

This report has been examined by the Geological Survey of Canada
DEC 11 1981
Yukon Territory

ASSESSMENT REPORT

ON

TOM 147-183 (YA45447-483)

63°08'N 130°06'W

GEOCHEMICAL, MAGNETIC
GEOLOGICAL & TRENCHING



WATSON LAKE MINING DISTRICT

JULY - SEPTEMBER, 1981

R. STROSHEIN

NOVEMBER 1981

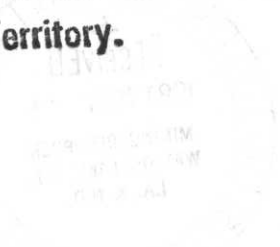
Upper Bay Exp & Dev. Contd

090919

This report has been examined by
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of \$ 11,100 -

Subston

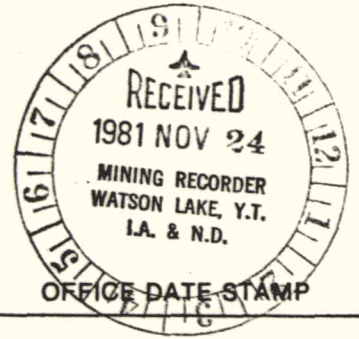
for Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.





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.)



(Name) Robert Stroshein	Occupation Geologist
(Postal Address) 100-10 Burns Rd., Whitehorse, Y. T. Y1A 4Y9	

MAKE OATH AND SAY, THAT:

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

YA 45458	TOM 158
YA 45460	TOM 160
YA 454569	TOM 169
YA 45469	TOM 170

situated at 63°08'N 130°08'W Claim Sheet No. 105/0/1
in the Watson Lake Mining District, to the value of at least 4800.00
dollars, since the 27th day of November 19 80,

to represent the following mineral claims under the authority of Grouping Certificate No. 2658 OK (PRV.)
(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

YA 45457 - YA 45470	TOM 157-170)	three years renewal requested for
YA 45482 - YA 45483	TOM 182-183)	each claim to November 27, 1984

Total of 48 years

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.)

Geochemical, geological, magnetic surveys and bull dozer trenching
July 10' - September 10, 1981

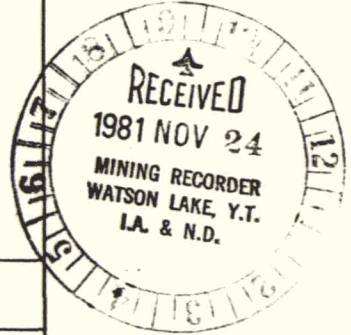
Sworn before me at Whitehorse, Y. T.
this 17th day of November 19 81.

[Signature]
Notary Public

Robert Stroshein
Applicant



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.)

(Name)	Robert Stroshein	Occupation	Geologist
(Postal Address)	100-10 Burns Rd., Whitehorse, Y. T. Y1A 4Y9		

OFFICE DATE STAMP

MAKE OATH AND SAY, THAT:

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

YA 45469 - YA 45471 TOM 169-171

situated at 63°08'N 130°08'W Claim Sheet No. 105/0/1
in the Watson Lake Mining District, to the value of at least 3600.00
dollars, since the 27th day of November 1980

to represent the following mineral claims under the authority of Grouping Certificate No. _____ (Group 1)
(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

YA 45447 - YA 45456	TOM 147-156)	3 years renewal requested for each claim to November 27, 1984
YA 45471	TOM 171)	
YA 45473	TOM 173)	

TOTAL of 36 years

- 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.)

Geochemical, geological, magnetic surveys and bulldozer trenching
between July 10 and September 10, 1981

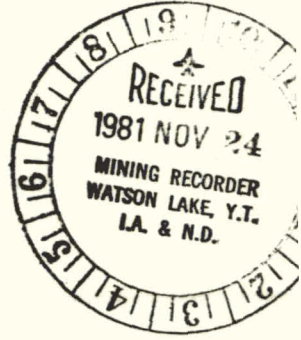
Sworn before me at Whitehorse, Y. T.
this 17th day of November 1981

Notary Public

Applicant



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)	Robert Stroshein	Occupation	Geologist
(Postal Address)	100-10 Burns Rd., Whitehorse, Y. T. Y1A 4Y9		

OFFICE DATE STAMP

MAKE OATH AND SAY, THAT:

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

YA 45469 - YA 45472 TOM 169-172

situated at 63°08'N 130°08'W Claim Sheet No. 105/0/1
in the Watson Lake Mining District, to the value of at least 2700.00
dollars, since the 27th day of November 1981,
to represent the following mineral claims under the authority of Grouping Certificate No. _____ (Group 2)

(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

YA 45472 TOM 172) 3 years renewal requested for each claim
YA 45474- YA45481 TOM 174-181) to November 27, 1984

Total of 27 years

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.)

