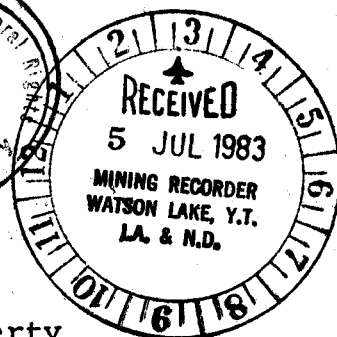


1982 Geological Geochemical
Assessment Report



TITLE

Hoole River Property

CLAIMS

Zap 1-6, Zoo 1-28

COMMODITY

Pb-Zn-Ag

LOCATION-Area

Pelly Mountains, 88 kilometres
southeast of Ross River

-Mining District

Watson Lake

-Coordinates

Latitude - $61^{\circ}18'$

Longitude - $131^{\circ}30'$

-NTS

105G/5 and 6

FOR

AMAX OF CANADA LIMITED

WORK PERIOD

July 20-24, 1982

AMAX VANCOUVER OFFICE

091465

Table of Contents

SUMMARY-----	1
CONCLUSIONS-----	2
RECOMMENDATIONS-----	3
INTRODUCTION	
Location and Access-----	4
Claim Data-----	4
History-----	4
1982 PROGRAM-----	5
REGIONAL GEOLOGY-----	6
PROPERTY GEOLOGY	
Structure-----	8
MINERALIZATION-----	9
GEOCHEMISTRY	
Results of Soil Sampling-----	10
Lead-----	10
Zinc-----	10
Silver-----	10
Barium-----	11
Chip Samples-----	11

Appendices

Appendix I	- Statement of Costs
II	- Statement of Qualifications
III	- Analytical Procedures, Analytical Results

Illustrations

Figure 1	- Location Map-----	after page 4
2	- Claim Map-----	1:50,000--after page 5
3	- Geological Map-----	1:10,000--in pocket
4	- Geochemical Map-Sample Location--	1:10,000--in pocket

SUMMARY

The Hoole River property comprised of 34 claims is within the Pelly Mountains, 88 kilometres southeast of Ross River. The property was staked by AMAX in 1982 as a result of base metal reconnaissance exploration of Devono-Mississippian stratigraphy in the Pelly Mountains. This ground was previously held by Newmont and Asamera Oil who drilled three holes (523 metres) in 1978.

The 1982 program included soil sampling, chip sampling and mapping.

The property lies on the Cassiar carbonate platform near the western edge of the Selwyn Basin. The regional north-westerly striking stratigraphy includes Cambro-Ordovician basalt and shale, Siluro-Devonian dolostone and siltstone, Devono-Mississippian volcanic and clastic rocks and Carboniferous-Triassic fine grained clastic rocks.

The claims are mainly underlain by Devono-Mississippian felsic volcanic breccias and flows. A 30-200 metre wide, seven kilometre long stratiform zone of schistose pyritic volcanics hosts the mineralization and dips steeply southeast. Galena and sphalerite in the altered volcanic rocks are associated with bedded barite, volcanic breccia and vuggy siliceous volcanics.

Soil samples over the altered zone are anomalous in lead. A 400 by 800 metre area anomalous in lead (500-2,000 ppm) and silver (1.0-13.2 ppm) occurs in the southeastern portion of the claims and has not been tested by diamond drilling or trenching.

CONCLUSIONS

A 150 metre wide, seven kilometre long stratiform zone of altered pyritic volcanic rocks contains small showings of galena-sphalerite associated with bedded barite, silicified volcanics or volcanic breccia. Soils over the altered zone are highly anomalous in lead and moderately anomalous in zinc and silver. Previous diamond drilling was confined to 500 metres of the altered zone. The best lead and coincident silver anomaly, in the southeastern portion, of the zone has not been drilled or trenched. The mineralization shows affinities to a volcanogenic massive sulphide model of the Kuroko type.

RECOMMENDATIONS

1. A 1:5,000 scale base map of the property should be constructed. This map was completed in February, 1983.

2. The property and extensions of the volcanic zone to the northwest and southeast should be mapped with a view to reconstructing the paleovolcanic history. Koroko and Sedex mineral models should be kept in mind.

3. The soil grid should be extended over the whole property with cross lines every 200 metres and samples every 50 metres. This would result in an additional 1,000 soil samples. The mineralized zones should be chip sampled.

4. Anomalous zones and mineralized areas should be trenched.

5. Upon completion of the surface work a small diamond drill should test the best targets with five - 150 metre holes.

Three men camped on the property for one month could complete the predrilling phase of the program at an estimated cost of \$91,000.00. The 750 metre drill program is estimated to take one month and cost \$150,000.00.

INTRODUCTION

Location and Access

The property is located in the St. Cyr Range of the Pelly Mountains at the headwaters of Hoole River, 88 kilometres southeast of Ross River, Y.T. and 41 kilometres south of the Robert Campbell Highway (Figure 1). A winter cat road leads to the property but just the first five kilometres is accessible in the summer. In 1982, access to the property was by casual-hire helicopter from Ross River, Y.T.

Claim Data

The property comprises the 34 Zoo and Zap claims in the Watson Lake Mining District which cover an area 1,000 metres by 7.2 kilometres. A list of the claims with grant number and anniversary dates is presented below:

Name	Grant Number	No. of Claims	Expiry Date
Zap 1-6	YA68699-68704	6	July 19, 1983
Zoo 1-4	YA68705-68708	4	July 19, 1983
Zoo 5-28	YA69081-69104	24	September 24, 1983
Total claims		- 34	

History

The property was first staked by Newmont in 1966. In 1967 they constructed the winter road and explored with mapping, soil sampling and hand trenching. It was restaked in 1976 by Newmont and Asamera Oil and further explored with soil sampling, EM and mag surveys, mapping and hand trenching. In 1978, they drilled three holes (523 metres) which are located on Figure 2 and carried out bulldozer trenching. All core from the three holes is on file at the DIAND core library, Whitehorse.

