



WELCOME NORTH MINES LTD. (N.P.L.)

Suite 8, 1161 Melville St., Vancouver, B.C. V6E 2X7 Telephone (604) 687-1658

ARCTIC RED PROJECT

PART VIII

GEOLOGICAL REPORT

ON THE

EAB CLAIM GROUP

Latitude 65° 06'N

Longitude 132° 26'W

MACKENZIE MINING DISTRICT

N.T.S. 106-F-1

NORTHWEST TERRITORIES

CANADA

Work Conducted During the Period May 18-Dec. 31, 1974

by

J.S. Brock

and

J.D. Guild, P.Eng.

October, 1974

EAB CLAIM GROUP

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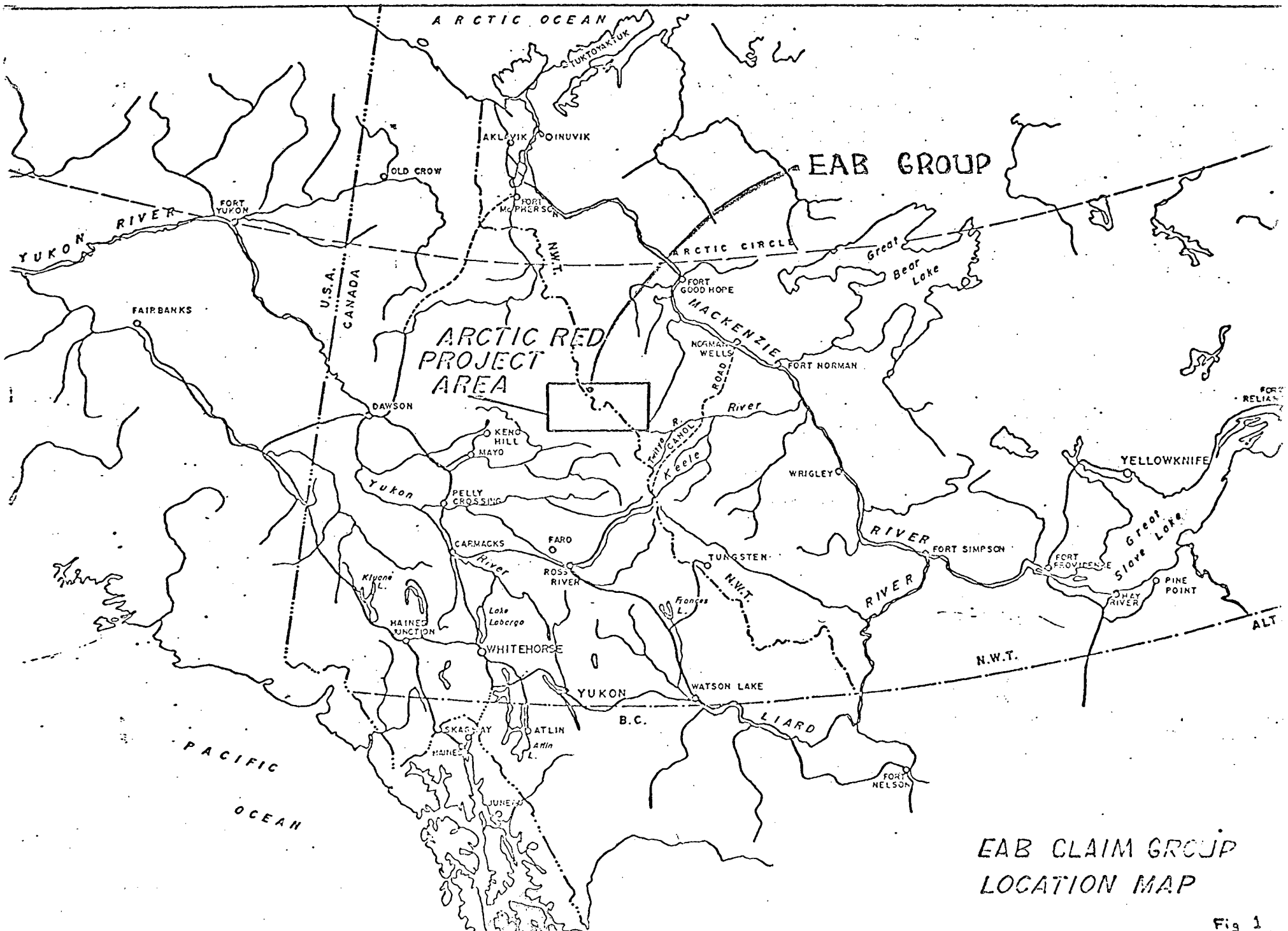
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EAB CLAIM GROUP
LOCATION MAP

EAB CLAIM GROUP

INTRODUCTION

The EAB Mineral Claim Group was staked by Welcome North Mines Ltd. (N.P.L.) on behalf of the Arctic Red Joint Venture in July, 1974. The claims are situated to cover the exposed length and the projected possible extensions of a lead-zinc mineral occurrence which was located by Company prospectors in the course of a regional exploratory program.

