

3583

BRANTA EXPLORATIONS LTD. (N.P.L.)

JAN HOWSON PROPERTY

Omineca Mining Division
British Columbia

54°33' N

127° 22' W

by

93 L / 11 W

A. S. Ashton, P. Eng.

31st January, 1972.

---oo0oo---

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 3583 MAP

TABLE OF CONTENTS

Summary	1
Recommendations	1
Cost of Programme	3
Location	4
Access	4
Topography	4
Property	5
General Geology	5
Property Geology	7
Mineralization	7
Trenching	8
Geochemical Reconnaissance	8
Discussion	9
Certificate	Rear
References	Rear
Maps	Rear Pocket

- #1 Geochem Reconnaissance
 N. Area
- 2. Geochem Reconnaissance
 S. Area

BRANTA EXPLORATIONS LTD. (N.P.L.)

JAN HOWSON PROPERTY

SUMMARY

During October 1971, limited trenching and a reconnaissance geochemical survey were carried out by Branta Explorations Ltd. (N.P.L.) on their Howson Creek property, south-west of Telkwa, B.C. in the Omineca Mining Division.

An assessment of the geochemical results indicates four zones of interest, but the limited number of samples gives no indication of the possible extent of the mineralization, nor any indication of probable grade.

A further programme has been outlined in order to more fully explore the potential of the property.

RECOMMENDATIONS

Limited trenching and the reconnaissance geochemical survey have indicated zones of indeterminate extent with (a) mineralization, or (b) anomalous geochemical readings. In consequence, a further programme of exploration is recommended.

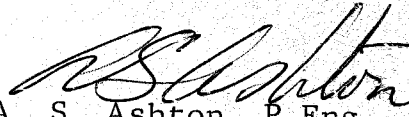
- (a) Approximately 20 claims and fractions should be staked to the south of the Hos claims to cover extensions of the A and B zones on the Hos 64-76 claims. This would give a total of approximately 94 claims.
- (b) A grid should be established on the claim group using the current road system for control or base lines. The lines should be spaced at approximately 400 foot intervals.
- (c) A geological survey should be carried out with systematic sampling of all showings.
- (d) A geochemical survey should be carried out on the grid lines, samples being taken every hundred feet. Alternate samples could initially be assayed and, in areas of interest, the remaining samples analysed.

Subject to the results of the surveys and possible overburden depth, either bulldozer trenching or diamond drilling could be carried out in areas of prime interest.

COST OF PROGRAMME

Staking additional claims	\$ 1,000.00
Line cutting 90 miles @ \$150/m.	\$ 13,500.00
Geological Survey 90 miles @ \$125	\$ 11,250.00
Geochemical Survey 90 miles @ \$125	\$ 11,250.00
	<hr/>
	\$ 37,000.00
Contingencies	3,000.00
	<hr/>
Total:	\$ 40,000.00
	<hr/> <hr/>

Respectfully submitted,


A. S. Ashton, P.Eng.

BULLIS ENGINEERING LTD.

DELTA, B.C.

January 31st, 1972.

JAN HOWSON PROPERTY

LOCATION

The property is located 20 miles south-west of Smithers, B.C., at latitude $54^{\circ}33'$ North and longitude $127^{\circ}22'$ West. It is situated in the Telkwa range, which is part of the Coast Range.

The property lies on the west slope of the Howson Creek Basin, which contains Howson Creek and its branch, Scallon Creek, as well as Mooseskin Johnny Lake.

Howson Creek drains northward into the south fork of the Telkwa River, 5 miles north.

ACCESS

The property is readily accessible by road from Telkwa. The road to the Hos claims is reached by Forest Access and logging roads from the Telkwa River. The group can also be reached by helicopter from Smithers. Both Smithers and Telkwa lie on the main C.N.R. line to Prince Rupert and on Highway 16.

TOPOGRAPHY

The average elevation is around 4,000 feet and rises to 4,500 feet with rolling timbered slopes. The area is not precipitous.