AMAX OF CANADA LIMITED

HOOLE RIVER PROPERTY
WATSON LAKE MINING DISTRICT — YUKON TERRITORY

LOCATION MAP

SCALE 200 0 200 KILOMETRES MILES
100 0 100

Fred Harris May 31/83

N. T. S. Ref. 105 G 5 and 6

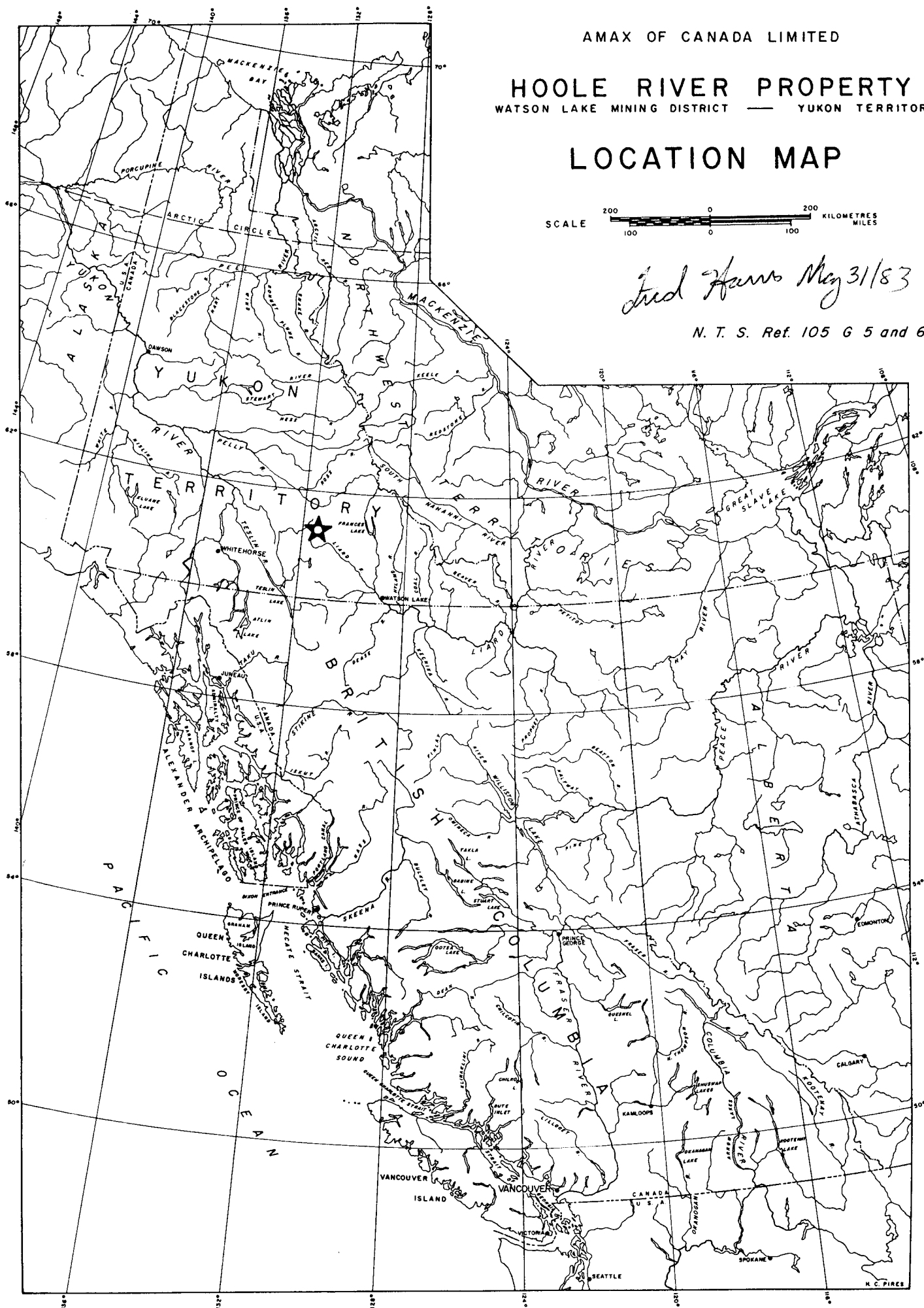


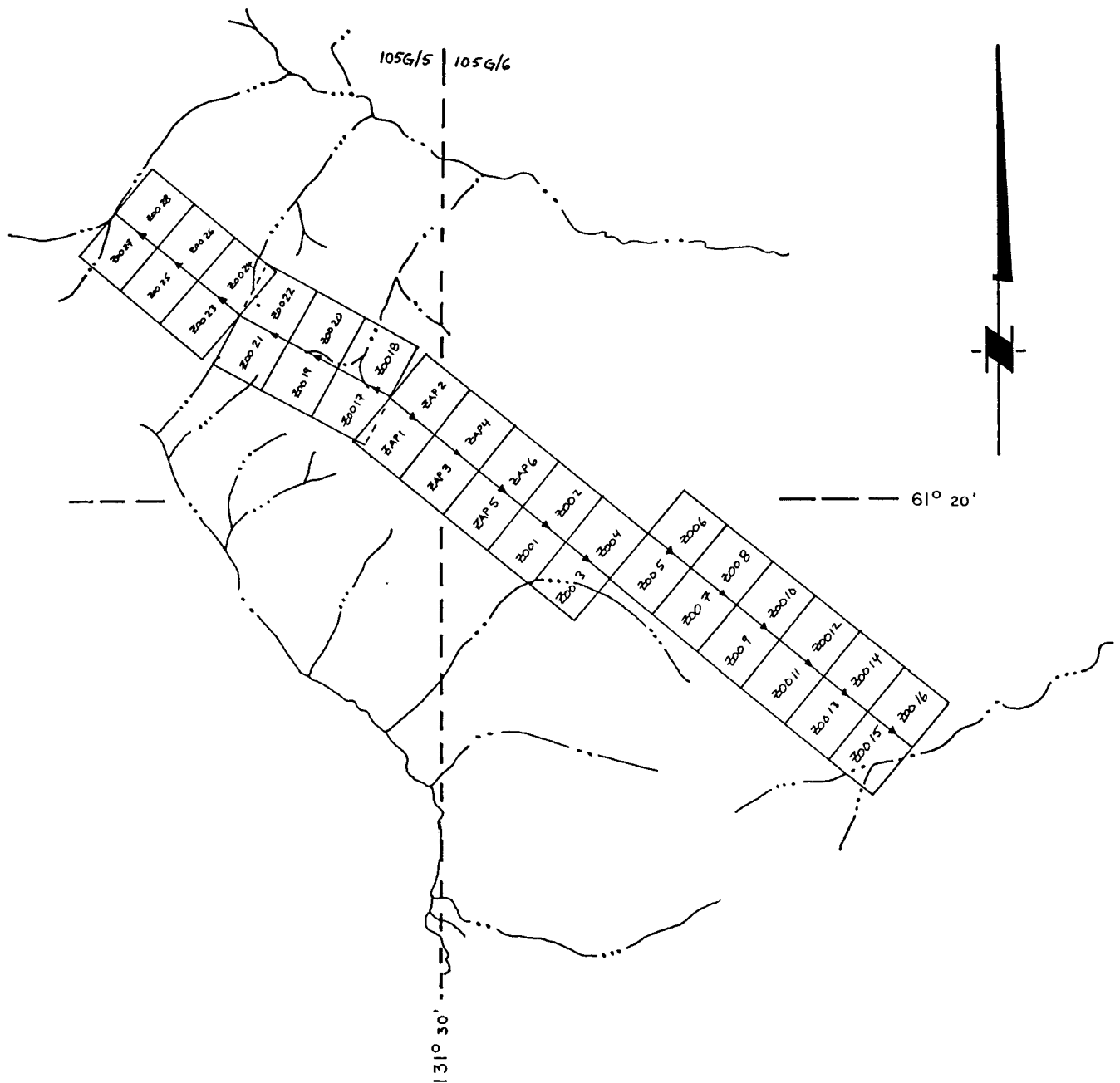
FIG. 1

1982 PROGRAM

The property was staked in the summer of 1982 as a result of reconnaissance exploration of Upper Devonian-Mississippian shales and volcanics in the Pelly Mountains.

Eight days were spent prospecting, mapping and soil sampling the property. A total of 32 chip samples, 10 silt samples and 300 soil samples were collected and analyzed for copper, manganese, iron, silver, lead, zinc and barium. Approximately 60% of the soil samples were taken on a flagged grid with a 2.2 kilometre base line and one kilometre cross lines at 200 metre intervals. Soil samples were taken at 50 or 100 metre intervals along the cross lines.