-Geochemical, geological, magnetic surveys and bulldozer trenching
between July 10 - September 10, 1981

Sworn before me at Whitehorse, Y. T.
this 17th day of November 1981
[Signature]
Notary Public

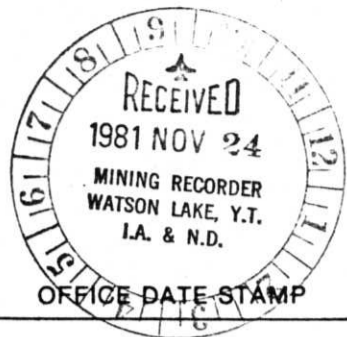
[Signature]
Applicant



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.)

(Name) Robert Stroshein	Occupation Geologist
(Postal Address) 100-10 Burns Rd., Whitehorse, Y. T. Y1A 4Y9	



MAKE OATH AND SAY, THAT:

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

YA 45458	TOM 158
YA 45460	TOM 160
YA 454569	TOM 169
YA 45469	TOM 170

situated at 63°08'N 130°08'W Claim Sheet No. 105/0/1
in the Watson Lake Mining District, to the value of at least 4800.00
dollars, since the 27th day of November 19 80

to represent the following mineral claims under the authority of Grouping Certificate No. 2658 OK (PRV.)
(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

YA 45457 - YA 45470	TOM 157-170) three years renewal requested for
YA 45482 - YA 45483	TOM 182-183) each claim to November 27, 1984

Total of 48 years

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.)

Geochemical, geological, magnetic surveys and bull dozer trenching
July 10 - September 10, 1981

Sworn before me at Whitehorse, Y. T.
this 17th day of November 19 81.

[Signature]
Notary Public

[Signature]
Applicant



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.)

(Name)	Robert Stroshein	Occupation	Geologist
(Postal Address)	100-10 Burns Rd., Whitehorse, Y. T. Y1A 4Y9		

OFFICE DATE STAMP

MAKE OATH AND SAY, THAT:

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

YA 45469 - YA 45471 TOM 169-171

situated at 63°08'N 130°08'W Claim Sheet No. 105/0/1

in the Watson Lake Mining District, to the value of at least 3600.00

dollars, since the 27th day of November 1980

to represent the following mineral claims under the authority of Grouping Certificate No. _____ (Group 1)

(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

YA 45447 - YA 45456	TOM 147-156)	3 years renewal requested for each claim to November 27, 1984
YA 45471	TOM 171)	
YA 45473	TOM 173)	

TOTAL of 36 years

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.)

Geochemical, geological, magnetic surveys and bulldozer trenching
between July 10 and September 10, 1981

Sworn before me at Whitehorse, Y. T.
this 17th day of November 1981

Notary Public

Applicant



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)	Robert Stroshein	Occupation	Geologist
(Postal Address)	100-10 Burns Rd., Whitehorse, Y. T. Y1A 4Y9		

OFFICE DATE STAMP

MAKE OATH AND SAY, THAT:

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

YA 45469 - YA 45472 TOM 169-172

situated at 63°08'N 130°08'W Claim Sheet No. 105/0/1
in the Watson Lake Mining District, to the value of at least 2700.00
dollars, since the 27th day of November 1981,

to represent the following mineral claims under the authority of Grouping Certificate No. _____ (Group 2)
(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

YA 45472 TOM 172) 3 years renewal requested for each claim
YA 45474- YA45481 TOM 174-181) to November 27, 1984

Total of 27 years

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.)

Geochemical, geological, magnetic surveys and bulldozer trenching
between July 10 - September 10, 1981

Sworn before me at Whitehorse, Y. T.
this 17th day of November 1981.