The main EAB showing has been geologically mapped and sampled and the areas adjacent to the showing prospected.

This preliminary work has produced results sufficiently encouraging to warrant a more detailed program of prospecting, mapping and sampling.

SUMMARY AND CONCLUSIONS

The EAB Mineral Property, consisting of twenty mineral claims was staked in 1974 to cover a stratabound, sphalerite-cemented breccia zone within carbonate rocks of the Mackenzie Mountains.

A brief geological examination of the property indicates the presence of a gently dipping zone between 15 and 30 feet thick, intermittently exposed for some 600 feet along a cliff face and open to possible strike and dip projections. Available samples of this zone would suggest a grade of between four and seven percent zinc. In addition, other lead-zinc mineral occurrences of less obvious importance were noted on the property.

It is concluded that the EAB property has the potential to contain economic deposits of lead-zinc and is, therefore, worthy of a further exploratory effort. The initial program recommended should involve a more detailed geological examination in conjunction with the prospecting and tracing of known favourable horizons.

LOCATION AND ACCESS

The EAB claim group is located in the Mackenzie District of the Northwest Territories, at latitude 65°06'N. and longitude 132°26'W; 148 miles to the northeast of Mayo, Yukon Territory (Figure 1).

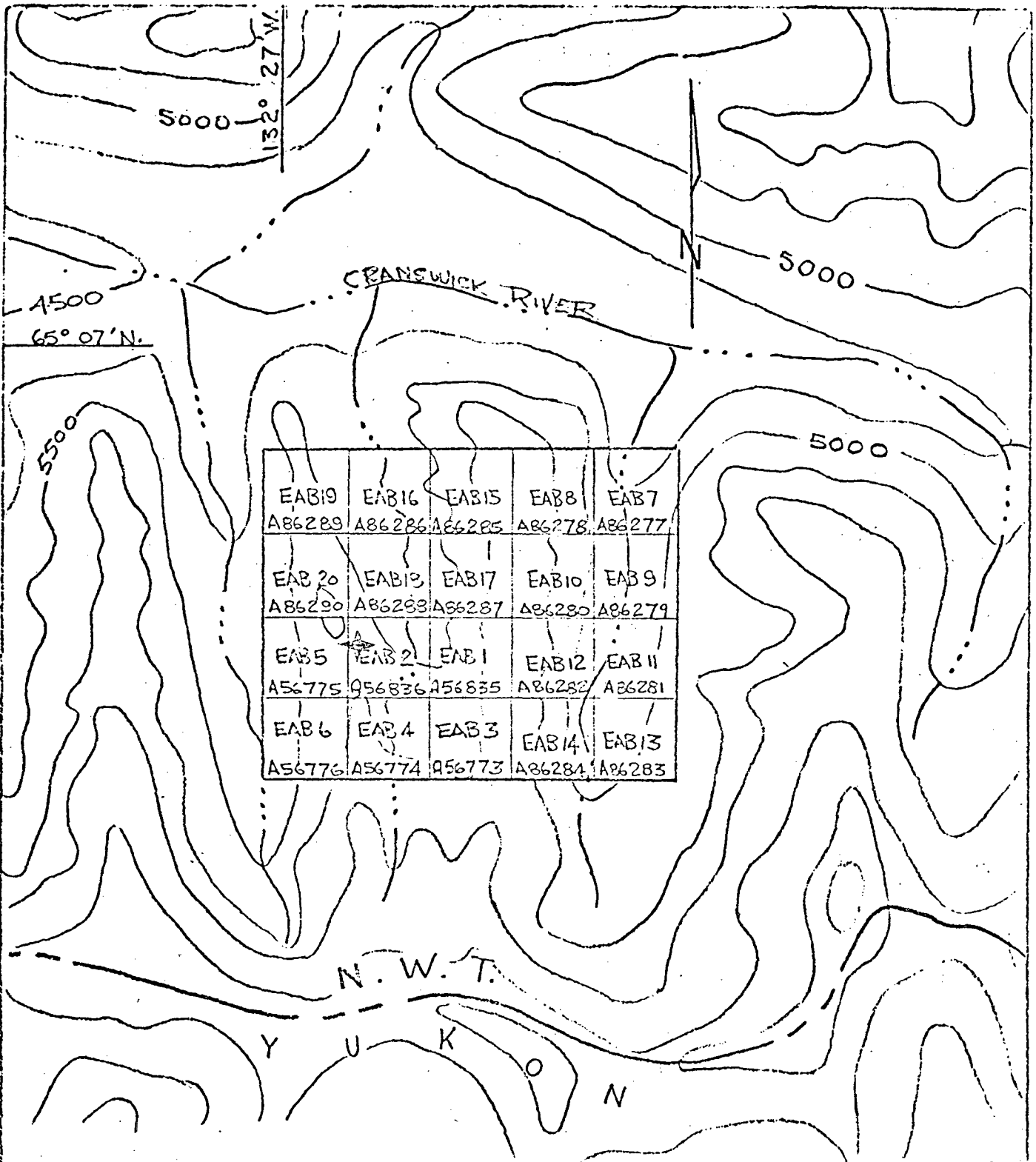
Access to the property can best be gained by helicopter from Mayo. There is a helicopter landing site within a few hundred feet of the principal mineral occurrence.