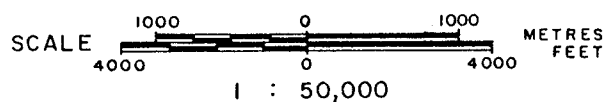
The geology and geochemistry are plotted on a 1:10,000 scale base map (Figures 3 and 4). 1:50,000 scale topographic maps are not available for the area.



AMAX OF CANADA LIMITED

HOOLE RIVER PROPERTY
WATSON LAKE MINING DISTRICT — YUKON TERRITORY

CLAIM MAP



Fred Harris May 31/83
N. T. S. Ref. 105 G 5 and 6
FIG. 2

REGIONAL GEOLOGY

Regionally, the area is southwest of the Tintina Trench and is underlain predominantly by Paleozoic sedimentary and volcanic rocks deposited near the western edge of the Selwyn Basin. The area centres on the Cassiar Platform, a centre of shallow water sedimentation which developed in Siluro-Devonian time.

Four rock assemblages are recognized (Gordey G.S.C. Bull. 318). These rocks assemblages are the main divisions used in Figure 3.

1) Cambro-Ordovician basalt and shale which occur southwest of the property.

2) Siluro-Devonian shallow water dolomite and siltstone which occur immediately southwest and northeast of the claim group.

3) Devono-Mississippian volcanic rocks, shale, and chert which mainly underlie the property and host the mineralization.

4) Carboniferous to Upper Triassic shale, siltstone and minor limestone which occur northeast of the property.

The regional strike of all strata is northwest. The area was deformed by northeasterly thrusting and folding in Jura-Cretaceous time. Younger, steep faults related to the Tintina fault cut the earlier structures and divide the area into fault-bounded blocks.

PROPERTY GEOLOGY

The claims are mainly underlain by a northwest trending band of Devonian-Mississippian acid volcanic rocks, some 1,500 metres wide (Unit 3). Silurian-Devonian carbonates (Unit 2) underlie the volcanics to the northwest and are thrust over the volcanics to the southwest. A small plug of medium-grained syenite (Unit 3a), probably coeval with the southeastern section of the claims.

Rubbly weathering felsic tuffs, lapilli tuff, agglomerates, breccia and flows (Unit 3b) make up most of the volcanic section. Lesser amounts of dacite, andesite and basalt (Unit 3e, 3f) along with minor amounts of black shale and dolostone (Units 3b, 3d) are intercalated with the volcanics. The fragmental nature of the volcanics is observed best in white weathering tuff-breccia which contains fragments up to 30 centimetres in size.

A prominent red colour anomaly marks the location of a zone of sheared and altered volcanics which trends northwesterly through the claim block and host the mineralization (Unit 3c). The zone dips moderately to steeply to the southwest and is concordant with the regional structure. The zone averages 75 metres in width and has been traced for seven kilometres in outcrop and talus. Volcanics within the zone are strongly iron stained and have been partially to totally altered to chlorite-sericite-quartz schist. Lenses or bands of vuggy chert or silicified volcanic were found within the schist. Limonite in vugs is common with pyrite content varying from a trace to 10%.

Small pods or lenses of barite are exposed intermittently within the altered volcanics. The exposed thickness of the lenses is 1-2 metres. Along strike the barite can be traced for a few tens of metres. The barite is white to grey

in colour, poor to well bedded and is generally finely crystalline with occasional coarse grained patches. In places, the barite is interbedded with fine-grained pyrite and trace to several percent galena-sphalerite.

Structure

Strike of the volcanic rocks is consistently northwest and dips range from vertical to 45° southwest. Primary textures in the volcanics are faint because they have been overprinted by a strongly developed northwesterly trending cleavage and schistosity.

The altered volcanic zone is offset a few hundred metres to the right at two localities (Zoo 5 and Zoo 18). Elsewhere, this zone appears to be continuous along its strike length. At the southeastern end of the property there appears to be two zones which both contain pyrite and barite. There are also two pyritiferous volcanic zones at the northwestern end of the property but to date barite has only been located in the narrower southwestern zone (Figure 3).

MINERALIZATION

Three types of mineralization were seen on the property. The first type consists of minor sphalerite and/or galena with pyrite occurring in brecciated felsic volcanic. Two such zones were found near the contact of the altered volcanics (Zap 4, Zap 6). The zones are irregular in shape and up to five metres wide. Angular and rounded felsic volcanic fragments up to twelve centimetres occur in a matrix of fine grained volcanic, quartz and iron carbonate.

A second type of mineralization is found within the schistose altered volcanics. Bedded galena and sphalerite have been found at four locations (Zoo 24, Zoo 18, Zap 2, Zap 6-Zoo 2 boundary) along the altered zone. One assay sample yielded 0.3% lead, 0.26% zinc and 1.0 oz silver across 1.5 metres (Zoo 18). Selected samples are estimated to contain 5% galena. Traces of disseminated fluorite were seen in sheared volcanics near two of the barite exposures on Zoo 18 and Zap 2.

A third type of mineralization is associated with vuggy chert within the altered volcanic zone. Near the trenched area on Zoo 2, vugs within the chert contain pyrite and trace amounts of galena and sphalerite.

GEOCHEMISTRY

All soil and silt samples are plotted on Figure 4. Results can be found in Appendix III.

The B soil horizon was sampled where possible but soil horizons are poorly developed and many samples were taken from talus fines.

Results of Soil Sampling

Lead

Within and near the altered volcanic zone soils are highly anomalous in lead. Values are commonly above 100 ppm over the whole length of the altered zone. The highest values occur within the Zoo 7-12 claims where many lead values are above 500 ppm (up to 2,000 ppm). This anomaly, which is only partly defined, is 800 by 400 metres.

Zinc

Soils are generally only slightly enriched in zinc over the altered volcanic zone. A 200 x 100 metre zone within the Zap 4 claim contains values from 1,000-2,220 ppm zinc. An 800 x 200 metre zone on claims Zoo 7, 10 and 12 which is coincident with the strong lead anomaly, contains scattered values above 1,000 ppm zinc.

Silver

The one area anomalous in silver is coincident with the strong lead anomaly on Zoo 7 to 12 claims. In this area,

silver values in soils range from 1.0 to 13.2 ppm whereas values elsewhere are generally less than 1.0.

Barium

As would be expected barium is anomalous in soils over the altered zone. The discontinuous nature of the barium anomaly along the altered zone confirms the observation that barite occurs as discontinuous lenses with the zone of altered volcanics.

Chip Samples

Seven chip samples of barite were taken along the altered zone and are listed below. Values are in ppm unless otherwise noted. Three samples contain galena-sphalerite and four are unmineralized. All samples contain greater than 10,000 ppm barium.

Barite Chip Samples				
Sample Number	Silver	Zinc	Lead	Description
82PQT312	30.0	1,720	48	Mineralized
82POT302	18.0	452	1,840	Mineralized
82PQA294	1.0 oz/t	0.38%	0.28%	Mineralized
82PHT329	1.2	16	2	Unmineralized
82PHT327	0.2	28	2	Unmineralized
82PHT326	0.2	136	2	Unmineralized
82PQT147	3.4	116	14	Pyrite-barite

Twenty chip samples of the altered volcanic rock were taken and eight of the most anomalous samples are listed below. Six of these samples are anomalous in lead (76-3,400 ppm), two are anomalous in zinc (600-1,260 ppm), four in silver (3.2-6.4) and three in barium 4,900 to >10,000.

