K.R. Pride	July 29, 1975	Cominco Ltd.
BOB #18	" "	K.R. Pride	July 29, 1975	Cominco Ltd.
BOB #19	" "	K.R. Pride	July 29, 1975	Cominco Ltd.
BOB #20	" "	K.R. Pride	July 29, 1975	Cominco Ltd.

B. HISTORY

Prior to Cominco's involvement in the Bonnet Plume River area, activity was initiated by the Barrier Reef discovery of zinc mineralization near the confluence of Goz Creek and the Bonnet Plume River in 1973.

The Bob group was staked by Cominco personnel during the course of a reconnaissance program in 1974 while carrying out stratigraphic studies of Proterozoic and Paleozoic Formations.

In July, 1975 additional claims were staked prior to the 1975 preliminary exploration program which involved geological mapping, detailed prospecting and a geophysical I.P. survey.

C. LOCATION AND ACCESS

Physiographically the Bob group lies within the northern Selwyn Mountains of the Yukon Territory approximately 115 air miles northeast of Mayo in the Bonnet Plume River area.

The claims lie within the Mayo Mining District, with coordinates of 64° 33' north latitude and 133° 00' west longitude and is located on the N.T.S. claim sheet 106 C/10.

The region is topographically one of high relief, the higher peaks reaching over 8,500 feet a.s.l. The Bob group is situated between 4500 ft. and 7500 feet a.s.l.

Access to the property is by float-equipped fixed-winged aircraft from Mayo 110 air miles northeast to Pinguicula Lake then 15 miles southeast via helicopter to the property.

GEOLOGY

A. REGIONAL SETTING

The Bob group occupies a small area underlain predominantly by Lower Paleozoic (Cambrian) rocks which were deposited in a supratidal to shallow marine environment on the northwestern margin of the Selwyn Basin. The Selwyn Basin, covering much of eastern-central Yukon and western Northwest Territories, is predominantly a clastic basin 200 miles long and 70 miles wide flanked on the east by the MacKenzie Arch and on the west by the Bonnet Plume High. It is believed that this basin was well established by Lower Paleozoic time.

In the Bonnet Plume River area, shallow-water sandy dolomites, sandstones and quartzites of Early Cambrian age (Backbone Ranges Formation) overly the Upper Proterozoic Hadrynian Sheepbed Formation shales with slight unconformity. It seems probable that the Backbone Ranges Formation formed part of a transgressive quartz-arenite, dol-arenite blanket-like deposit which may have been somewhat continuous to Upper Cambrian (Sekwi Formation) time if, as it seems probable, the MacKenzie Arch and the Bonnet Plume High were emergent during Early Cambrian time.

Carbonates and clastics of the Sekwi Formation, which is locally as much as 3000 feet thick, contain many features clearly of shallow water origin. Towards the southwest on the Bonnet Plume River, the Sekwi Formation shallow-water clastics and shelf carbonates give way to dark grey shale containing archeocyathid mounds and thin-bedded limestones characteristic of slope and basinal (deeper-water) environments. Farther to the east these Lower Cambrian rocks are lithologically similar and possibly continuous with the Middle Cambrian and younger Road River Formation shales which are the basinal equivalents of shelf carbonates of Middle Cambrian to Middle Devonian age deposited as widespread blankets throughout the entire Selwyn Basin.

B. STRATIGRAPHY

In the Bonnet Plume River area carbonate and clastic strata represent a semi-continuous depositional history from Proterozoic (Helikian) to Mississippian time. The principle formations present within the stratigraphic sequence are the Sekwi Formation and the Mount Kindle Formation.

Upper Cambrian

Sekwi Formation

Although the formation overlies clastic rocks of the Backbone Ranges Formation, in this locality it seems probable that the Sekwi Formation is at least in part correlative with the upper part of the Backbone Range Formation.