The EAB Showing occurs high on the canyon walls of a northerly flowing tributary of the Cranswick River. The main showing lies on the north side of the canyon, 400 feet above the creek at an elevation of 5,400 feet. The stratigraphic horizon which contains the mineralization dips gently to the south and crops out at the headwall and on both sides of the canyon.


MINERAL CLAIMS

The EAB Property consists of the following twenty located mineral claims in the Mackenzie Mining District of the Northwest Territories (Figure 2):

<u>Claims</u>	<u>Grant Numbers</u>	<u>Recording Date</u>
EAB 1-2	A56835-A56836	July 31, 1974
EAB 3-6	A56773-A56776	Aug. 19, 1974
EAB 7-20	A86277-A86290	Aug. 19, 1974



<u>EAB CLAIMS</u>	<u>TAG NOS.</u>
EAB 1-2	A56835-A56836
EAB 3-6	A56773-A56776
EAB 7-20	A86277-A86290

 MAIN EAB SHOWING

WELCOME NORTH MINES LTD.		
ARCTIC RED PROJECT		
EAB PROPERTY		
N.T.S. 106F-1		
EAB CLAIMS LOCATION		
1" = 1/2 MILE	OCT. 1974	FIG. NO. 2

REGIONAL GEOLOGY

Regional geology has not been mapped in detail by the Geological Survey of Canada within the area of the EAB mineral claims (N.T.S. 106-F-1). Generalized mapping (Norris, G.S.C. 1969-Bonnet Plume Basin) has provided sketchy regional geologic information for the area.

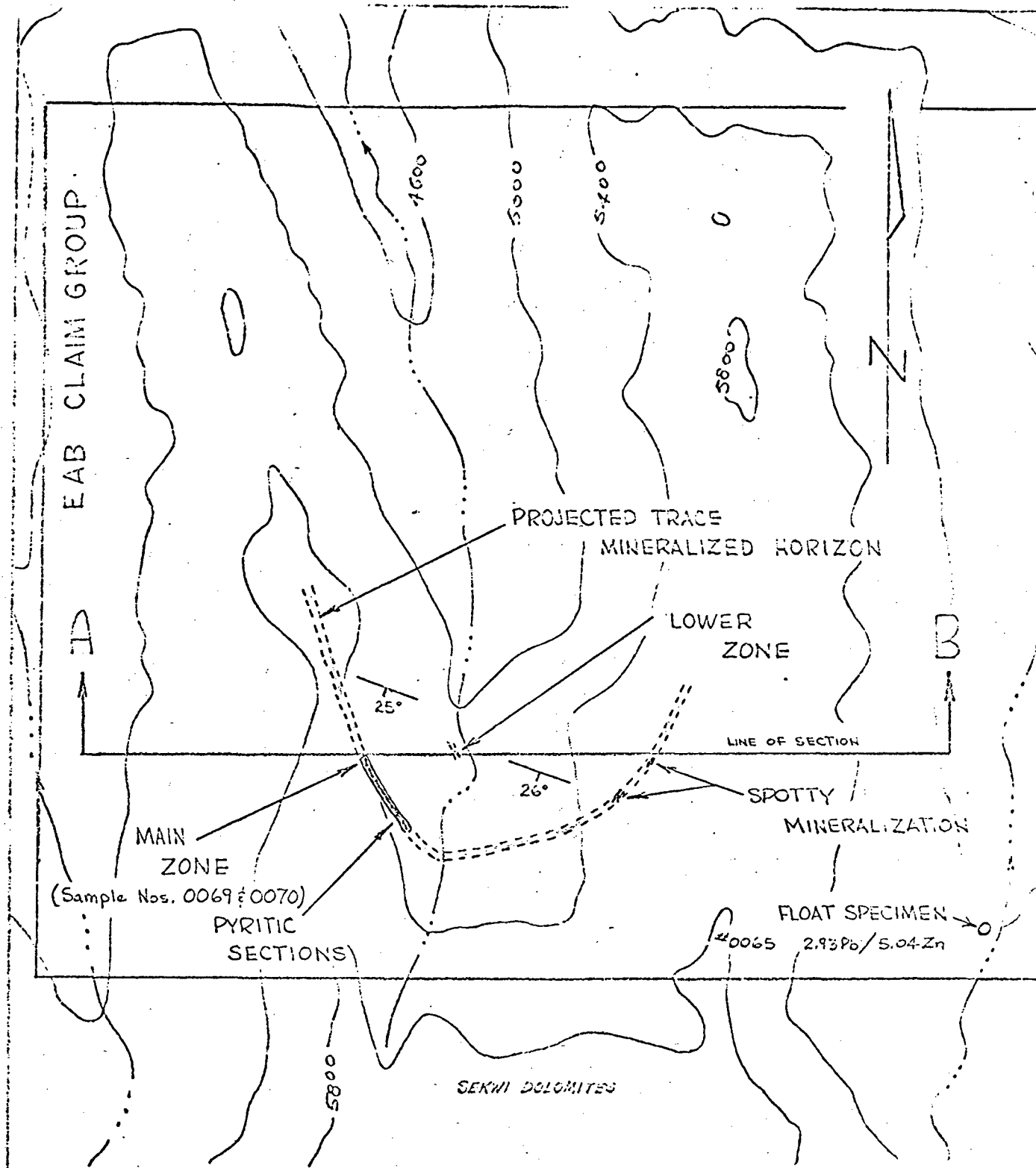
The EAB prospect lies along the north boundary of an over-thrust section of Hadrynian to lower Cambrian clastic and carbonate rocks. The EAB claims lie within lower Cambrian carbonates, tentatively correlated with Sekwi Formation.