[Signature]
Notary Public

[Signature]
Applicant

TABLE OF CONTENTS

	<u>Page</u>
1. INTRODUCTION.....	1
2. LOCATION AND ACCESS.....	1
3. PERSONNEL.....	1
4. CLAIM OWNERSHIP.....	3
5. GEOCHEMISTRY.....	3
6. MAGNETOMETER SURVEY.....	3
7. GEOLOGY AND TRENCHING.....	4
8. CONCLUSIONS AND RECOMMENDATIONS.....	5
APPENDIX I - REVIEW OF EXPENDITURES	
APPENDIX II - QUALIFICATIONS: R. STROSHEIN	
FIGURES	
1. TOM CLAIMS: CLAIM LOCATION PLAN	2
2. GEOCHEMICAL PLANS - PB	6
3. GEOCHEMICAL PLANS - ZN	7
4. GEOCHEMICAL PLANS- AG	8
5. MAGNETIC SURVEY	9
6. TOM CLAIMS: GEOLOGY	10

1. INTRODUCTION:

The Tom Claims (147-183) were staked in August 1979 by Hudson Bay Exploration and Development. The claims were investigated during 1980 by reconnaissance geological mapping and a small soil sampling grid established in an overburden covered area.

During 1981 a second grid was established by using compass and topolite chain. The lines were marked with flagging tape.

The grid consisted of lines run at one hundred meter intervals. Soil samples and magnetic readings were obtained at twenty five meter intervals along the grid lines.

Soil samples were analysed for Pb/Zn/Ag by Bondar Clegg and Company Limited of 136B Industrial Road, Whitehorse, Yukon Territory. The magnetic survey was carried out using a Precision Proton Magnetometer.

Rock outcrops along the east draining creek in the south central area were mapped and rock samples collected were analysed for Pb/Zn/Ag.

Bulldozer trenching was carried out across the stratigraphy over the magnetic anomaly above the valley drop off on the Tom 169 and 170 claims.

All results were compiled at the Whitehorse office of Hudson Bay Exploration and Development Company Limited and here in presented.

2. LOCATION AND ACCESS:

The Tom claims (147-183) are located in the Watson Lake Mining District near Macmillan Pass on claim map 105/0/1 approximately centered at 63°08'N, 130°06'W.

The claims are accessible by helicopter from the Macmillan Pass airstrip which is 5 miles north west of the claims. The airstrip is located along the North Canol Road approximately 140 miles north of Ross River, Y. T.