The base of the section is marked by 100 meters of bright orange and buff yellow weathering stromatactoid dolarenites, in part sandy, silty and calcareous. Sphalerite, galena and pyrite occur within the algal stromatolitic portions of the unit.

The overlying rocks (approximately 150 meters thick) include several members of thin to thick-bedded, locally laminated and crossbedded, brown, purple-maroon, grey and white quartzite, which weather dark grey.

The top of the Sekwi Formation comprises approximately 175 meters of fine-grained, thin-bedded buff and olive-grey weathering calcareous siltstone with pods and rip-up clasts of light grey, fine-grained impure limestone. The limestone pods, ranging in size from 2 cm to 1/2 meter thick and 1/2 meter to 2 meters long, impart a mottled appearance to the rocks.

The Sekwi Formation is locally fossiliferous and contains numerous genera of Lower Cambrian trilobites.

ORDOVICIAN

Mount Kindle Formation

The Mount Kindle Formation consists of a monotonous succession of uniform, medium to dark grey, finely crystalline and arenaceous, light grey weathering dolomites and minor limestone. Locally the more arenaceous portions show characteristic bioturbation textures, indicative of shallow-water marine deposition. No fossils were noted from the 50 meter section of Mount Kindle Formation strata.

C. MINERALIZATION

The discovery showings consisting of coarse galena, sphalerite and pyrite are on both banks of a north flowing creek. Mineralization occurs intermittently down dip for approximately 100 feet and approximately 50 feet along strike. It appears that the mineralization is stratabound being lenticular and roughly parallel to bedding in the Sekwi Formation massive orange weathering stromatolitic dolomite unit. This dolomite host unit is creamy brown in colour and weathers in shades of buff to orange and brown. Generally the rock is massive, microcrystalline, non porous and generally a poor host for mineralization. Locally, ferrodolomitization of lenticular stromatolitic patches has increased the primary porosity to provide open space for sulphide deposition. The high grade showings are characterized by coarse galena and sphalerite replacing (?) dolospar and void spaces within the stromatolitic zones.

CONCLUSIONS

The 1975 program of 1000 scale mapping, and detailed prospecting revealed no additional attractive showings that would compare with the original discovery showings.

The geophysical I.P. survey suggests some weak responses towards the southern portions of the main showing area.

It is recommended that the claims be retained as assessment credits total 80 claim years which amounts to 4 years credit for each of the 20 claims. The 20 claims will therefore come due in August and July 1979.

Report by:

K. R. Pride

K. R. Pride
Assistant Geologist

Endorsed by:

D. W. Heddle

D.W. Heddle, P.Eng.

Approved for

Release by:

W. T. Irvine

W.T. Irvine, P.Eng.

Distribution:

Mining Recorder (3)

Western District (1)

KRP

Attachments

Affidavit

Exhibit "A" - Statement of Expenditures

Plate 1 Location Map Scale: 1" = 80 miles

Plate 2 Location Map Scale: 1" = 10 miles

Plate 3 Claim Map Scale: 1" = 1/2 miles

Plate 4 Geology Map Scale: 1" = 1000 feet

EXHIBIT "A" STATEMENT OF EXPENDITURES
GEOLOGICAL REPORT ON THE BOB GROUP CLAIMS
SITUATED AT
64° 33' NORTH LATITUDE
133° 00' WEST LONGITUDE

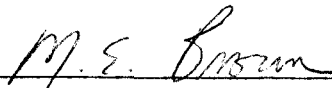
SALARIES	K.R. PRIDE	8 DAYS @ \$100.00/DAY	\$ 800.00
	D. HILKEWICH	8 DAYS @ \$75.00/DAY	600.00
			687.00
TRANSPORTATION	HELICOPTER AND FIXED-WINGED AIRCRAFT		297.00
			297.00
CAMP COSTS			<u>372.91</u>
			\$3,062.91