Sekwi carbonates that host the EAB and CAB zinc occurrences represent the extreme northwest extent of Cambrian Formation as found within the Mackenzie Mountains. The normal Cambro-Devonian stratigraphic sequence in this area has been disrupted by Laramide (?) tectonism, thus complicating stratigraphic correlations within this area.

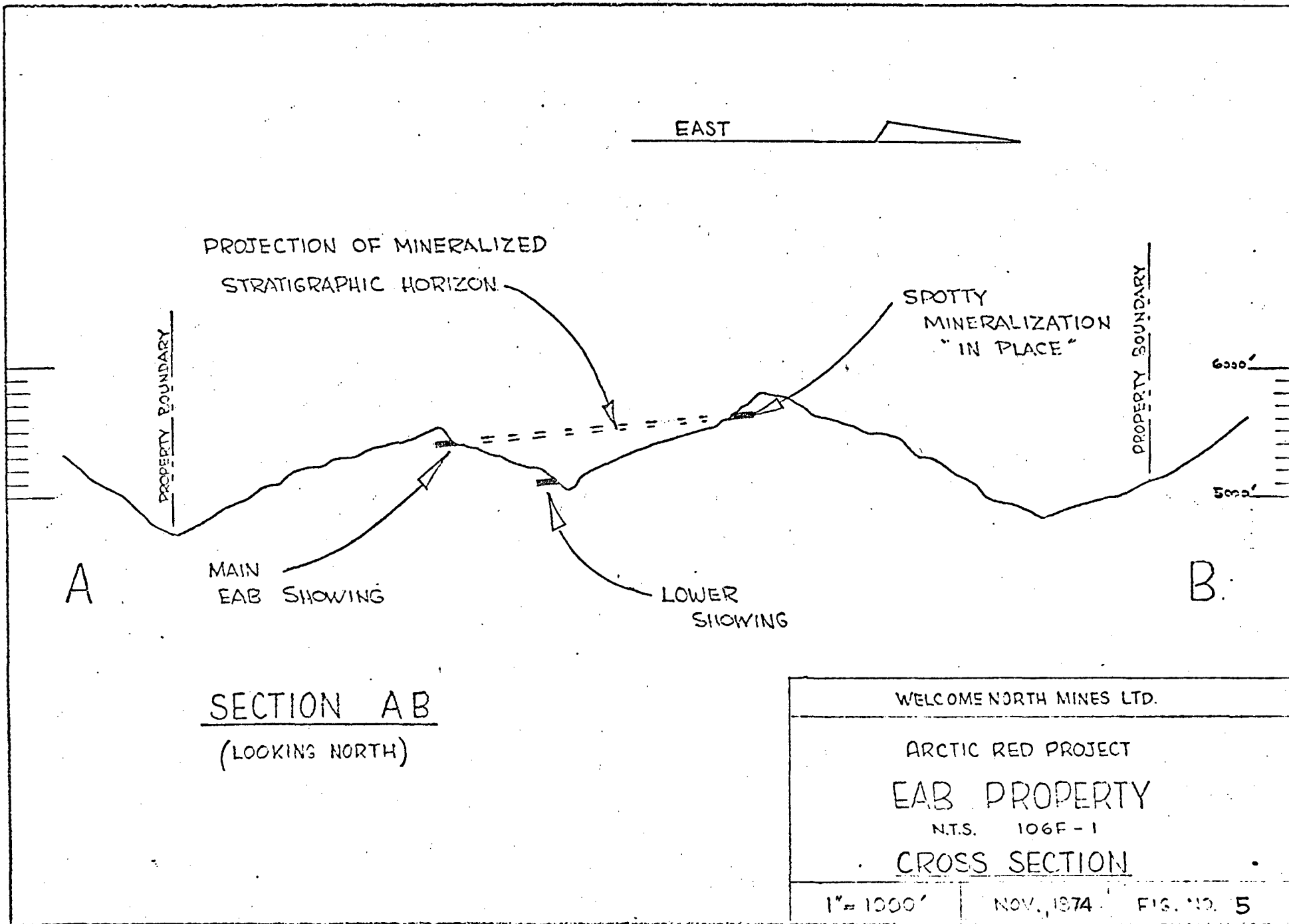
PROPERTY GEOLOGY AND MINERAL OCCURRENCES

The principal mineral occurrence known on the EAB property consists of a stratabound breccia zone which is exposed on an easterly facing vertical cliff wall on the west side of EAB Valley (Figures 4 and 5). The relatively resistant sedimentary horizon, which contains the mineralization, forms the prominent upper cliff-forming perimeter of the valley. Access for examination is limited to points along the face where the talus-bedrock juncture coincides with the showing. Much of the assumed continuity of the zone is based upon hydrozincite stained rubble found lying at the cliff base.

Mineralization in the main EAB Zone appears to be restricted to a thickness of from 15 to 30 feet. Both the upper and lower limits, however, are not readily accessible to examination in any one exposure, nor are they apparent from a distance, so the thickness has not been measured. Within the mineral zone, the grey vuggy dolomitic host rock has been coarsely brecciated. The large, angular breccia fragments, up to one foot in dimension, show evidence of little rotation, and could be the product of minor karsting. Locally, the fragments are oddly misorientated yet closely packed, so that the bedding directions in adjacent pieces form large angles to one another. The breccia is cemented with intermixed cream calcite and amber crystalline sphalerite which forms a vein network. Very fine grained pyrite is also present, localizing in the outer rims of the matrix material and in places filling fine cracks in the fragments themselves. Individual veinlets of matrix material range in thickness from 0.20 to 2 inches in width.



WELCOME NORTH MINES LTD.		
ARCTIC RED PROJECT		
EAB PROPERTY		
N.T.S. 106F-1		
GEOLOGY		
1" = 1000'	NOV. 1974	FIG. NO. 4



SECTION AB
(LOOKING NORTH)

WELCOME NORTH MINES LTD.	
ARCTIC RED PROJECT	
EAB PROPERTY	
N.T.S. 106F-1	
CROSS SECTION	
1" = 1000'	NOV. 1974 FIG. NO. 5