PROPERTY

The Jan Howson Property consists of 76 staked and recorded claims, held by Branta Explorations Ltd. (N.P.L.), Suite 205, 846 West Hastings Street, Vancouver 1, B.C.

	<u>Claim</u>	<u>Record Number</u>
Hos	1 - 60 incl.	98945 - 99004 incl.
Hos	61 - 76 incl.	105678 - 105698 incl.

All these claims lie within the Omineca Mining Division and were recorded at Smithers, B.C.

GENERAL GEOLOGY

From the studies of W.W. Leach the Howson Basin area comprises volcanics and sediments of the Hazleton Group of Upper Jurassic Age, consisting mainly of andesitic, dacitic, thuyolitic and basaltic flows, tuffs and breccias. To the west of the area and forming the heart of the Telkwa Mountains is a plug of Upper Cretaceous Intrusives of the Coast Range Batholith, consisting in the main of granodiorite, granite, and diorite, porphyritic phases and rhyolite.

Tongues from this intrusive mass have been injected into the Hasleton sediments in complex dikelets.

Leach divides the rocks of the Telkwa Valley area into four main divisions:

1. Crystalline rocks of the Coast Range.
2. Porphyritic rocks.
3. Coal bearing beds.
4. Eruptive series.

The first are the granites and gneisses of the Coast Range.

The porphyritic rocks constitute the bulk of the rocks in the area and comprise tuffs, andesites and agglomerates. Their thickness is estimated as 5000 feet. The rocks vary in colour from red to green. These rocks are important in that most of the mineral outcrops of the district occur in them.

The coal bearing beds lie above the porphyritic rocks and are mainly clay shales. These are noteworthy in that the coal reefs of Telkwa and the coal beds near the Howson Basin occur within them. Coal beds are found adjacent to the Howson Basin in the Denys Creek Valley, at the headwaters of the Thautil River and near Burnie Lake.

The newer eruptives consist of coarse porphyritic rocks which have thrown out dikes in all directions. At the head of Scallon Creek, the eruptives are a pink syenite porphyry. The eruptives appear to have a marked influence

on ore deposition according to Leach, since most deposits occur within the vicinity of these intrusions and hence may have provided the channels for mineralizing solutions.

Extensive shear zones in the form of fine-grained acidic dikes were noted around the Howson Basin, and some chalcopyrite and galena were found adjacent to them.

PROPERTY GEOLOGY

From limited outcrop and exposures along the roads, the property is underlain by andesitic dacite, rhyolitic and basaltic flows, tuffs and breccias. In part, these rocks have been intruded by tongues of granitic and related intrusives.

There is insufficient outcrop to detail the geology and solve the structural problems.

MINERALIZATION

Numerous zones of mineralization have been located, but insufficient work has been done in the vicinity of any of the showings to indicate any possible size of potential.

The mineralization seems to consist of pyrite zones in volcanics of indeterminate dimensions, carrying low values in gold, silver and copper. In conjunction with some of these zones are granitic type dikes, which are fractured and mineralized with chalcocite, bornite and

associated copper minerals. Associated with the mineralization in the volcanics are veinlets and blobs of epidote. Hematite and quartz veinlets also occur.

Generally over appreciable widths 20' copper values are low, although some selected samples have run as high as 3.25% Cu.

TRENCHING

Near station 4 00 E on line 60, a small trench 20' x 2' x 2' was made. In this trench fairly good mineralization of pyrite with some chalcopyrite was found.

Two further trenches about 400' to the north-west adjacent to the road indicated similar type mineralization. These trenches, one 10' x 2' x 2' and the other 5' x 2' x 2', exposed smooth hard bedrock and time did not permit any systematic sampling. A gasoline plugger and dynamite would be necessary to prepare the zone for meaningful sampling.