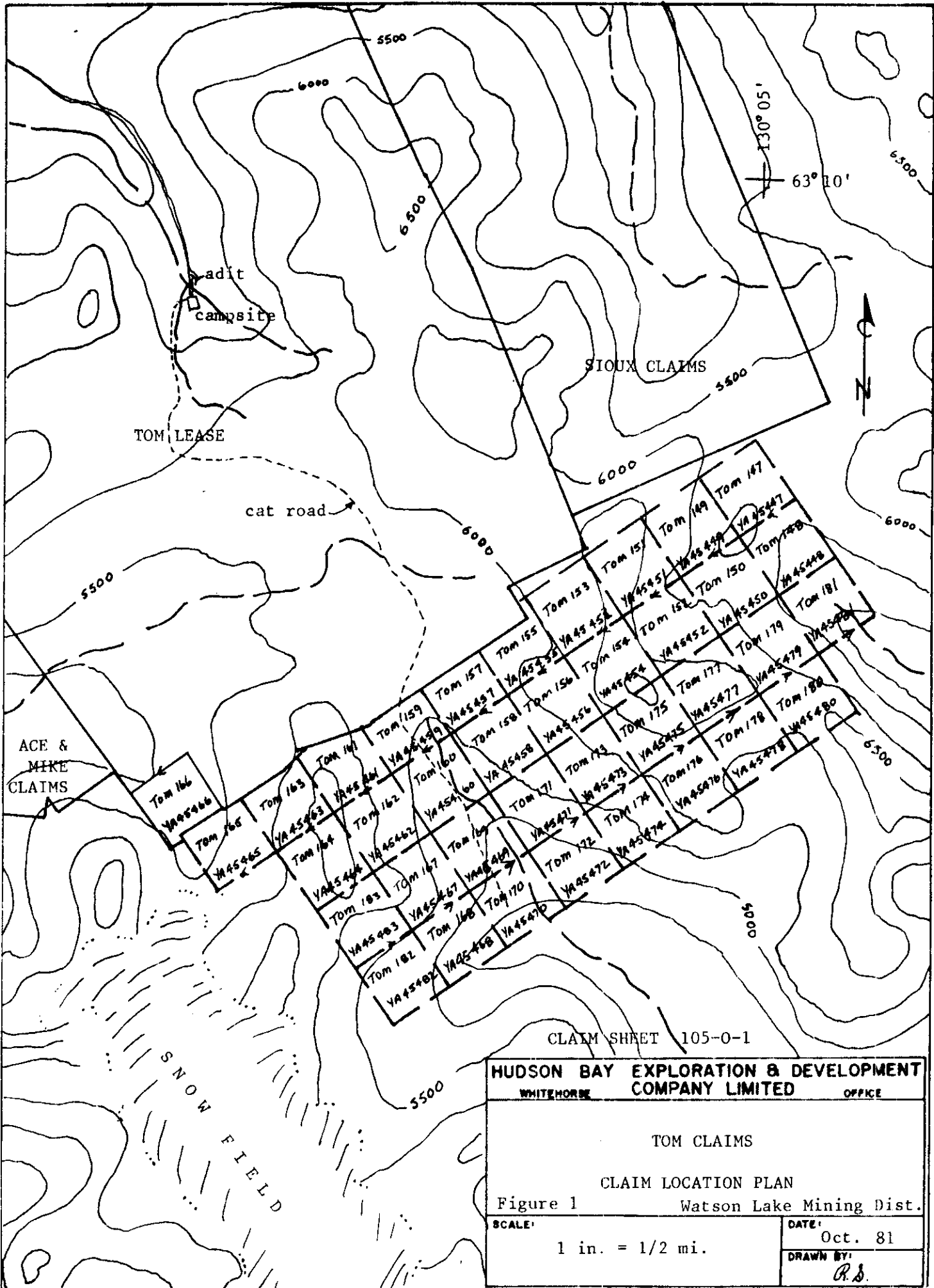
A road suitable for only caterpillar travel has been located to the property from the mine site of the Tom Valley Project 2 miles north of the claims.

See figure 1.

3. PERSONNEL:

The personnel assigned to the project were:

R. Stroshein	Project Supervisor
S. Tufford	Magnetometer Operator
R. Conner	Soil Sampler
B. Carson	Cat Operator



CLAIM SHEET 105-0-1

HUDSON BAY EXPLORATION & DEVELOPMENT	
WHITEHORSE	OFFICE

TOM CLAIMS

CLAIM LOCATION PLAN

Figure 1 Watson Lake Mining Dist.

SCALE:
1 in. = 1/2 mi.

DATE: Oct. 81
DRAWN BY: R.S.

All personnel were employed by Hudson Bay Exploration and Development Company Limited.

4. CLAIM OWNERSHIP:

This exploration report covers the claims Tom 147-183 (YA 45447 - YA 45483) indicated on figure 1. The claims total 37, all are wholly owned by Hudson Bay Exploration and Development Company Limited of 100-10 Burns Road, Whitehorse, Yukon Territory. Y1A 4Y9.

The exploration was carried out from July to September 1981.

5. GEOCHEMISTRY:

The results of the geochemical survey are indicated on figures 2, 3 and 4. All results are reported in parts per million. Analysis were by atomic absorption.

The following table presents the statistical analysis of the data for each element.

<u>Element</u>	<u>n</u>	<u>\bar{x}</u>	<u>δ</u>	<u>Poss.</u> <u>'Anom.</u>	<u>Defin.</u> <u>Anom.</u>
Pb	110	18	10	28	38
Zn	110	61	40	101	141
Ag	110	.6	.7	1.3	1.9

Possibly anomalous values are considered as being 1 standard deviation above the mean value while definitely anomalous values are 2 standard deviations above the mean value.

Contours of mean, possibly anomalous and anomalous values are indicated on the plans.

The element plots indicate an erratic distribution in the area. Anomalous Zn values occur in the northern portion of the grid along the creek bottoms.

6. MAGNETIC SURVEY:

The results of the ground magnetic survey are indicated on figure 5. The survey was conducted using a Precision Proton magnetometer.

An approximately 350 γ anomaly occurs along an east-west trend in the eastern portion of the grid.