The mineral zone can be traced along the western valley-side for about 600 feet. The southerly end of this distance, where accessible, appears to be more pyritic than the north end, with the mineralization tending to form irregular vein systems and vug fillings rather than breccia healing.

The head end and eastern side of the valley has been prospected for continuation of the mineralized horizon. Spotty and isolated occurrences of veinlet-type chocolate brown sphalerite and galena were located. Difficult access to these areas was encountered during efforts made to determine stratigraphic correlations and the location of the significant horizon being sought. Therefore, the east valley side may contain undiscovered but related mineral occurrences. The projection of the main zone to the north, on the west valley side, is locally talus covered and no attempt has been made to follow the mineralized horizon in this direction. In addition, a lower parallel zone, near creek elevation and approximately below the main EAB showing was discovered. This zone is similar in character to the main zone but is mainly talus covered, being exposed in a limited area of about 10 x 20 feet.

The following samples were taken from the main EAB showing:

<u>Sample No.</u>	<u>Lead %</u>	<u>Zinc %</u>	<u>Comments</u>
0069	0.10	6.84	Grab sample - material at base of cliff below main showing.
0070	0.05	4.14	Specimen from main showing

Float occurrences, reported by prospectors in valleys to the east and west of EAB Valley were not examined. A unique float specimen of lead-zinc mineralized sandstone from the head end of the adjacent valley to the east of the EAB assayed:

<u>Sample No.</u>	<u>Lead %</u>	<u>Zinc %</u>
0067	2.93	5.04

This mineralized area remains to be followed up.

CONCLUSIONS AND RECOMMENDATIONS

It is concluded by the authors that the EAB property has the potential to contain significant deposits of lead-zinc and is, therefore, worthy of a further exploratory effort. A follow up program should consist initially of a much more detailed geological examination in conjunction with the further prospecting and tracing of favourable horizons. Due to the relative inaccessibility of most of the area, this work will probably involve the use of ropes and mountain climbing equipment.