Sample 82PQ168 with 3,400 ppm Pb is from a 20 metre diameter gossan in claim Zoo 2.

Volcanic Chip Samples					
Sample Number	Silver	Zinc	Lead	Barium	Description
82PQT154	0.2	600	100	680	rusty trachyte breccia
159	0.4	158	80	3,200	rusty schist
168	3.8	144	3,400	>10,000	gossan
172	1.8	1,260	210	1,780	vuggy siliceous volcanic
301	3.4	140	284	8,800	pyritic schistose volcanic
307	0.8	62	76	880	pyritic schistose volcanic
311	3.2	52	400	1,320	pyritic schistose volcanic
313	6.4	110	182	4,900	vuggy siliceous volcanic



F.R. Harris

APPENDIX I

STATEMENT OF COSTS

APPENDIX I - STATEMENT OF COSTS

Period of Work - July 21-23, 1982

Type of Work - Geochemical Survey

Personnel Employed

N.D. Humphries-2647 West 14th Avenue, Vancouver, B.C. Geologist; 3 days @ \$104.35	\$313.05
A.M. Neill-2636 Turner Street, Vancouver, B.C. Junior Assistant & Cook; 3 days @ \$79.39	238.17
R.J. Boase-609 E. Carisbrook, North Vancouver, B.C. Junior Assistant; 3 days @ \$63.52	190.56

<u>Room and Board</u> - 9 man days @ \$25.00/day	225.00
--	--------

Geochemical Analyses - Rossbacher Laboratory Ltd.
- Invoice No. 82300
2225 S. Springer Avenue,
Burnaby, B.C.

262 soil samples for Pb, Zn, Ag, Ba @ 6.15 (82PO 595-759 and 82PN 251-347)	1,611.30
---	----------

Helicopter - Trans North Turbo Air-Ross River, Y.T.

Jet Ranger 204B - Invoice No. 61519	
July 21 - 1.7 hrs @ 500 + Fuel	925.55
Invoice No. 61518	
July 23 - 1.7 hrs @ 500 + Fuel	925.55

<u>Report Preparation</u>	650.00
	\$5,079.18

5 years each to ZOO 1-4 and ZAP 1-6 = \$5,000.00

Type of Work - January, 1983

Topographic Base Map - Pacific Survey Corporation,
Vancouver, B.C.

Invoice No. 1236	\$4,850.00
2 years each to ZOO 5-28	4,800.00
	=====

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

AMAX MINERALS EXPLORATION

601-535 Thurlow Street

Vancouver, B.C.

Project 57032

DATE Feb. 25, 1983

INVOICE NO. 82300

CERTIFICATE NO. 82432

ITEM	DESCRIPTION	SUB-TOTAL	TOTAL
262	Geochem. analysis for 3 elements and Ba @ \$ 5.75	\$ 1,506.50	
262	Soil sample prep. 0.40	104.80	
<u>DUPLICATE INVOICE.</u>			
(Do not pay.)			
			<u>\$ 1,611.30</u>

TERMS - NET 30 DAYS



TRANS NORTH AIR
TRANS NORTH TURBO AIR LTD.

ACCOUNT
NUMBER

61518

INVOICE DATE

013/08/82

A/C TYPE

2068 FDDC

DAY MONTH YEAR

230782

PURCHASE ORDER NO.

CHARTERER

BILLING ADDRESS

FUEL TNTA FUEL USED 1.7 PR

FROM PR
Pickup 2 Fly Camps
Hool River Area.

ADD & EXT CORRECT

APPROVED DATE 3/12
PROJECT ACCOUNT SUB AMOUNT
57032 8201 725.55

CK 28191 SEP 3 1982

SUB	G.L.	AMOUNT
606	51020	850.00
606	51110	75.55

1.7	@ 500.00	850.00

09 CV084

TERMS NET 30 DAYS
INTEREST PER MONTH (24% PER ANNUM) WILL
BE CHARGED ON ALL OUTSTANDING AMOUNTS
OVER 30 DAYS

X Fred Harris #32
CHARTERER'S SIGNATURE

JDW JMT
INITIALS COPILOT'S NAME

ENGINEER'S NAME

FLIGHT ATTENDANT

TOTAL \$ 925.55

FLIGHT REPORT
INVOICE



TRANS NORTH AIR
TRANS NORTH TURBO AIR LTD.

ACCOUNT
NUMBER

61519

INVOICE DATE

013/08/82

A/C TYPE

2068 FDDC

DAY MONTH YEAR

210782

PURCHASE ORDER NO.

CHARTERER

BILLING ADDRESS

FUEL TNTA FUEL USED 1.7 PR

FROM PR
More 2 Fly Camps
into Hool River

ADD & EXT CORRECT

APPROVED DATE 3/12
PROJECT ACCOUNT SUB AMOUNT
57032 8201 925.55

CK 28191 SEP 3 1982

SUB	G.L.	AMOUNT
606	51020	850.00
606	51110	75.55

1.7	@ 500.00	850.00

09 CV084

TERMS NET 30 DAYS
INTEREST PER MONTH (24% PER ANNUM) WILL
BE CHARGED ON ALL OUTSTANDING AMOUNTS
OVER 30 DAYS

X Fred Harris #32
CHARTERER'S SIGNATURE

JDW JMT
INITIALS COPILOT'S NAME

ENGINEER'S NAME

FLIGHT ATTENDANT

FLIGHT ATTENDANT

TOTAL \$ 925.55

FLIGHT REPORT
INVOICE



PACIFIC SURVEY CORPORATION

1409 WEST PENDER STREET, VANCOUVER, B.C., CANADA V6G 2S4 TELEPHONE: 683-6501 TELEX: 04-507805

INVOICE

AMAX MINERALS EXPLORATION
#601 - 535 Thurlow Street
Vancouver, B. C. V6E 3L6

ATTN: Mr. H. Pires



INVOICE No.
DATE
YOUR ORDER No.
JOB No.
PACKING SLIP No.
SHIPPED VIA

(REPLACEMENT)
1236
March 31/83
82-134

QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
	STEAMBOAT - Scribed 1:5000/10M CI	\$ 550.00	
	TROITSA PEAK - 1:10000/20 M CI	750.00	
	PRICE - 1:5000/10M CI	900.00	
	KUTCHO CREEK - Scribed 1:10000/20M CI	2,000.00	
	HOULE RIVER - Scribed 1:5000/10M CI	4,850.00	
	NUM CLAIMS - Scribed 1:10000/20M CI	2,350.00	
			\$ 11,400.00

ADD & EXT CORRECT	
3671.02	11,400.00

Sales Tax N/A

CK. 2 4 6 6 3 APR 28 1983

5

CV 153

TERMS. NET CASH. INTEREST AT THE RATE OF 1% PER MONTH (12% PER ANNUM) CHARGED AFTER 30 DAYS.

