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PROSPECTING REPORT

ON THE

HAWK #1 CLAIM

CRANBROOK AREA, SOUTHEAST, BRITISH COLUMBIA

FORT STEELE MINING DIVISION

N.T.S. 82F/8E

FILMED

49° 26' North Latitude and 116° 10' West Longitude

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

BY

14,718

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TABLE OF CONTENTS

LOCATION AND ACCESS	1
DISCUSSION OF MAPPING PROCEDURE	1
GEOLOGY OF HAWK #1	2
ECONOMIC POTENTIAL	4
CERTIFICATE	6
COST BREAKDOWN	7

LIST OF ILLUSTRATIONS

		MAP
B.C. Location Map	1:10,000,000	1
Claim Location Map	1: 50,000	2
Geological Map	1: 5,000	3

LOCATION AND ACCESS

The Hawk #1 claim is approximately located at geographical coordinates $49^{\circ} 26'$ north latitude and $116^{\circ} 10'$ west longitude. It is located in the Fort Steele Mining Division and is situated 30 km southwest of Cranbrook which is the largest centre in the east Kootenays. The property is relatively accessible, one follows the Perry Creek logging road which branches off the Wycliffe Regional Park road approximately 12 km northwest of Cranbrook. A footpath allows direct access to the south-central part of the claim.

DISCUSSION OF MAPPING PROCEDURE

The mapping of the Hawk claim was carried out using a compass, altimeter, topographic map and survey chain. The nature of the topographic lake and hillsides, allied with an altimeter and topographic maps permitted reasonably adequate control over the area mapped. In addition, pacing and frequent reference to compass bearings was done to insure as much accuracy as possible in delineating the contacts between different rock types. The author was aided by the profusion of outcrops and their relative structural uniformity in accurately deducing the stratigraphy of the area. The distances between the trenches were measured by survey chain. The claim was mapped systematically by the author with all accessible areas covered.

No attempt was made to plot the exact boundaries of the individual outcrops visited. Outcrops are very continuous on this claim with approximately 75% of the total underlying bedrock being exposed. Only rarely was thick overburden or marsh encountered. The boundaries between different lithologies were extrapolated from the observations of outcrops in the field. Not only are the rock types similar in structure but also they are quite transitional in lithology. Nevertheless in the authors opinion the contacts drawn on the map portray accurately the lithological boundaries within the claim area.

GEOLOGY OF HAWK #1

The Hawk #1 claim was mapped and prospected in great detail, the workings on the claims especially so. All the rocks noted are sediments and are variants of two different rock types namely quartzites and argillites. Not unexpectedly, the rocks in one outcrop are very transitional between these two rock types. Relatively pure quartzites are frequently present, these are usually pinkish grey or watery green coloured and are very hard rocks. Argillaceous quartzites are frequently buff coloured while reddish to brownish tones result from iron-staining. Indeed specularite and micaceous haematite occasionally compose 10% of rock. Other iron oxides such as limonite, magnetite, goethite, manganese oxides namely pyrolusite and perhaps titanium oxides also frequently occur. Minute flecks of pyrite frequently occur and are occasionally very abundant. One very distinctive variety

of quartzite is coloured light and dark shades of purple with perfectly developed bands two to five mm wide, the bands resulting from the variant colour of the quartzites. This variety of quartzite appears more pure than most of the others. The majority of the quartzites are aphanitic with a cherty appearance though some have the texture of a sandstone.

The argillites vary from the siliceous varieties which are often poorly bedded to the slatey types which often show perfect slatey foliation. These rocks are usually coloured various shades of grey with the slatey varieties being the darkest. Usually these variations occur in one single outcrop, and thus it is impossible to map them as separate units. Frequently the argillites are separate from the quartzites by quite arbitrary parameters. Visible oxides occur rather infrequently in the argillites but sulphides are occasionally quite abundant.

The structure of the rocks on the Hawk #1 claim are remarkably uniform with the strike of the sediments universally north-northeast usually 030° . The dip is somewhat more variable though the direction is usually to the northwest particularly north of the lakes in the central part of the claim. The shear zones seem to contain a large amount of oxides. Some of the rocks are slightly folded and cross bedding is occasionally evident. The bedding planes in the quartzites vary from 5 to 20 cms usually but often they are indiscernable. The colour banding often displays by the quartzites rarely corresponds to bedding planes.