SIGNED

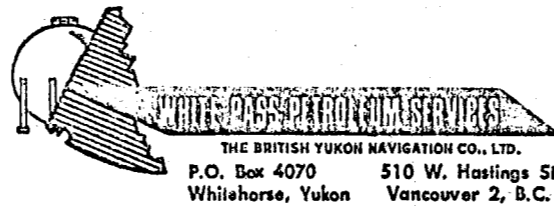


K.R. PRIDE
ASSISTANT GEOLOGIST

THIS IS EXHIBIT "A" TO THE STATUTORY DECLARATION OF EXPENDITURES RELATING TO THE GEOLOGICAL SURVEY DECLARED BEFORE ME ON THE 7th DAY OF AUGUST, 1975.



A NOTARY PUBLIC IN AND FOR THE
PROVINCE OF BRITISH COLUMBIA



THIS IS YOUR INVOICE

DELIVERY INVOICE NO. 931894

STATION <i>MAYO</i>	DATE <i>FEB 7 1975</i>
SHIPPED TO	TRUCK NO. <i>1</i>
	TRIP NO.

SOLD TO (PRINT) <i>COMINCO</i>	19511	CUSTOMER'S <i>Acc't. 19511</i> ORDER OR REQ. NO. <i>5BB-187</i>
ADDRESS	WP. NO.	LOC.
		DELIVERED BY <i>B. K. L. T. O.</i>

PRODUCTS DELIVERED	SIZE OF PACKAGE	CODE	QUANTITY	PRICE	AMOUNT
<i>100/130</i>	<i>100 DRS</i>		<i>3500</i>		
<i>100/130</i>	<i>100 DRS</i>		<i>4590</i>	<i>8.13</i>	<i>4007 07</i>
<i>JP4</i>	<i>25 DRS</i>		<i>1125</i>	<i>734</i>	<i>825 75</i>
<i>232-28-4430 #687</i>					
<i>K.R. Price</i>					
TAX (SPECIFY)			<i>5715 GALS. @ .02</i>		<i>114 30</i>
PRODUCTS RECEIVED	RECEIVED PAYMENT				
BY <i>[Signature]</i>	CASH _____	DRUM CHARGES	<i>127</i>	<i>25.00</i>	<i>3175 00</i>
APPROVED _____	CHEQUES _____	DRUM CREDITS			<i>()</i>
CHECKED _____	EXCH. _____	TERMS - NET CASH (NO DISCOUNT)		TOTAL	<i>8122 12</i>
	TOTAL _____				

FORM FET 855 65M 73



TRANS NORTH TURBO AIR (1971) LTD.
 BOX 4338, WHITEHORSE, YUKON
 TELEPHONE (403) 668-2177 • TELEX 036-B-290

CHARTERER

Cominco

BILLING ADDRESS

FUEL \$ OIL-X	TNTA FUEL USED	HRS.-GALS.	FROM
TNTA CUST.			
✓	2.0	1425. MA	

ACCOUNT NUMBER 695

3695

INVOICE DATE

27 02 75

AREA
B.C.
YUKON
NWT
ALTA.

A/C TYPE

AIRCRAFT REGISTRATION C

DHC2 (AKW) F0E1

FLIGHT DATE

DAY	MONTH	YEAR
1	5	02 75

PURCHASE ORDER NO.

SBB187

FROM	MILES	HOURS	ZONE	FREIGHT LBS.	NO. OF PASS. -REMARKS
MA					
TO PINOVICULA	110	1.0			4x45'S
MA	110	1.0			
232-28-4430					
3/4/75					
Stephen B. Butrenchuk					
K.P. Price					
Fuel Deal					

3526012	297 00

220 e 135 297 00

TERMS: ONE PERCENT INTEREST PER MONTH WILL BE CHARGED ON ALL INVOICES NOT PAID WITHIN 30 DAYS OF DATE ISSUED.