APPENDIX II

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

F.R. Harris

Education

University of Western Ontario - B.Sc. Honours Geology	1961
University of New Brunswick - M.Sc. Geology	1964

Experience

May 60 - May 64 - Summer employment while attending university with Geological Survey of Canada and the New Brunswick Department of Lands & Mines

May 64 - June 70 - Ontario Department of Mines based in Thunder Bay. Party Chief - mapping and writing final reports on areas ranging from 100 to 150 square miles

July 70 - Amax of Canada Limited - Staff Geologist
Plans, organizes and supervises small property and prospect evaluation programs or assists with the planning and management of large property exploration programs utilizing all exploration techniques.
Selects, applies and interprets the most effective exploration approaches and techniques for any type of exploration survey.
1982 - New Title - Senior Geologist

STATEMENT OF QUALIFICATIONS

NAME R.J. Boase

ADDRESS 609 E. Carisbrooke Road,
North Vancouver, B.C.
V7N 1N8

EDUCATION First year sciences at Capilano College - B -
in Geology 110

EXPERIENCE 1979 - Texasgulf Inc.
1980 - Esso Minerals
1981 - Newmont Mines
1982 - AMAX of Canada Limited
Field Assistant

STATEMENT OF QUALIFICATIONS

NAME	N.D. Humphreys
ADDRESS	131 LaLoche Crescent, Saskatoon, Saskatchewan S7K 4R8
EDUCATION	B.Sc. University of Saskatchewan - 1976 M.Sc. Queens University - 1982
EXPERIENCE	1976-1978 - Geological Assistant - Cominco 1979-1981 - Geologist - B.P. Minerals 1982 - Geologist - AMAX of Canada Limited

STATEMENT OF QUALIFICATIONS

NAME	Allison Neill
ADDRESS	2636 Turner Street, Vancouver, B.C. V5Z 2G2
EDUCATION	1st Year Simon Fraser University - communications and geography
EXPERIENCE	1981 - Cordilleran Engineering 1982 - AMAX Minerals Exploration

APPENDIX III

ANALYTICAL PROCEDURES, ANALYTICAL RESULTS

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

CERTIFICATE OF ANALYSIS

2225 S. SPRINGER AVE.
BURNABY, B.C.
CANADA
TELEPHONE: 299-8810

CERTIFICATE NO. 82176-9

INVOICE NO.

DATE ANALYSED 82/08/16

PROJECT 57032

TO: AMAX MINERALS EXPLORATION
601 - 535 THURLOW ST.
VANCOUVER, B.C.

No.	Sample	pH	Mo	Cu	Mn	Fe	As	Zn	Pb	Ba	No.
01	82PH5290			44	3500	210.0	2.4	1323	356	1260	01
02	291			34	670	8.7	5.8	600	1220	2000	02
03	292			16	1100	5.3	8.4	520	1660	4200	03
04	T293			16	930	5.8	1.6	170	62	6600	04
05	S294			20	800	8.5	4.6	336	780	78000	05
06	295			16	2900	8.6	1.6	366	116	1540	06
07	296			16	1740	8.6	1.6	840	132	1120	07
08	297			14	1240	8.6	1.4	320	82	1140	08
09	298			26	740	5.8	2.0	1140	374	1360	09
10	299			16	640	5.0	1.4	134	18	1200	10
11	82PHL220			30	400	8.8	9.4	530	1100	1320	11
12	S301			22	1360	9.8	3.2	900	900	1120	12
13	302			26	1090	12.0	3.0	1160	760	1200	13
14	303			22	2980	7.0	2.6	1560	440	1120	14
15	304			26	1710	6.2	3.8	920	324	1340	15
16	305			16	860	6.6	7.2	406	860	7400	16
17	306			30	1220	8.2	4.6	830	1140	1620	17
18	307			16	420	4.8	3.0	390	580	1600	18
19	82PH5308			46	470	4.6	1.2	380	132	2900	19
20	S308			146	160	1.0	1.0	138	92	1620	20
21	82PH5309			50	1000	8.2	4.0	870	1160	1120	21
22	310			34	750	4.2	0.6	464	68	1620	22
23	311			40	310	3.6	0.8	336	50	3160	23
24	1302			44	310	3.6	0.6	422	32	2420	24
25	S313			26	1040	6.4	0.4	950	56	1100	25
26	314			8	450	2.9	0.4	108	24	1500	26
27	L315			18	240	3.4	0.4	242	46	2540	27
28	316			22	580	3.1	0.2	280	30	1780	28
29	S328			12	420	7.00	0.4	264	414	2120	29
30	T326			2	20	1.1	0.2	136	2	212000	30
31	T327			2	20	0.8	0.2	28	2	212000	31
32	S328			16	1040	6.0	0.4	246	68	2500	32
33	T329			2	20	4.8	1.2	16	2	210000	33
34	T330			2	30	3.2	0.4	18	2	8600	34
35	82PH5331			12	670	8.2	0.4	262	76	1000	35
36	82PHL332			18	4400	4.9	2.2	1260	38	1700	36

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

CERTIFICATE OF ANALYSIS

2225 S. SPRINGER AVE.
BURNABY, B.C.
CANADA
TELEPHONE: 299-8810

CERTIFICATE NO. 82363-2

INVOICE NO.

DATE ANALYSED 82/12/14

PROJECT 57032

TO: AMAX MINERALS EXPLORATION
601 - 535 THURLOW ST.
VANCOUVER, B.C.

No.	Sample	pH	Mo	Su	PPB A.	No.
01	82PH5290				10	01
02	291				10	02
03	292				10	03
04	T293				10	04
05	S294				10	05
06	295				10	06
07	296				10	07
08	297				10	08
09	298				10	09
10	82PH5299				10	10
11	1300				20	11
12	S301				10	12
13	302				10	13
14	303				10	14
15	304				10	15
16	305				10	16
17	306				10	17
18	82PH5307				10	18
19						19
20						20
21						21
22						22
23						23
24						24
25						25
26						26
27						27
28						28
29						29
30						30
31						31
32						32
33						33
34						34
35						35
36						36
37						37
38						38
39						39
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J. Rossbacher

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GEOCHEMICAL ANALYSTS & ASSAYERS

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TO: AMAX MINERALS EXPLORATION
601 - 535 THURLOW ST.
VANCOUVER, B.C.

2225 S. SPRINGER AVE.
BURNABY, B.C.
CANADA
TELEPHONE: 299-8910

CERTIFICATE NO. 82171-1

INVOICE NO.

DATE ANALYSED 82/08/13

PROJECT 57032

No.	Sample	pH	Mo	Cu	Mn	Fe	As	Zn	Pb	Ba	No.
17	5251			18	280	4.1	0.2	116	14	840	17
18	5252			16	470	3.9	0.2	126	6	680	18
19	82PNS 253			18	440	3.8	0.2	128	10	1260	19
20	STD B			140	140	0.9	0.8	140	88	1640	20
21	82PNS 254			30	1100	4.4	0.2	270	126	1360	21
22	258			22	460	3.3	0.2	120	22	1200	22
23	256			26	1240	7.2	1.0	184	56	5000	23
24	257			18	480	5.5	0.4	400	88	1400	24
25	258			12	2090	5.0	1.4	610	320	4700	25
26	259			8	1140	4.7	1.8	244	670	2560	26
27	260			4	490	3.6	0.2	182	64	1880	27
28	261			8	130	3.3	2.4	190	254	21000	28
29	262			20	940	5.2	0.4	150	82	1500	29
30	263			18	820	5.5	0.2	136	62	1780	30
31	82PNS 264			18	540	7.3	0.6	164	124	2380	31
32	265			10	410	4.7	0.4	216	120	2240	32
33	266			10	100	4.1	1.4	106	270	1080	33
34	267			14	1220	5.5	1.0	600	170	2520	34
35	268			18	640	3.7	0.6	610	84	2800	35
36	269			16	210	3.7	0.2	252	18	1360	36
37	270			16	780	5.1	0.6	262	52	3600	37
38	271			18	960	4.4	0.6	146	30	1540	38
39	82PNS 272			24	850	3.8	0.2	116	12	860	39
40	STD B			149	160	1.0	0.8	142	88	1700	40

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CERTIFICATE NO. 82171-2

INVOICE NO.