PROPOSED BUDGET - EAB MINERAL CLAIMS

(See overall Arctic Red '75 Budget for details)

Period: August 1 to August 5, 1975.

Geology

Property Geologist - Wages		
Field Supplies		
Maps/Printing/Drafting		
Assays		\$ 400.00

Geochemistry

Field Assistant - Wages	\$250	
Maps/Prints/Drafting	50	
Assays/Analysis - say 400 samples	<u>800</u>	\$ 1,100.00

Freight & Transportation		\$ 1,000.00
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Camp Operation		\$ 200.00
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\$ 2,700.00

Administration		<u>300.00</u>
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Total		<u>\$ 3,000.00</u>
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Respectfully Submitted,



John S. Brock



J.D. Guild, P.Eng.

APPENDIX I

ARCTIC RED PROJECT

CLAIMS SUMMARY AS AT DECEMBER, 1974
NORTHWEST TERRITORIES

<u>N.T.S. AREA</u>	<u>CLAIMS</u>	<u>GRANT NUMBERS</u>	<u>RECORDING DATE</u>	<u>NO. OF CLAIMS</u>
106-F-1	EAB 1- 2	A56835-A56836	July 31/1974	
	EAB 3- 6	A56773-A56776	" " "	
	EAB 7-20	A86277-A86290	Aug. 19/1974	
	TOTAL EAB CLAIMS			20

APPLICATION FOR CERTIFICATES OF WORK - MACKENZIE MINING DISTRICT

In accordance with the provisions of the CANADA MINING REGULATIONS, we the recorded owners of mineral claims listed below, hereby apply for the following certificates of work as per Appendix III of this report, "Statement of Costs", attached hereto:

TOTAL REPRESENTATION WORK - As per Appendix III \$3,841.02

DISTRIBUTION OF REPRESENTATION WORK:

EAB CLAIM GROUP

EAB 1- 2	A56835-A56836		
EAB 3- 6	A56773-A56776		
EAB 9-20	A86279-A86290		
	18 claims - 2 years each	\$3,600.00	
EAB 7- 8	A86277-A86278		
	2 claims - 1 year each	<u>200.00</u>	
	TOTAL EAB - 20 claims	\$3,000.00	\$3,800.00
	Balance Unapplied		\$ 41.02

APPENDIX II

PERSONNEL AND DATES WORKED

The following pages tabulate the personnel and dates worked on the EAB Mineral Claims.

Please note that "Camp Operations" and "Expediting" wages have been pro-rated and are included in the costs for individual claim groups under "Camp Costs" (see Appendix III - Statement of Costs).

Also the OEX (Outside Exploration) costs have been pro-rated to individual claim groups as shown in Appendix III.

EAB GROUP

PERSONNEL AND DATES WORKED

1974 FIELD SEASON

Richard F. McLoughlin, July 18, 28.
c/o #1010,
2055 St. Matthew St.,
Montreal, PQ.

Geologist,
\$1200/month

John D. Guild, July 7.
13291 Woodcrest Drive, Nov. 4, 6, 7, 12.
White Rock, B.C.

Party Chief,
\$65/day

Joan Stickney,
c/o General Delivery,
Whitehorse, Y.T.

Cook,
\$900/month

Duration of Program.
Wages pro-rated to
all projects - under
camp costs.

OEX

PERSONNEL AND DATES WORKED

1974 FIELD SEASON

C.L. (Pete) Risby, Ross River, Y.T. Chief Prospector, <u>\$1200/month</u>	May 1-8, 20-28, 30-31. June 1, 3-12, 25-30, July 1-19, 21-26, 28-31. Aug. 1-4, 12-19, 25, 27, 30. Sept. 3-6, 9-13.
Arthur John, Ross River, Y.T. Prospector, <u>\$1100/month</u>	May 16-31. June 1-16, 25-30. July 1-25, 31. Aug. 1-29, Sept. 3-8.
Robert Etzel, Ross River, Y.T. Prospector, <u>\$1100/month</u>	May 16-31. June 1-3, 5-12, 14-25, 30. July 2-25, 31. Aug. 1-11, 13-31. Sept. 1.
Esau Dick, Ross River, Y.T. Prospector <u>\$800/month</u>	May 16-31. June 1-11, 13-15, 30. July 2-21, 24, 25. Aug. 1-11, 13-22. Sept. 1.
Walter Etzel, Ross River, Y.T. Prospector, <u>\$800/month</u>	May 15-31. June 1-25, 30. July 2-21, 24, 25, 31. Aug. 1-11, 13-20.
Joan Stickney, General Delivery, Whitehorse, Y.T. Cook <u>\$900/month</u>	Duration of Program - salary pro-rated over all projects.- under camp costs.