GEOCHEMICAL RECONNAISSANCE

A total of 199 samples was taken along roads and lines on the property at measured intervals. Generally, the samples, whose composition varied from clay to sandy clay, were taken from what is believed to be the "B" horizon. As collected, samples were bagged and marked as to location.

The samples were shipped to Crest Laboratories in Vancouver for analysis of copper and silver. Upon receipt of samples at the laboratories, they were placed in a drying cabinet at a temperature of 150° to 175° until dry. After drying, the samples were sieved to -80 mesh in an aluminum framed nylon mesh screen.

A gram sample was taken and a hot digestion was carried out using HClO₄ and HNO₃. This provided a nearly total extraction of the metals concerned. After digestion, the solution was brought to volume and then "read" in a Techtron AA5 Atomic Absorption Unit. The samples were measured against standard solutions and frequent checks were made during the readings.

The results were recorded in parts per million of contained metal found in each sample.

DISCUSSION

An arithmetic average of the 199 samples analysed for copper indicated a value of 59.9 parts per million. Of these samples, 9% or 18 samples were greater than 100 parts per million and 8.5% or 17 samples were between 60 and 99 parts per million.

If the values above 100 p.p.m. are removed and the average taken, the background appeared to be about 38 p.p.m. and if the values above the overall arithmetic average are

removed, the background becomes 32 p.p.m. Taking a background of 35 p.p.m. for copper in this environment of intermediate volcanics, it coincides almost exactly with the published information on the abundance of elements in rocks of this type.

In consequence, it is suggested that the anomalous zones bearing investigation are above 70 p.p.m. Four zones have been indicated on the maps marked A, B, C and D. Unfortunately, A, B and D zones are along single lines with no lateral information. Zone C possibly occurs on lines 60 and 76, but the spacing is really too great to be sure of the extent of the zone. Further sampling is necessary to ascertain the extent of the indicated zones.

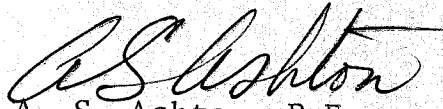
Silver values vary from 0.5 to 3.0 p.p.m. The standard reporting of geochemical assays for silver is given in 0.5 multiples unless more accuracy is required, when a different technique is necessary.

The arithmetical average of the silver values is 1.5 p.p.m. for the 199 samples assayed. Of these, 24.1% were above the average, but of these only one reached 3.0 p.p.m. From a table of abundances of elements in rocks, the silver content of intermediate volcanics is measured at 0.07 p.p.m. It can be seen that the background here is

considerably higher, although with one possible exception there do not appear to be any specifically higher zones. On line 60 in zone C two adjacent readings at 18 00 E and 20 00 E are 2.5 and 3.0 p.p.m. respectively. Generally, this is the only zone that appears to warrant further investigation from the limited sampling carried out.

There does not appear to be any particular relationship between the copper and silver values. Certainly in A, B and D zones the silver is in the background range with high coppers, while in the C zone there is a slight increase in the silver values although the coppers, while not in the highest range, are anomalous.

Respectfully submitted,


A. S. Ashton, P.Eng.

BULLIS ENGINEERING LTD.

DELTA, B.C.

January 31st, 1972.

CERTIFICATE OF QUALIFICATIONS

I, Arthur Sydney Ashton, do hereby certify that:

1. I am a practising geological engineer with residence at 5441 - 7B Avenue, Delta, B.C.
2. I am a graduate of the University of Toronto and have been granted a degree of Bachelor of Applied Science.
3. I have been practising my profession as a geological engineer for twenty-three years.
4. I am a member of the Professional Engineers of British Columbia and of the Professional Engineers of Ontario.
5. This report is based on a visit to the property on October 30th, 1971, and on published information.
6. I have no interest, directly or indirectly, in the property nor in the securities of Branta Exploration Ltd. (N.P.L.), nor do I expect to receive any such interest.


A. S. Ashton, P.Eng.

January 31st, 1972.
DELTA, B.C.