DATE ANALYSED 82/08/13

PROJECT 57032

No.	Sample	pH	Mo	Cu	Mn	Fe	As	Zn	Pb	Ba	No.
01	82PNS 273			14	1600	4.7	0.2	42	10	2580	01
02	274			14	770	2.7	0.2	50	24	1820	02
03	275			16	980	4.5	0.2	194	34	2620	03
04	276			14	480	3.2	0.2	82	22	1600	04
05	277			14	630	4.0	0.2	126	10	1400	05
06	278			26	1350	6.2	0.8	2100	150	1560	06
07	279			14	380	3.2	0.2	102	14	640	07
08	280			26	920	4.7	0.2	126	14	920	08
09	281			8	170	0.9	0.2	20	2	260	09
10	282			14	620	2.3	1.4	114	260	2500	10
11	82PNS 283			16	50	1.7	11.0	98	520	21000	11
12	284			6	50	1.5	2.4	52	220	7500	12
13	285			16	100	2.0	2.0	166	90	21000	13
14	286			18	120	4.5	0.8	178	114	2560	14
15	287			18	190	3.7	1.2	170	130	4300	15
16	288			22	1400	5.8	0.6	208	206	4400	16
17	289			18	1220	21.0	0.4	690	60	920	17
18	290			16	1100	6.4	0.4	570	128	1220	18
19	82PNS 291			18	1620	7.7	0.8	490	72	1180	19
20	STD C			168	210	1.5	0.8	120	80	1520	20
21	82PNS 292			34	2390	6.7	0.6	414	204	1120	21
22	293			50	2300	7.1	0.8	720	362	1600	22
23	294			24	1120	4.5	0.2	172	100	1460	23
24	295			28	1180	5.5	0.2	334	110	1540	24
25	296			16	180	4.9	0.2	190	56	3660	25
26	297			20	250	7.1	0.6	234	100	2060	26
27	298			26	240	21.0	4.0	720	490	1820	27
28	299			22	2680	7.1	0.8	600	96	1560	28
29	300			74	790	6.3	0.2	457	46	960	29
30	301			38	680	6.1	0.2	366	16	1340	30
31	82PNS 302			34	730	5.3	0.2	180	24	1020	31
32	303			26	750	5.6	0.2	164	46	2900	32
33	304			14	420	3.6	0.2	172	100	1400	33
34	305			24	710	6.8	0.2	750	124	1680	34
35	306			34	1080	6.8	0.2	760	310	1640	35
36	307			22	560	5.1	0.4	374	180	1620	36
37	308			10	180	2.4	0.4	196	76	1100	37
38	309			12	300	6.0	0.2	770	122	1160	38
39	82PNS 310			20	1920	5.7	0.6	1660	1000	900	39
40	STD C			154	230	1.5	0.6	170	86	1560	40

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CERTIFICATE NO. 82363-3

INVOICE NO.

DATE ANALYSED 82/12/14

PROJECT 57032

No.	Sample	pH	Mo	Pg	PPB Au						No.
01	82 PMS 290				10						01
02	291				10						02
03	292				10						03
04	293				10						04
05	294				10						05
06	295				10						06
07	296				10						07
08	297				10						08
09	298				10						09
10	82 PMS 299				10						10
11	300				10						11
12	301				10						12
13	302				10						13
14	303				10						14
15	304				10						15
16	305				10						16
17	82 PMS 306				10						17
18											18
19											19

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CERTIFICATE NO. 82176-4

INVOICE NO.

DATE ANALYSED 82/08/13

PROJECT 57032

No.	Sample	pH	Mo	Cu	Mn	Fe	Ag	Zn	Pb	Ba				No.
01	82 PMS 348A			34	160	2.3	0.2	184	20	2160				01
40	82 PMS 348B			12	680	5.7	0.2	188	16	740				40

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CERTIFICATE NO. 82171-3

INVOICE NO.

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PROJECT 57032

No.	Sample	pH	Mo	Cu	Mn	Fe	Ag	Zn	Pb	Ba				No.
01	82 PMS 311			10	2160	6.6	0.4	440	50	1180				01
02	312			8	1100	5.0	0.2	396	28	1160				02
03	313			28	770	3.5	0.6	284	22	1800				03
04	314			62	1090	4.8	1.0	510	24	1880				04
05	315			40	640	4.4	0.4	302	12	1660				05
06	316			10	1300	4.2	0.4	222	16	800				06
07	317			12	620	4.9	0.2	174	18	920				07
08	318			10	700	4.6	0.2	110	10	640				08
09	319			10	630	4.8	0.2	100	16	720				09
10	320			12	520	4.4	0.2	156	16	820				10
11	82 PMS 321			16	1440	5.9	0.2	230	4	1080				11
12	322			8	600	4.4	0.2	112	8	980				12
13	323			22	580	7.4	0.3	238	50	1300				13
14	324			20	340	6.5	0.4	178	34	1060				14
15	325			42	540	8.9	0.4	404	62	1340				15
16	326			16	600	7.6	0.2	462	34	1060				16
17	327			12	820	4.8	0.2	204	34	860				17
18	328			12	620	4.2	0.2	132	28	880				18
19	82 PMS 329			12	370	4.8	0.2	156	20	1000				19
20	STD A			22	420	2.4	0.2	40	34	2560				20
21	82 PMS 330			16	560	3.9	0.2	116	14	860				21
22	331			12	470	4.3	0.2	134	10	780				22
23	332			14	600	4.8	0.6	104	6	760				23
24	333			14	700	5.0	0.2	124	14	780				24
25	334			20	870	4.9	0.2	168	16	1120				25
26	335			12	870	4.2	0.2	164	18	880				26
27	336			16	1130	4.6	0.2	232	24	940				27
28	337			8	1090	2.8	0.2	126	18	860				28
29	338			14	1150	4.1	0.6	154	16	820				29
30	339			18	1420	5.0	0.6	250	50	1100				30
31	82 PMS 340			12	280	2.9	0.4	152	28	1700				31
32	341			12	810	2.5	0.2	134	20	1320				32
33	342			8	150	2.2	0.2	102	12	1100				33
34	343			10	580	2.5	0.2	48	20	1080				34
35	344			14	1540	2.0	0.4	36	14	21000				35
36	345			8	130	1.1	0.2	38	4	840				36
37	346			22	260	2.9	0.4	186	14	1160				37
38	347			12	400	4.2	0.4	236	20	780				38
39	82 PMS 348			MISSING										39
40	STD A			24	370	2.4	0.2	38	16	1560				40

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TELEPHONE: 299-6810

CERTIFICATE NO. 82171-6

INVOICE NO.