A large number of old workings and trenches are present on this claim mainly in the central area. A large caved-in adit was noted on the northeast side of a high plateau which lies just northeast of these trenches. This adit, estimated to have been 150 metres

long, appears mainly tunnelled in overburden since no ore dumps of any sort was seen at the mouth of it. About a dozen trenches and one old shaft, caved in but estimated to be 20' deep was noted and investigated for mineralization on the plateau which lies northwest and uphill from the lakes. These trenches are rarely found alone, several are usually clustered together in one small area. These trenches are located all along the south ridge of the plateau.

An old uninhabitable cabin is located a few hundred metres south of the lakes near a small creek, a couple trenches are present here and a larger cluster is located a few hundred metres southeast. Other clusters of trenches were found several hundred metres west of the cabin while a couple of trenches were located on the southeast corner of the claim. An apparent adit now sloughed-in but with a small ore dump present was noted 800 metres south of the cabin. A total of approximately two dozen trenches were located on the Hawk #1 claim. Many are located on overburden but most are present on contacts between siliceous and argillaceous rocks.

ECONOMIC POTENTIAL

Sulphides in varying quantities were frequently noted in the material adjacent to the trenches. Most of this is pyrite but a little chalcopyrite, galena and sphalerite are occasionally present in some trenches, particularly in those west of the cabin.

Much of the rock in the vicinity of the trenches has a microlitic appearance with the myriad cavities infilled by various iron, manganese and possibly titanium(?) oxides. These include haematite, goethite, limonite, magnetite, pyrolusite and perhaps ilmenite. These oxides sometimes compose 40% of the rock and despite its spongy appearance it is often quite heavy. Ironstones are often found in the vicinity of the trenches. Rock geochemical results revealed quite high assays in lead, copper, silver and gold. In fact one rock sample collected from the plateau northwest of the lakes, returned an assay of .891 oz of gold per ton.

Respectfully submitted,
TRANS-ARCTIC EXPLORATIONS LTD.


Guy A. Royer,
Geologist

CERTIFICATE

I, Guy A. Royer am a consulting geologist for Trans-Arctic Explorations Ltd. of Vancouver, British Columbia.

I hereby certify that:

1. I am a graduate of the University of Saskatchewan with a B.Sc. degree in geology.
2. I have been practising my profession for five years.
3. I have no interest, beneficial or otherwise in the property of this company.
4. I am the author of this report, which is primarily based upon my personal observations made while in the field.

Dated at Vancouver, B.C. this 18th day of Dec 1985


Guy A. Royer, B.Sc.

COST BREAKDOWN

<u>Claim Name</u>	<u>Record No.</u>	<u>Units</u>	<u>Anniversary Date</u>
Hawk #1	2283	20	September 25, 1986

Prospecting Report

N.T.S. 82F/8E

Fort Steele Mining Division

Personnel: Mr. G. Royer, geologist

Mr. D. Jones, assistant

Work was conducted on and between September 18th - 23rd, 1985

Field:

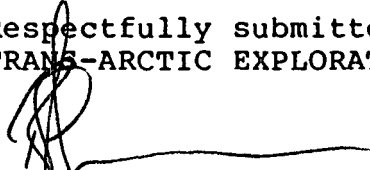
1 geologist, 5 days at \$200/day	\$ 1,000.00
1 assistant, 5 days at \$150/day	750.00
1 supervisor, 1 day at \$200/day	200.00
1 4x4, 3/4 ton truck, 5 days at \$90/day (including gas and oil)	550.00
5 days room and board, \$50 per day per man	500.00
	<u>\$ 3,000.00</u>