REFERENCES

- W. W. Leach Telkwa River and Vicinity -
 G.S.C. 1907.
- V. Dolmage The Copper Silver Veins of
 the Telkwa District, B.C. -
 G.S.C. 1918.
- R. B. Stokes Janite Group, Howson River
 Area - July 21, 1967.
- J. A. Michell Report on Stewart Ground,
 Howson River Area 1968.
- S. J. Hunter Reports on Norcan property,
 Howson Basin, 1966.
- Maps (a) G.S.C. Map 44 - 23 Smithers.
 (b) G.S.C. Map 971A Smithers.
 (c) B.C. Dept. of Mines - Map 69-1
 Geological Compilation Map of
 the Smithers, Hazelton and
 Terrace Areas.

In Account With

OREST LABORATORIES (B.C.) LTD.

B.C. REGISTERED ASSAYERS
INDUSTRIAL and RESEARCH CHEMISTS

PHONE 688-8586

1068 HOMER STREET
VANCOUVER 3, B.C.

Branta Resources,
804 Royal Bank Bldg.,
EDMONTON, Alta.

DATE Nov. 25, 1971
LAB. No. 748G
ORDER No.

FOR: HOWDEN CLAIMS

For Services Rendered:

202 geochemical determinations - 2 elements @ 1.50	303.00
202 soil sample preparations @ 0.20	40.40
	<hr/>
	\$343.40
	<hr/>

ASSESSMENT WORK DONE ON THE
HOWSON CLAIMS - SMITHERS B.C.

FOR

BRANTA EXPLORATIONS LTD. (N.P.L.)
205 - 846 West Hastings Street
VANCOUVER 1, British Columbia

DATES OF WORK PROGRAM: - October 4 - October 30 inclusive, 1971

WORK CONTRACTED AND CONDUCTED BY:

Dr. K.W. Geiger - Geologist - St. Albert, Alberta
Jon Stewart - Prospector - Sardis B.C.
A.S. Ashton - Consulting
Engineer - Delta B.C.

1. Line Cutting and Geologic mapping:
38,000 feet - 20 days work\$ 4000.00
2. Soil Sampling for Geochemistry
38,000' @ 200' spacing - 190 samples\$ 1140.00
3. Trenching:
 - a. 10'x2'x2' - 40 cu.ft.
 - b. 5'x2'x2' - 20 cu.ft.
 - c. 20'x2'x2' - 80 cu.ft total 140 cu.ft
140 cu.ft @ \$9.00 per Cu.ft. \$ 1260.00
4. Geochemistry analysis, interpretation & report \$ 900.00

Total work conducted on Claims \$ 7300.00

A.S. Ashton P. Eng

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.

To Wit:

In the Matter of ASSEMENT WORK CONDUCTED
ON JAN HOWSON CLAIMS (Nos 1-76 inclusive)
by BRANTA EXPLORATIONS LTD, 205-846 WEST
HASTINGS STREET, VANCOUVER B.C., during the
period OCT. 4 to OCT 31, 1971.

I, MICHELE P. CURCIO, AGENT for BRANTA EXPLORATIONS LTD (INC)
of 3374 - RADCLIFFE AVENUE, WEST VANCOUVER

in the Province of British Columbia, do solemnly declare that, work was performed
on Nos claims 1-76, during the period of OCT 4 - OCT 31/71
for a total of \$7300⁰⁰ in and by the following.

LINE CUTTING - OCT. 4 - OCT 19 incl.

DR. K.W. GEIGER -
42-GLENMORE CRESCENT - 16 days @ 10 hrs = 160 hrs @ \$15⁰⁰ per hr = \$2400⁰⁰
ST. ALBERT, ALBERTA

TON STEWART
P.O. Box 4 - 16 days @ 10 hrs = 160 hrs @ \$10⁰⁰ per hr = \$1600⁰⁰
SARVIS B.C.