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PROJECT 57032

No.	Sample	pH	Mo	Cu	Mn	Fe	Ag	Zn	Pb	Ba	No.
01	82POS584										01
02	595			24	3000	4.2	0.6	184	26	8000	02
03	596			20	170	7.3	6.4	350	274	10000	03
04	597			46	680	4.3	0.8	200	34	1760	04
05	598			34	360	8.6	1.0	510	176	1280	05
06	599			16	1540	7.6	0.6	860	160	1100	06
07	600			12	2020	6.4	0.6	730	134	900	07
08	601			38	780	8.0	0.4	147	20	1040	08
09	602			98	1360	6.6	0.4	1340	28	1960	09
10	603			44	920	4.8	0.4	418	26	2760	10
11	82POS 604			64	840	4.4	0.4	780	48	2040	11
12	605			58	1800	5.0	0.8	1020	94	1680	12
13	606			24	700	4.4	0.6	210	20	1100	13
14	607			36	460	3.8	0.6	254	20	1360	14
15	608			28	110	2.4	0.4	170	22	980	15
16	609			38	1260	4.2	0.6	200	20	1340	16
17	610			46	800	3.8	1.0	278	38	1640	17
18	611			10	2180	7.4	0.6	510	92	940	18
19	82POS 612			96	1600	7.6	0.6	740	74	1720	19
20	570 B			180	140	0.9	1.0	154	100	1680	20
21	82POS 613			58	1820	7.8	0.2	600	34	1220	21
22	614			12	1940	6.8	0.2	610	102	1120	22
23	615			40	1400	2.2	0.6	160	28	1400	23
24	616			70	780	3.4	1.8	750	42	1560	24
25	617			22	80	2.0	0.6	106	28	1720	25
26	618			28	320	2.4	0.2	168	24	1700	26
27	619			30	640	3.0	0.2	154	18	1340	27
28	620			22	1360	2.0	0.2	148	30	940	28
29	621			28	400	2.4	0.4	176	20	1020	29
30	622			12	640	4.2	0.2	188	34	1160	30
31	82POS 623			148	1460	6.0	0.2	406	64	940	31
32	624			22	1860	7.8	0.2	486	28	880	32
33	625			38	1300	7.8	0.2	502	60	1360	33
34	626			22	1160	5.0	0.2	420	26	1500	34
35	627			50	1820	7.4	0.2	2220	116	1400	35
36	628			30	1580	7.2	0.2	980	82	1420	36
37	629			38	1160	6.2	0.2	1300	184	2040	37
38	630			32	920	6.7	0.4	570	102	1320	38
39	82POS 631			26	5000	7.4	0.6	860	92	1680	39
40	STD B			146	140	1.0	0.8	144	100	1580	40

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CERTIFICATE NO. 82171-7

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PROJECT 57032

No.	Sample	pH	Mo	Cu	Mn	Fe	Ag	Zn	Pb	Ba	No.
01	82POS 632			16	3320	5.8	0.6	600	94	840	01
02	633			18	3360	6.6	0.6	820	254	920	02
03	634			14	1240	5.3	0.4	404	68	830	03
04	635			20	900	4.9	0.6	462	112	1180	04
05	636			22	940	6.3	1.2	780	284	2480	05
06	637			28	660	6.5	1.4	1140	424	2360	06
07	638			36	980	4.7	1.2	1360	72	210000	07
08	639			36	1000	4.0	1.6	1660	120	210000	08
09	640			66	1960	7.4	0.6	1920	154	1880	09
10	641			46	2420	6.7	0.4	1540	80	1520	10
11	82POS 642			30	3300	7.0	0.6	610	118	1120	11
12	643			24	3980	6.8	0.6	530	78	940	12
13	644			32	700	4.6	0.6	386	120	880	13
14	645			16	1320	6.2	0.6	248	58	1220	14
15	646			58	300	3.2	1.0	244	36	2340	15
16	647			34	260	2.8	0.6	118	24	1600	16
17	648			16	1100	4.4	0.2	78	44	1780	17
18	649			16	540	2.8	0.6	146	46	5000	18
19	82POS 650			24	320	3.6	0.8	248	50	3260	19
20	C			174	180	1.3	0.7	110	78	1680	20
21	82POS 651			52	820	4.1	1.2	354	34	2460	21
22	652			22	320	2.9	0.4	218	20	1860	22
23	653			26	860	4.2	0.6	186	82	1680	23
24	654			52	480	3.9	0.4	170	34	1580	24
25	655			16	240	4.6	5.6	132	660	2260	25
26	656			52	920	6.5	0.8	190	42	9520	26
27	657			28	1960	6.5	0.4	88	42	2480	27
28	658			10	1680	4.9	0.2	42	20	1780	28
29	659			12	1760	4.4	0.4	124	78	7400	29
30	82POS 660			12	140	2.2	1.2	84	22	2100	30
31											31
32											32
33											33
34											34
35											35
36											36
37											37
38											38
39											39
40											40

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CERTIFICATE NO. 82176-6

INVOICE NO.

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PROJECT 57032

No.	Sample	pH	Mo	Cu	Mn	Fe	Ag	Zn	Pb	Ba	No.
01	82POS 661			16	220	4.2	1.4	250	190	1560	01
02	662			12	420	4.3	2.6	240	52	8400	02
03	663			28	260	7.6	2.6	384	264	1500	03
04	664			24	840	4.1	7.2	466	620	10000	04
05	665			26	940	6.5	6.2	540	600	10000	05
06	666			32	1040	9.2	2.4	530	412	2240	06
07	667			42	960	10.0	1.8	580	344	1640	07
08	668			44	2940	9.1	2.2	640	740	960	08
09	669			42	5000	8.4	1.4	1220	380	1920	09
10	670			28	3220	7.8	2.6	740	750	2260	10
11	82POS 671			22	820	7.6	4.2	470	1160	5100	11
12	672			22	920	8.2	2.8	458	1020	5200	12
13	673			20	480	9.1	5.8	388	840	2780	13
14	674			34	780	10.0	13.2	790	2000	1460	14
15	675			24	600	10.0	6.8	430	920	10000	15
16	676			28	760	10.0	2.8	530	90	2920	16
17	677			42	880	10.0	2.4	770	446	1080	17
18	678			18	560	8.0	2.8	260	288	1300	18
19	82POS 679			38	340	5.7	5.8	960	940	2760	19
20	STD D			126	60	0.9	4.2	520	102	1560	20
21	82POS 680			42	380	5.8	7.0	1000	1260	2180	21
22	681			30	1100	7.6	4.0	700	900	3200	22
23	682			30	3060	7.2	4.8	880	1060	2000	23
24	683			36	1160	5.4	7.4	710	880	10000	24
25	684			34	1560	6.4	7.2	750	760	10000	25
26	685			82	4200	10.0	3.8	1520	940	2460	26
27	686			28	1200	6.5	6.6	680	840	4100	27
28	687			18	460	3.1	0.8	162	20	940	28
29	688			16	640	4.5	1.0	228	36	1100	29

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INVOICE NO.