The anomaly is open ended but appears to be associated with the chert pebble conglomerate unit and hanging wall silt banded argillites.

7. TRENCHING AND GEOLOGY:

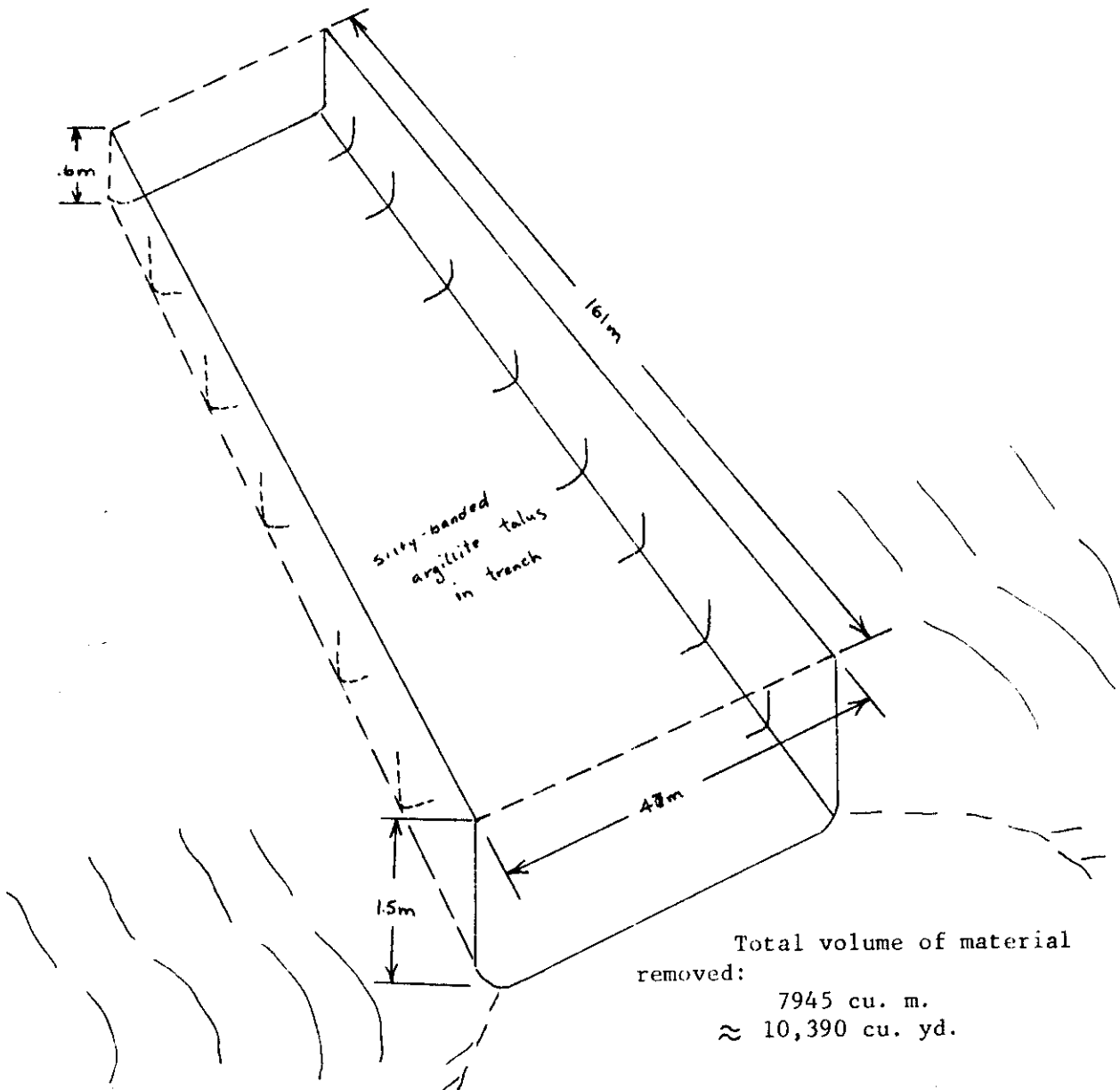
The location of the bulldozer trench and outcrops are indicated on figure 6.

The trench was located to cross the geological strike and to expose the area of the most intense magnetic response.

The dimensions of the trench are indicated on the following sketch.