GEOCHEMICAL Soil Sampling - OCT 20 - 24th inclusive

DR. K.W. GEIGER - 4 days @ 10 hrs = 40 hrs @ \$15⁰⁰ per hr = \$600⁰⁰
1 day @ 4 hrs = 4 hrs @ \$15⁰⁰ per hr = \$60⁰⁰
Total = \$660⁰⁰

TON STEWART - 4 days @ 10 hrs = 40 hrs @ \$10⁰⁰ per hr = \$400⁰⁰
1 day @ 8 hrs = 8 hrs @ \$10⁰⁰ per hr = \$80⁰⁰
Total = \$480⁰⁰

TRENCHING - OCT 25 - OCT 29 incl.

DR. K.W. GEIGER - 5 days @ 10 hrs = 50 hrs @ \$15⁰⁰ per hr = \$750⁰⁰
TON STEWART - 4 days @ 10 hrs = 40 hrs @ \$10⁰⁰ per hr = \$400⁰⁰
1 day @ 11 hrs = 11 hrs @ \$10⁰⁰ per hr = \$110⁰⁰
Total = \$860⁰⁰

ASSAY, RESULTS & INTERPRETATION - OCT. 29 - OCT 31 incl.

A.S. ASHTON, P. ENG. CONSULTANT.
5441-78 AVE, DELTA B.C. - 3 days @ 12 hrs = 36 hrs @ \$25⁰⁰ per hr = \$900⁰⁰

TOTAL EXPENDITURES = \$7300⁰⁰

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of
the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City
of Vancouver, in the
Province of British Columbia, this 10th
day of April, 1972, A.D.