OEX

PERSONNEL AND DATES WORKED

1974 FIELD SEASON

Harold Barker,
c/o General Delivery,
Whitehorse, Y.T.

Field Assistant
\$800/month

May 15-26.
June 25, 30.

Richard F. McLoughlin,
c/o #1010,
2055 St. Matthew St.,
Montreal, PQ.

Geologist
\$1200/month

May 15-26.
June 2-4, 10, 14, 22, 25, 30.
July 1, 19, 20, 24, 31.
Aug. 22, 31.
Sept. 3, 23-27, 30.
Oct. 1-4.

John D. Guild,
13291 Woodcrest Dr.,
White Rock, B.C.

Party Chief,
\$65/day

March 26-29.
April 1-5, 8-12.
May 7-10, 13-17, 20-26.
June 3, 5, 9-11, 19, 20, 22-30.
July 1-4, 8, 10-11, 14-15, 19-21,
23-36, 30, 31.
Aug. 6, 8, 10, 14-15, 18, 20,
23, 30-31.
Sept. 3, 4, 5, 7, 10-17.
Dec. 10, 11, 13.

John S. Brock,
3029 Procter Ave.,
West Vancouver, B.C.

Field Supervisor,
\$71/day

Jan. 3-5, 16-18, 21-22.
Feb. 18, 21, 25-28.
March 14-16, 21-22, 25-26, 29-30.
April 1-5, 22-26.
May 6-10, 13, 29, 31.
June 3-4, 9-12, 25, 31, 22.
Aug. 1-2, 8, 13-14, 17-18, 20-21.
Sept. 3-4, 10, 13, 16, 23, 24-25.
Oct. 1, 3, 4, 13, 16, 23, 27, 28, 29, 31.

CAMP OPERATION

PERSONNEL AND DATES WORKED

1974 FIELD SEASON

Joan Stickney,
c/o General Delivery,
Whitehorse, Y.T.

Cook
\$900/month

May 13-31.
June 1-16, 21-30.
July 1-19, 25-31.
Aug. 1-6, 13-31.
Sept. 1.

C.L. (Pete) Risby,
Ross River, Y.T.

\$1200/month

May 19, 29.
July 27.

Arthur John,
Ross River, Y.T.

\$1100/month

July 26, 27.

Robert Etzel,
Ross River, Y.T.

\$1100/month

July 1, 26, 27.

Esau Dick,
Ross River, Y.T.

\$800/month

July 1, 26, 27.

Walter Etzel,
Ross River, Y.T.

\$800/month

July 1, 26, 27.

Harold Barker,
c/o General Delivery,
Whitehorse, Y.T.

\$800/month

June 2-8, 11-23.
July 1, 4, 13, 16, 22-25, 31.
Aug. 1, 3, 5-7, 13-20, 22.

Richard McLoughlin,
c/o #1010,
2055 St. Matthew St.,
Montreal, PQ.

\$1200/month

July 26, 27.

N.B. Wages pro-rated to all projects worked under
1974 program - under camp costs.

EXPEDITING

PERSONNEL AND DATES WORKED

1974 FIELD SEASON

C.L. (Pete) Risby,
Ross River, Y.T.

Aug. 20-24.
Sept. 7-8.

\$1200/month

N.B. Wages prorated to projects worked.

APPENDIX III

EAB CLAIM GROUP
STATEMENT OF COSTS

The following pages show a distribution of the total costs incurred by Welcome North Mines Ltd. (N.P.L.) on behalf of the Arctic Red Joint Venture in carrying out exploration work on the claims during the 1974 field season. These costs can be invoice supported or in the case of internal costs documented.

The costs can be summarized as follows:

<u>Claim Group</u>	<u>Direct Property Cost</u>	<u>Outside Exploration Cost Related to Property</u>	<u>Total</u>
EAB	\$1,748.62	\$2,092.40	\$3,841.02

NOTE: The allocation of these costs of representation work is shown in Appendix I.