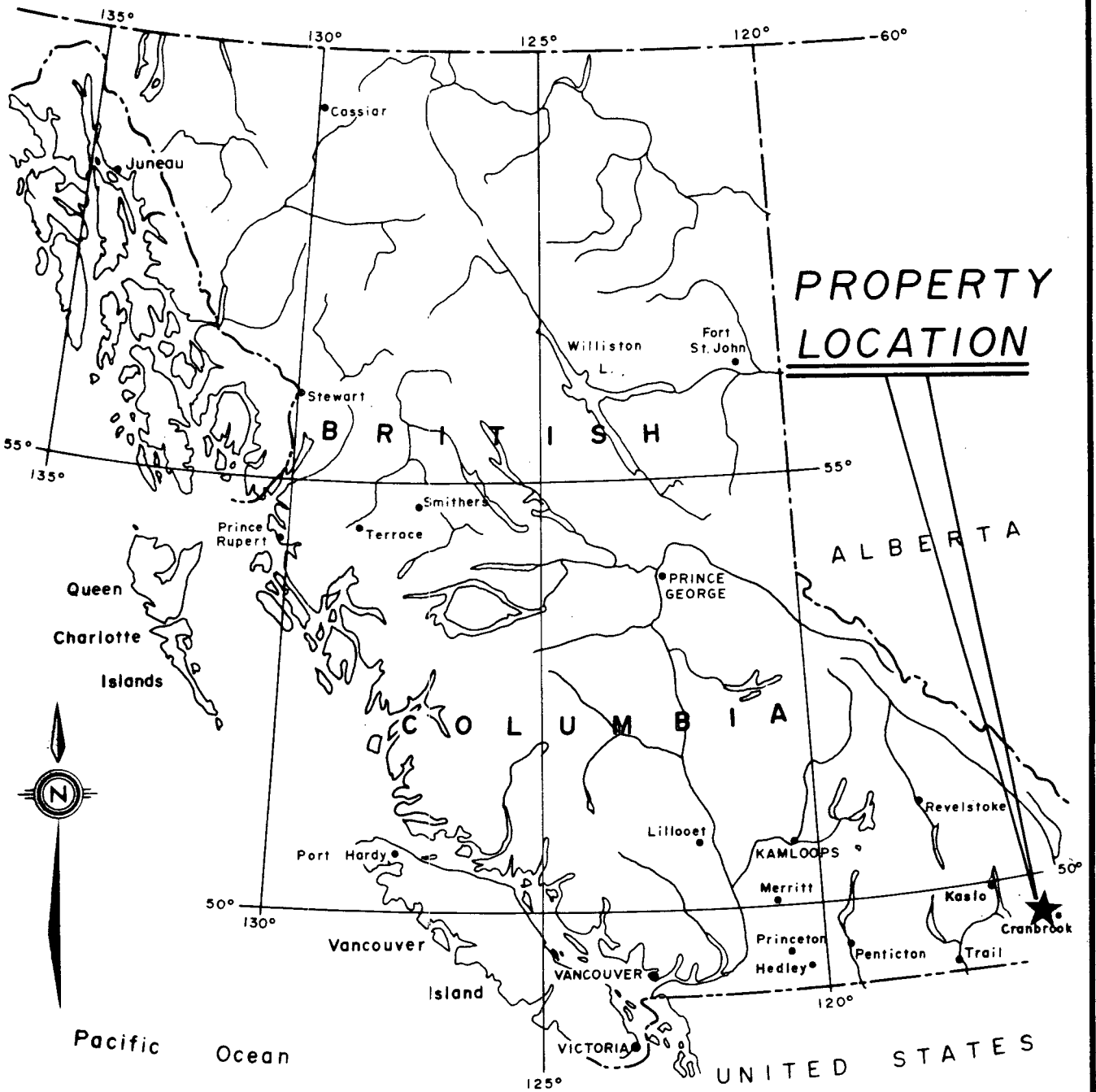
Office - Report

Report compilation, drafting and typing	\$ 500.00
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Grand total	<u><u>\$ 3,500.00</u></u>
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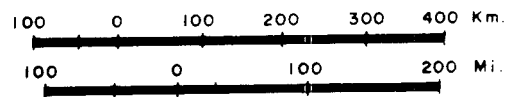
Respectfully submitted
TRANS-ARCTIC EXPLORATIONS LTD.