Michele Curcio

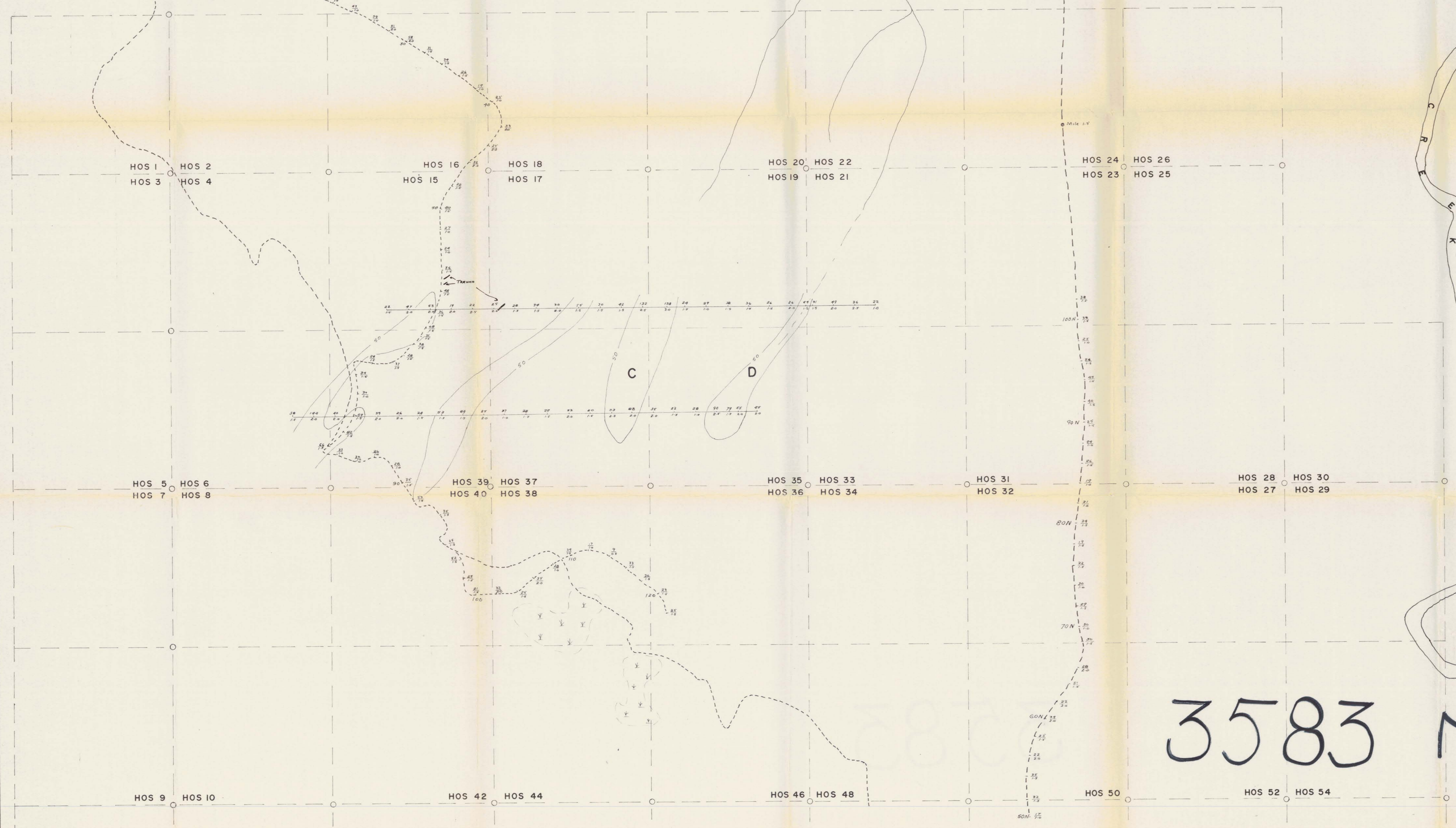
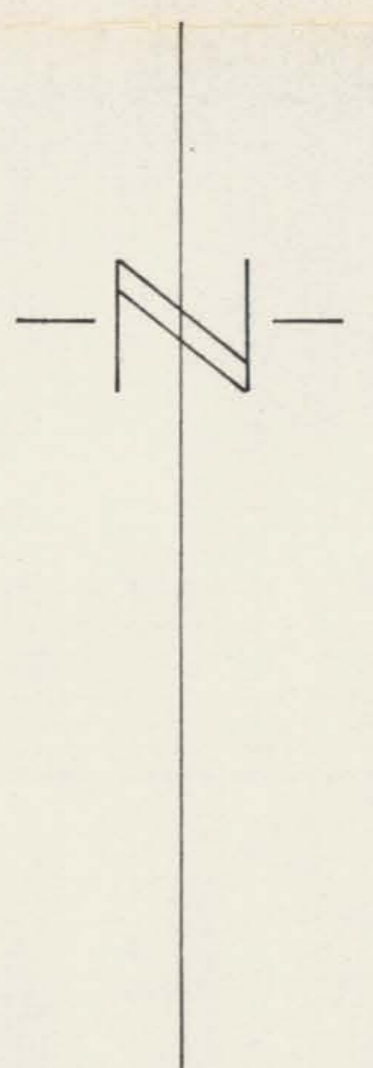
R. John Rogers
A Commissioner for taking Affidavits within British Columbia or
a Notary Public in and for the Province of British Columbia.

R. JOHN ROGERS

BARRISTER & SOLICITOR
205 - 846 W. HASTINGS ST.
VANCOUVER 1, B. C.