WAITING TIME	e	/HR.
FUEL:	e	/GAL.
FUEL:	e	/GAL.
MEALS & LODGING		
OTHER		
OTHER		

CHARTERER'S SIGNATURE

PILOT'S SIGNATURE

ENGINEER'S NAME

TOTAL \$297 00

INVOICE

STATEMENT OF QUALIFICATIONS

I, K.R. PRIDE, WITH BUSINESS ADDRESS AT 2200-200 GRANVILLE SQUARE, VANCOUVER 2, BRITISH COLUMBIA, DO HEREBY CERTIFY THAT I HAVE SUPERVISED THE FIELD WORK AND HAVE ASSESSED AND INTERPRETED THE DATA RESULTING FROM THIS GEOLOGICAL SURVEY ON THE BOB GROUP MINERAL CLAIMS.

I ALSO CERTIFY THAT:

1. I AM A GRADUATE OF UNIVERSITY OF BRITISH COLUMBIA, B.SC. HONOURS GEOLOGY
2. I HAVE ENGAGED IN MINERAL EXPLORATION SINCE GRADUATION.

RESPECTFULLY SUBMITTED

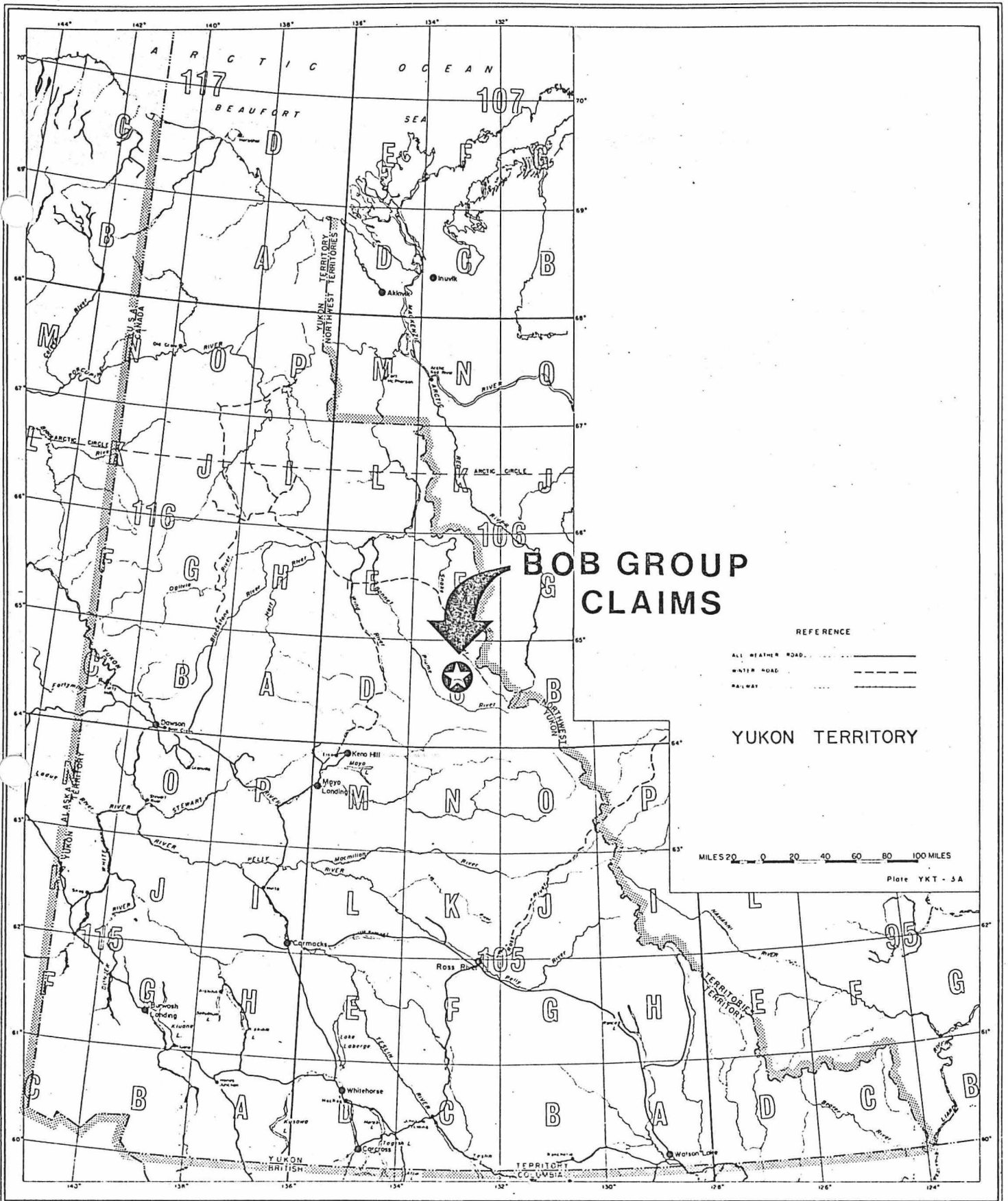
K.R. Pride
K.R. PRIDE

VANCOUVER, B.C., AUGUST 6, 1975

K.R. PRIDE WAS RESPONSIBLE FOR SUPERVISING THE GEOLOGICAL SURVEY DESCRIBED HEREIN. MR. K.R. PRIDE RECEIVED HIS B.SC. DEGREE IN HONOURS GEOLOGY FROM THE UNIVERSITY OF BRITISH COLUMBIA IN 1973. HE HAS WORKED FOR COMINCO LTD., AS A PERMANENT EMPLOYEE SINCE NOVEMBER 1, 1973

SIGNED BY:

D.W. Heddle
D.W. HEDDLE, P. ENG.,
CHIEF GEOLOGIST
WESTERN DISTRICT EXPLORATION

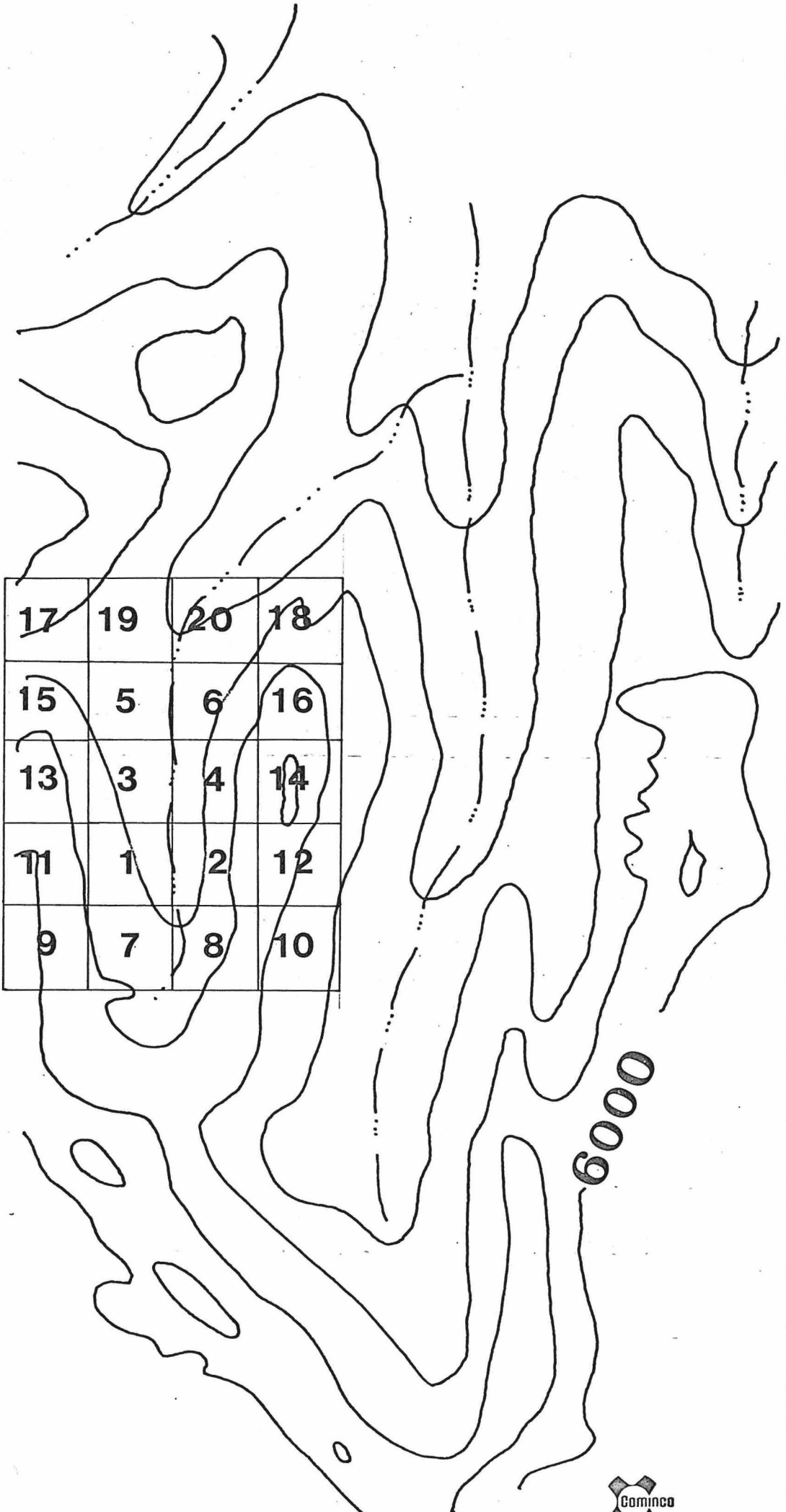
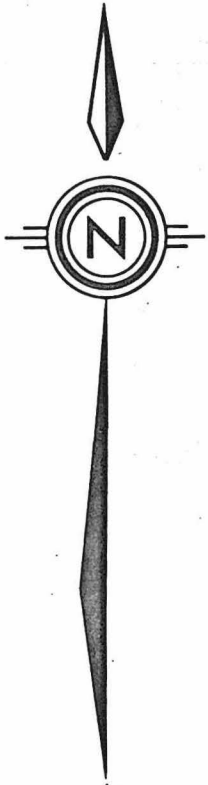