R.S. Simpson
General Manager

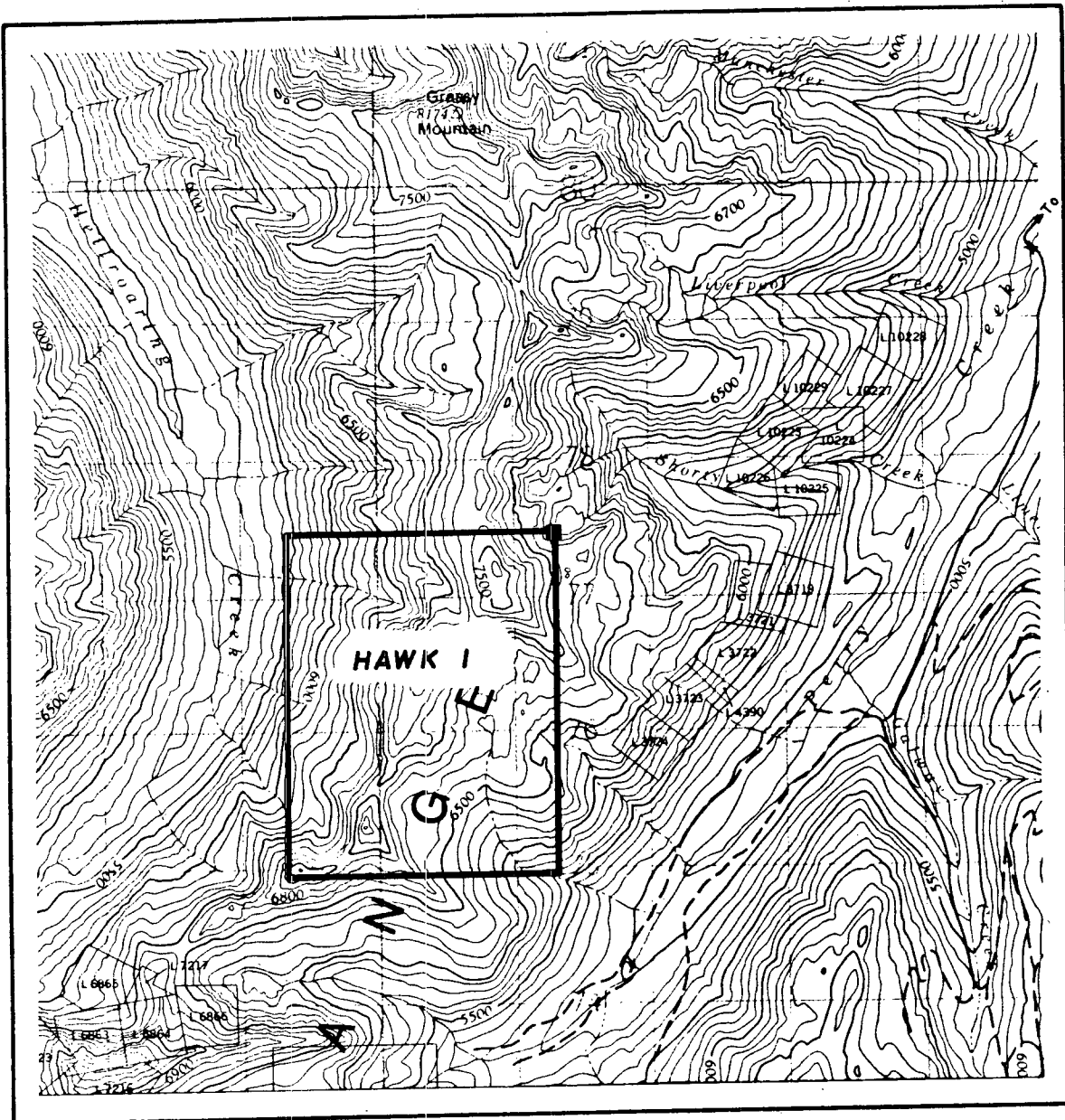


**PROPERTY
LOCATION**

HAWK I CLAIM



116°10'



CRANBROOK
37 km.

49° 26'



TRANS-ARCTIC EXPLORATIONS LTD.			
HAWK I CLAIM PERRY CREEK, CRANBROOK AREA FORT STEELE M.D., B.C.			
CLAIM LOCATION MAP			
SCALE: 1:50,000	DATE: DEC. 85	MAP: 2	N.T.S. 82 F/8 E