T E L K A R I V E R

H O W S O N C R E E K

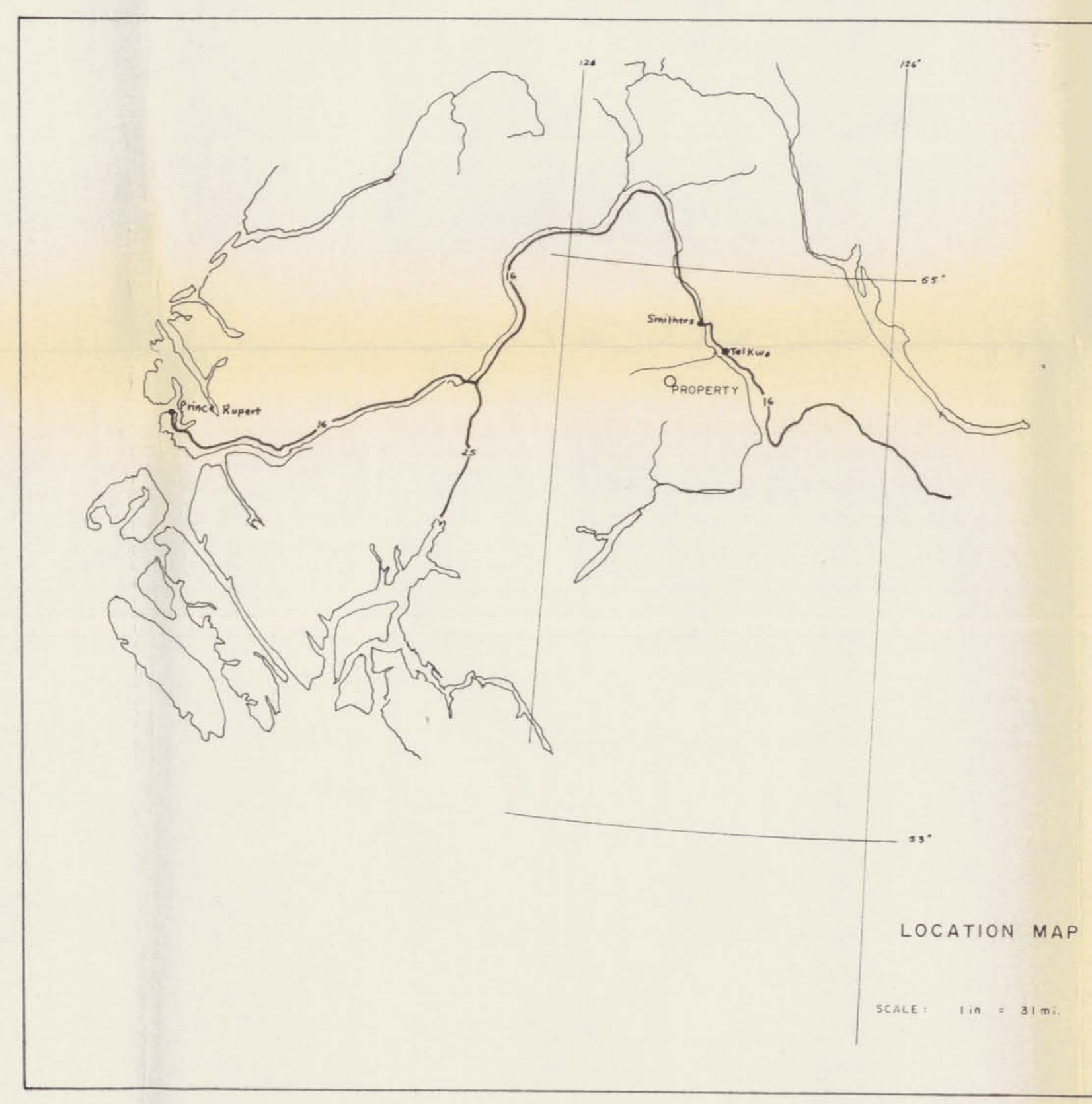
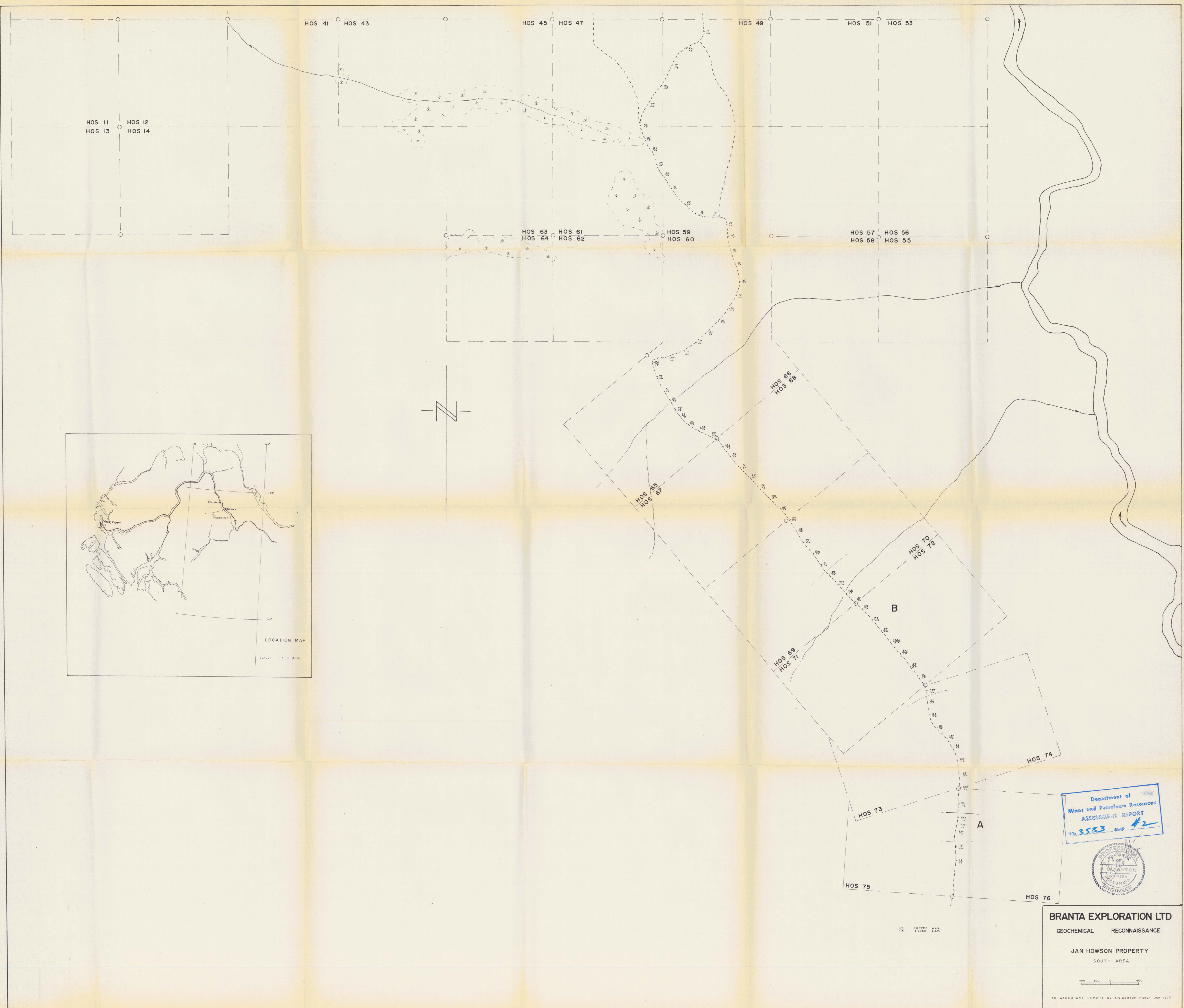


Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO 3583 MAP #1



3583 M-1

BRANTA EXPLORATION LTD
GEOCHEMICAL RECONNAISSANCE
JAN HOWSON PROPERTY
NORTH AREA
400 200 0 200
TO ACCOMPANY REPORT BY A. S. ASHTON P.E.N.G. JAN 1978



Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 3583 MAP #2



BRANTA EXPLORATION LTD
 GEOCHEMICAL RECONNAISSANCE

JAN HOWSON PROPERTY
 SOUTH AREA