The total volume of material removed is approximately 10,390 cubic yards.

The bulldozer was unable to expose bedrock due to a shortage of time and poor conditions. The trench exposed silt-banded argillite talus throughout with minor rounded chert pebble conglomerate boulders. No visible sulphides were observed. Further trenching will be undertaken next season to attempt to deepen the existing trench or to test other locations.



Total volume of material removed:
7945 cu. m.
≈ 10,390 cu. yd.

8. CONCLUSIONS AND RECOMMENDATIONS:

The presence of the magnetic anomaly associated with the chert pebble conglomerate and overlying silt-banded argillite unit is encouraging. The result suggest the presence of stock work or feeder zone indicating a potential stratabound horizon stratigraphically overlying the zone.

Because the magnetic anomaly is of a relatively low order (350 γ) it is possible that the zone occurs at some depth and thus may not sub crop at bed rock surface.

It is recommended to continue the trenching and attempt to reach bedrock. Consideration should be given to diamond drilling several test holes in the vicinity of the anomaly even if the results of the trenching are not encouraging.

Further exploration of the favourable horizon using geochemical and magnetic surveys should be continued in other areas of the property.



R. Stroshein
Sr. Geologist

Hudson Bay Exploration and
Development Company Limited

APPENDIX I

REVIEW OF EXPENDITURES 1981

TOM (147-183) CLAIMS

SALARIES AND WAGES

R. Stroshein - Supervision and report preparation
3 days @ 95\$/day \$ 285.00

R. Conner - Soil Sampling
3 days @ 50\$/day 150.00

S. Tufford - Magnetometer Survey
2 days @ 75\$/day 150.00

HELICOPTER

2.0 hours @ 460\$/hr (includes fuel) 920.00
- (5 days at .4 hrs./day)

ASSAY COSTS

110 soil samples (Pb/Zn/Ag) @ \$3.85 423.50
(includes sample preparation)

8 rock samples (Pb/Zn/Ag/Ba) @ \$9.50 76.00
(includes sample preparation)