TOTAL REPRESENTATION WORK APPLIED FOR	\$3,800.00
Balance Unapplied	\$ 41.02

APPENDIX III

ARCTIC RED PROJECT - 1974

GROUP: EAB

EXPENDITURES - EAB GROUP

	<u>GEOLOGY/ GEOCHEM</u>	<u>PROSPECTING</u>	<u>DRILLING</u>	<u>STAKING & ACQ.</u>	<u>PROPERTY MAINT.</u>	<u>CAMP OP.</u>	<u>EXPEDI- TING</u>	<u>ADMIN</u>	<u>SUB- TOTAL</u>	<u>GRAND TOTAL</u>
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
ALARIES										
Wages	288.16	-	-	166.42	-	69.29	2.65	-	526.52) 1,526.52
Finder Fees	-	-	-	1,000.00	-	-	-	-	1,000.00	
CONTRACT PAYMENTS	-	-	-	-	-	-	20.54	88.24	-	108.78
FIELD & MISC. EXP.	-	-	-	80.00	-	142.15	15.41	6.40	-	243.96
MAPS/PRINTS/ DRAFTING	-	-	-	-	-	-	-	-	-	-
ASSAYS/ ANALYSES	17.10	-	-	-	-	-	-	-	-	17.10
FREIGHT/ TRANSPORT										
Helicopter	1,117.59	-	-	-	-	-	-	-	1,117.59) 1,193.32
Fixed Wing	-	-	-	-	-	43.60	-	-	43.60	
Major Transp.	-	-	-	-	-	16.84	-	-	16.84	
Misc. Freight	-	-	-	-	-	15.29	-	-	15.29	
TOTAL	\$ 1,422.85	-	-	1,246.42	-	287.17	38.60	94.64	-	3,089.68

EAB CLAIMS - 20 N.W.T.

LESS: TOTAL COSTS NOT ALLOWED (STAKING/ACQ & ADMIN.) - 1,341.06
 - BALANCE OF APPLICABLE DIRECT COSTS \$ 1,748.62
 PLUS: PRO-RATED PORTION OF OEX COSTS (SUMMARY ATTACHED) - NWT 2,092.40
 TOTAL TO BE APPLIED AS REPRESENTATION WORK \$ 3,841.02

ARCTIC RED PROJECT

COSTS RELATED TO

PROPERTIES - DISTRIBUTED AMONG 459 Northwest Territories

APPENDIX 17A

RA CLAIM GROUP	-	12	Claims x \$104.62 = \$1,255.44	Claims, as follows:
BR-DAB "	"	100	Claims x \$104.62 = 10,462.00	
CAB "	"	65	Claims x \$104.62 = 6,800.30	
AB "	"	250	Claims x \$104.62 = 26,155.00	
EAB "	"	20	Claims x \$104.62 = 2,092.40	
HAB "	"	12	Claims x \$104.62 = 1,255.44	
			<u>TOTAL = \$48,020.58</u>	

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ARCTIC RED PROJECT - 1974

GROUP: OEX

EXPENDITURES - OEX

	<u>GEOLOGY/ GEOCHEM</u>	<u>PROSPECTING</u>	<u>DRILLING</u>	<u>STAKING & ACQ.</u>	<u>PROPERTY MAINT.</u>	<u>CAMP OP.</u>	<u>EXPEDI- TING</u>	<u>ADMIN</u>	<u>SUB- TOTAL</u>	<u>GRAND TOTAL</u>
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
SALARIES										
Wages	14,027.52	19,615.39	-	-	-	6,721.34	257.11	-	40,621.36	} 40,621.36
Finder Fees	-	-	-	-	-	-	-	-	-	
CONTRACT PAYMENTS	-	-	-	-	-	-	1,992.81	8,558.80	-	10,551.61
FIELD & MISC. EXP.	-	-	-	-	-	13,789.15	1,495.01	621.02	-	15,905.18
MAPS/PRINTS/ DRAFTING	3,487.29	-	-	-	-	-	-	-	-	3,487.29
ASSAYS/ ANALYSES	595.81	-	-	-	-	-	-	-	-	595.81
FREIGHT/ TRANSPORT										
Helicopter	30,971.30	-	-	-	-	-	-	-	30,971.30	} 43,266.82
Fixed Wing	4,948.59	-	-	-	-	4,229.70	-	-	9,178.29	
Major Transp.	-	-	-	-	-	1,633.86	-	-	1,633.86	
Misc. Freight	-	-	-	-	-	1,483.37	-	-	1,483.37	
TOTAL	\$ 54,030.51	19,615.39	-	-	-	27,857.42	3,744.93	9,179.82	-	114,428.07

LESS: Total Costs not Allowed (Admin Costs) -9,179.82
 BALANCE AS APPLICABLE REPRESENTATION WORK \$105,248.25

NOTE: Costs related to properties distributed on pro-rata basis among
 400 Yukon Claims and 606 N.W.T. Claims = $\frac{\$105,248.25}{1006 \text{ Claims}} = \$104.62052 \text{ per claim}$



WELCOME NORTH MINES LTD. (N.P.L.)

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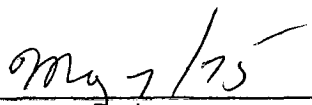
APPENDIX III

AFFIDAVIT SUPPORTING SUMMARY OF COSTS


I, John S. Brock, Vice President, Welcome North Mines Ltd. (N.P.L.), of Vancouver, British Columbia, hereby state that, to the best of my knowledge and belief, the statement of costs presented in this report (Geological Report on the EAB Mineral Claim Group) is both correct and true.



John S. Brock



Date



Notary Public in and for the
Province of British Columbia.