Drawn by:		Traced by:	
Revised by	Date	Revised by	Date

Location Map

Scale: _____ Date: _____ Plate: **1**



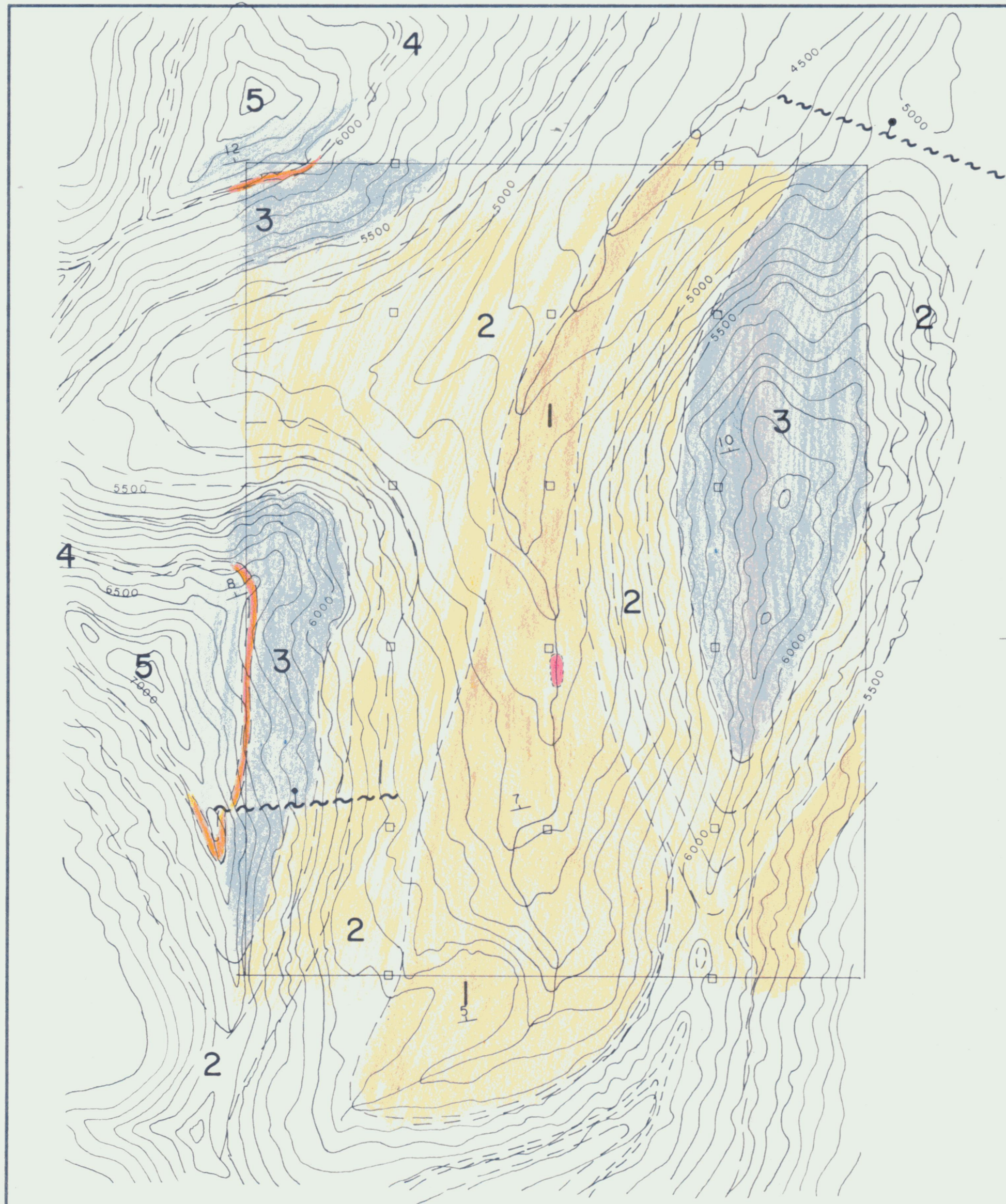


Drawn by: _____		Traced by: _____	
Revised by	Date	Revised by	Date

CLAIM MAP

BOB GROUP

Scale: $1'' = \frac{1}{2}$ Mile Date: _____ Plate: **3**



LEGEND

- ORDOVICIAN
- 5 Mount Kindle Fm.
Dolomite and minor limestone; dark grey, arenaceous; light grey weathering; bioturbated.
-
- CAMBRIAN
- 4 Sekwi Mountain Fm.
Dolomite; buff brown to buff grey, arenaceous, minor vuggy porosity; bright orange weathering; cross-bedding.
- 3 Limestone; dark grey, arenaceous; rip-up clasts; dark olive-grey weathering, wavy banded and mottled; trilobite debris.
- 2 Quartzite; brown, purple-maroon, grey and white, thickly interbedded, dark grey weathering; worm tracks; cross-bedding.
- 1 Dolomite; buff to cream, minor vuggy porosity, locally arenaceous, locally stomatactoid and pyritic with associated Zn-Pb sulphides; bright orange weathering.
- Main showing (red oval)
- Claim post
- v Bedding, (inclined)
- ~ Fault, (solid circle is downthrow side)

BOB GROUP



Drawn by: KRP	Traced by:
Revised by: _____	Revised by: _____
Date: _____	Date: _____

GEOLOGY

Scale: 1" = 1000 FT Date: AUG. 6, 1975 Plate: 4