TRENCHING

10,390 cubic yards @ 1\$/yard 10,390.00

TOTAL - \$ 12,394.50

APPENDIX II

ROBERT W. STROSHEIN

ADDRESS: 181 Alsek,
Whitehorse, Yukon Territory.
Y1A 4L8

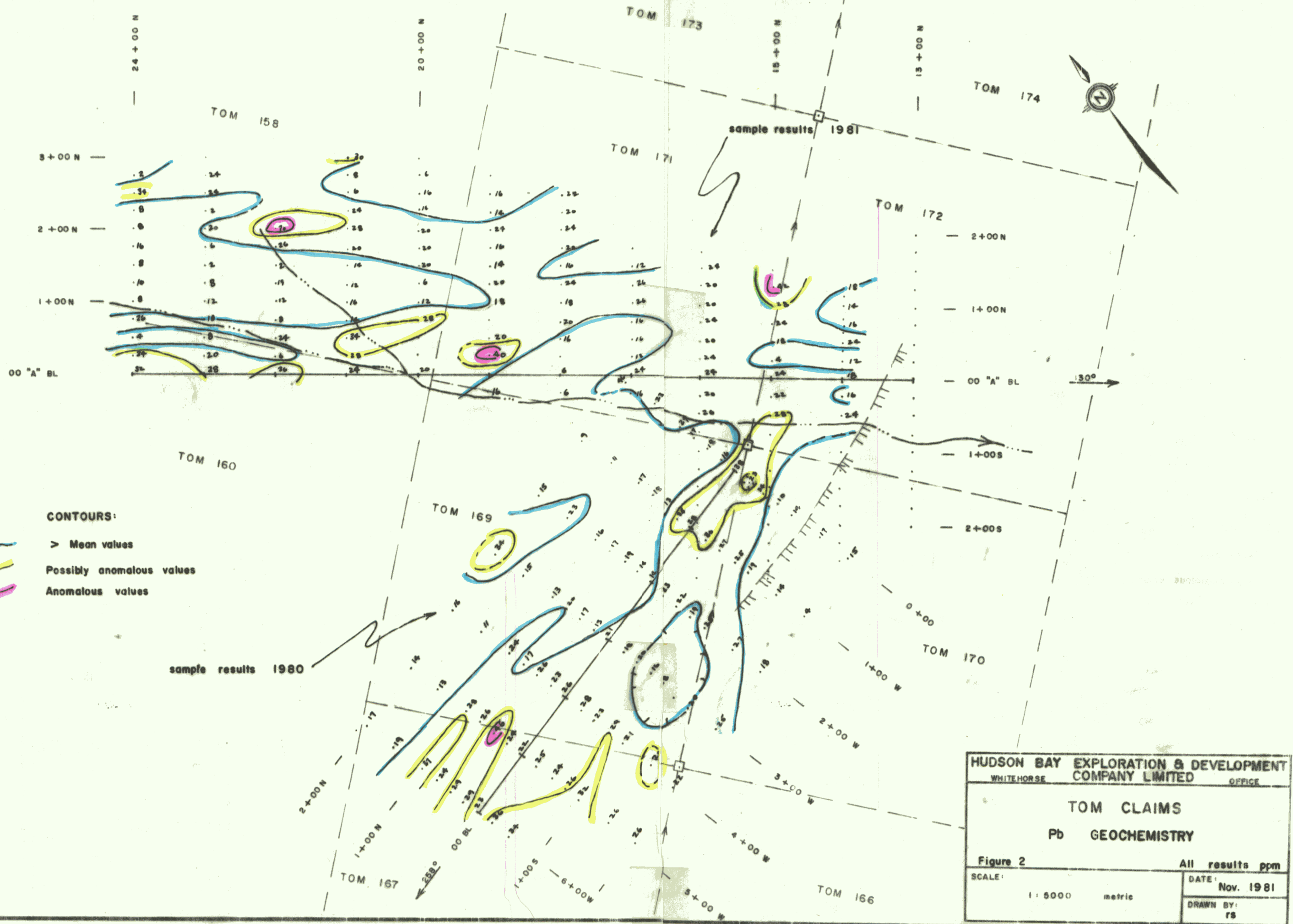
EDUCATION: B. Sc. (Geological Engineering) from
University of Saskatchewan
Graduated in 1973

EMPLOYMENT: 1973 - 1981 Hudson Bay Exploration & Development Co. Ltd.

Flin Flon Office 1973 - 1975
Drill Geologist - field supervisor of diamond drill
projects Northern Manitoba and Saskatchewan.

Whitehorse Office
Project Geologist 1975 - 1980 - field supervisor
of geological mapping, geophysical, geochemical
and prospecting programs in the Yukon Territory.
Included report preparation and assessment.

Senior Geologist - 1981 - planning, monitoring
and assessing exploration projects conducted in
the Yukon Territory.



CONTOURS:

- > Mean values
- Possibly anomalous values
- Anomalous values

HUDSON BAY EXPLORATION & DEVELOPMENT WHITEHORSE COMPANY LIMITED OFFICE	
TOM CLAIMS	
Pb GEOCHEMISTRY	
Figure 2 All results ppm	
SCALE:	DATE:
1 : 5000 metric	Nov. 1981
	DRAWN BY:
	rs



CONTOURS:

- > Mean values
- Possibly anomalous values
- Anomalous values

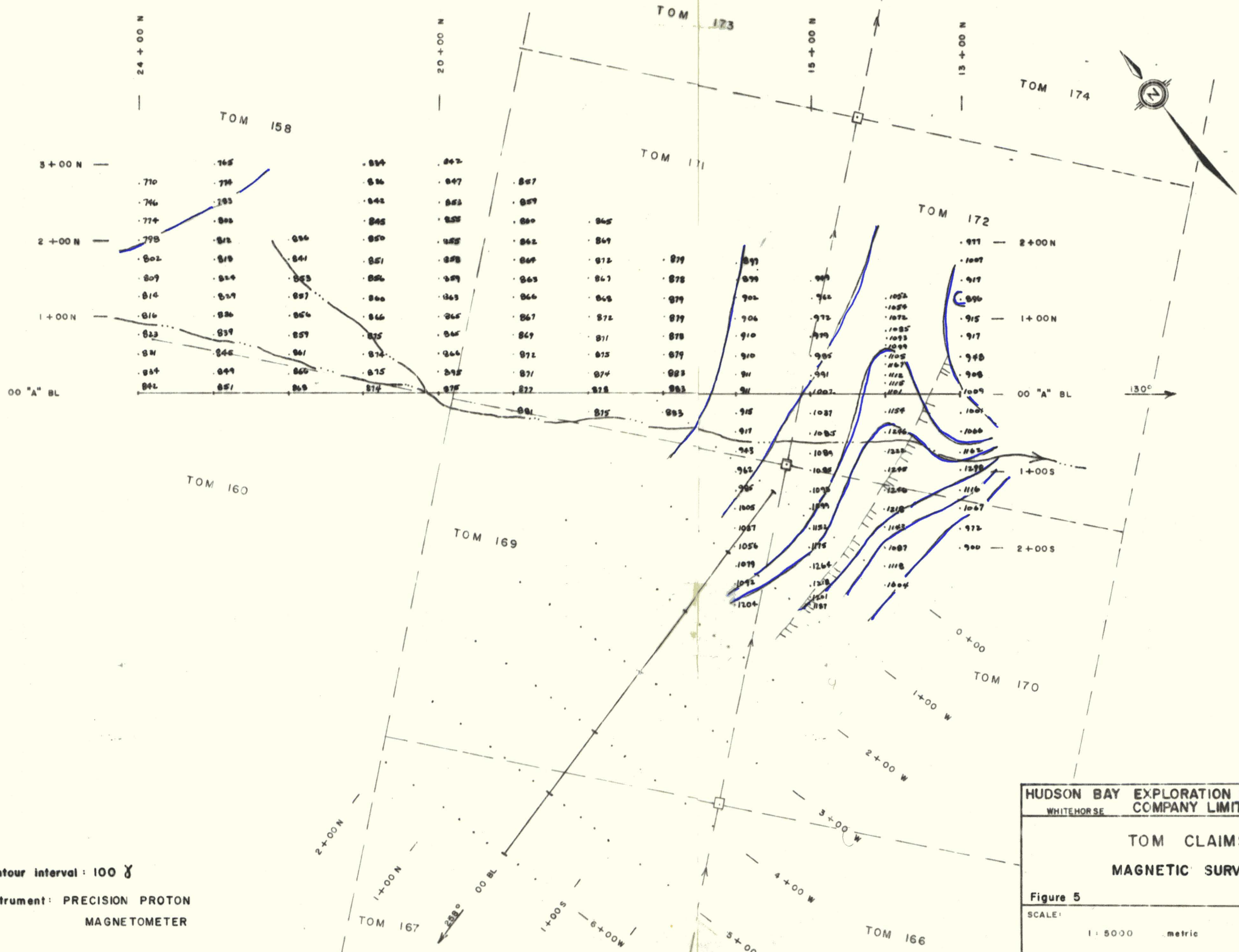
HUDSON BAY EXPLORATION & DEVELOPMENT WHITEHORSE COMPANY LIMITED		OFFICE
TOM CLAIMS Zn GEOCHEMISTRY		
Figure 3		All results ppm
SCALE: 1 : 5000 metric		DATE: Nov. 1981
		DRAWN BY: FS



CONTOURS:

- > Mean values
- Possibly anomalous values
- Anomalous values

HUDSON BAY EXPLORATION & DEVELOPMENT WHITEHORSE COMPANY LIMITED OFFICE	
TOM CLAIMS Ag GEOCHEMISTRY	
Figure 4 All results ppm	
SCALE: 1:5000 metric	DATE: Nov. 1981
	DRAWN BY: rs



Contour interval : 100 γ
 Instrument : PRECISION PROTON
 MAGNETOMETER

HUDSON BAY EXPLORATION & DEVELOPMENT
 WHITEHORSE COMPANY LIMITED OFFICE

TOM CLAIMS
 MAGNETIC SURVEY

Figure 5

SCALE:	DATE:
1 : 5000 metric	Nov. 1981
	DRAWN BY:
	rs



X rock sample - width - Pb/Zn/Ag/Ba
all results ppm

- unit 3b : carbonaceous argillite
- unit 3a : silt banded argillite
- unit 2 : chert pebble conglomerate

HUDSON BAY EXPLORATION & DEVELOPMENT WHITEHORSE COMPANY LIMITED		OFFICE
TOM CLAIMS GEOLOGY		
Figure 6		
SCALE:	1 : 5000 metric	DATE:
		Nov. 1981
		DRAWN BY:
		rs