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PROJECT 57032

No.	Sample	pH	Mo	%	Av	No.
01	82POS 669				10	01
02	670				10	02
03	671				10	03
04	672				10	04
05	673				10	05
06	674				10	06
07	675				10	07
08	676				10	08
09	677				10	09
10	82POS 678				10	10
11	679				10	11
12	680				10	12
13	681				10	13
14	682				20	14
15	683				10	15
16	684				20	16
17	685				10	17
18	686				10	18
19	687				10	19
20	82POS 688				10	20

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No.	Sample	pH	Mo	%	Cu	Mn	Fe	Ag	Zn	Pb	Ba	No.
03	701				20	420	3.9	0.2	70	22	860	03
04	702				10	800	2.1	0.2	92	14	840	04
05	703				10	580	3.0	0.2	110	16	1320	05
06	704				16	1130	8.3	0.4	202	84	980	06
07	705				14	1340	3.8	0.2	318	18	2380	07
08	706				12	980	5.0	0.2	160	104	8800	08
09	707				10	970	6.0	0.2	446	80	10000	09
10	708				14	1420	8.2	0.4	890	226	3740	10
11	82POS 709				20	1690	10.0	0.6	700	204	2380	11
12	710				20	1740	6.6	0.4	530	110	4100	12
13	711				22	2370	8.2	0.6	760	166	3840	13
14	712				24	3400	7.9	1.8	760	158	9200	14
15	713				8	540	2.4	0.4	86	94	2200	15
16	714				16	1040	3.6	1.6	252	426	10000	16
17	715				74	1040	5.3	1.0	314	202	1400	17
18	L 716				22	2700	7.6	0.6	1700	152	3140	18
19	82POS 717				26	1200	6.3	0.2	172	54	10000	19
20	STD 718				76	340	2.9	0.2	148	16	1620	20
21	82POS 718				14	1450	5.2	0.2	242	46	4200	21
22	719				10	90	7.7	1.2	38	590	1500	22
23	720				8	220	7.8	0.6	252	108	920	23
24	721				12	1130	10.0	0.6	540	150	640	24

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

CERTIFICATE OF ANALYSIS

TO: AMAX MINERALS EXPLORATION
601 - 535 THURLOW ST.
VANCOUVER, B.C. V6E 3L6

2225 S. SPRINGER AVE.,
BURNABY, B.C.
CANADA
TELEPHONE: 299-8910

CERTIFICATE NO. 82106-7

INVOICE NO.

DATE ANALYSED 82/07/08

PROJECT PELLY MINT

No.	Sample	pH	Mo	Cu	Mn	Fe	As	Zn	Pb	Ba		No.
01	82PQT1											01
02												02
03												03
04												04
05												05
06												06
07	147			2	20	0.3	3.4	116	714	710000		07
08												08
09												09
10	82PQR											10
11												11
12	T 152			40	1160	1.8	4.6	820	164	1360		12
13	153			20	3480	8.7	1.0	5200	670	620		13
14	154			6	1360	2.0	0.2	600	100	680		14
15	155			4	480	1.8	0.2	76	12	1080		15
16	156			2	300	4.8	0.2	88	6	1900		16
17	157			4	30	1.4	0.2	12	20	2020		17
18	158			2	10	0.8	0.2	8	16	1880		18
19	82PQT 159			10	300	5.2	0.4	158	80	3200		19
20	STD E			76	240	2.9	0.2	146	18	1600		20
21	82PQT 160			18	40	2100	0.4	82	14	1780		21
22	L 161			28	540	3.2	0.6	300	40	2120		22
23	T 162			4	140	1.8	0.4	14	16	1233		23
24	163			10	30	1.5	0.2	14	46	1240		24
25	164			4	380	2.4	0.2	32	14	1120		25
26	165			4	300	2.2	0.2	58	4	1220		26
27	166			8	40	1.9	1.0	84	26	3180		27
28	167			4	10	1.6	0.6	24	22	1910		28
29	168			14	20	2.3	3.8	144	3400	210000		29
30	82PQT 169			22	30	1.6	2.0	54	48	3160		30
31	170			4	10	1.3	0.4	20	36	1400		31
32												32
33	82PQT 171			34	20	0.6	1.8	1260	210	1780		33
34	STD E			80	260	2.8	0.2	150	18	1680		34
35												35
36												36
37												37
38												38
39												39
40												40

VALUES IN PPM, UNLESS NOTED OTHERWISE.

Certified by

P. Rossbacher

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

CERTIFICATE OF ANALYSIS

TO: AMAX MINERALS EXPLORATION
601 - 535 THURLOW ST.
VANCOUVER, B.C.

BURNABY, B.C.
CANADA
TELEPHONE: 299-8910

CERTIFICATE NO. 82171-11

INVOICE NO.

DATE ANALYSED 82/08/16

PROJECT S7032

No.	Sample	pH	Mo	Cu	Ni	Fe	As	Zn	Pb	Ba		No.
08	5291			34	610	4.2	0.4	410	32	1320		08
09	292			28	380	10.0	0.8	102	144	1700		09
10	A293			26	440	1.4	5.0	-	-	3620		10
11	82PQ 5294			30	4000	2.0	2.0	910	910	1380		11
12	295			28	290	6.8	2.0	258	242	6000		12
13	296			24	4100	9.4	1.2	378	144	1640		13
14	297			30	2320	2.0	1.2	610	330	1260		14
15	298			24	560	10.0	1.2	84	188	920		15
16	299			46	2200	2.0	2.0	200	286	1520		16
17	A300			46	30	0.9	-	-	-	210000		17
18	T 301			6	50	2.3	3.4	140	284	8800		18
19	82PQT 302			18	50	2.8	18.0	452	1840	210000		19
20	STD C			126	240	1.4	0.8	122	82	1620		20
21	82PQ 303			36	1380	8.6	2.6	710	700	2700		21
22	304			26	800	7.2	1.0	190	94	3240		22
23	305			14	940	5.2	0.4	182	46	1380		23
24	306			12	260	2.0	0.2	92	48	1320		24
25	T 307			6	130	1.6	0.8	62	76	580		25
26	L 308			22	950	5.2	0.6	600	78	1320		26
27	T 309			20	130	2.4	0.4	20	10	1160		27
28	310			10	130	1.4	0.6	8	46	4800		28
29	82PQT 311			10	80	1.0	3.2	52	400	1320		29
30	312			24	20	0.4	30.0	1720	480	210000		30
31	313			8	50	2.2	6.4	110	182	19000		31
32	5314			78	550	10.0	10.8	1460	1200	210000		32
33	315			18	1320	9.4	5.0	540	880	1500		33
34												34
35												35
36												36
37												37
38												38
39												39
40												40

VALUES IN PPM, UNLESS NOTED OTHERWISE.

Certified by

P. Rossbacher

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

CERTIFICATE OF ANALYSIS

TO: AMAX MINERALS EXPLORATION
601 - 535 THURLOW ST.
VANCOUVER, B.C.

2225 S. SPRINGER AVE.
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910

CERTIFICATE NO. 82259-6

INVOICE NO. 3011

DATE ANALYSED 8/2/10/12

PROJECT 57032

No.	Sample	pH	Mo	Cu	Mn	%Fe	Ag	Zn	Pb	Ba	No.
14	S 800			22	1040	3.9	0.4	400	68	2420	14
15	801			74	940	10.2	0.1	710	212	1100	15
16	802			10	580	5.6	0.2	152	50	1040	16
17	803			8	160	1.6	0.4	120	32	780	17
18	804			8	620	5.7	0.2	76	16	1060	18
19	82 PAS 805			10	820	5.4	0.2	82	14	1140	19
20	STD 806			76	320	2.9	0.2	148	18	1520	20
21	82 PAS 808			18	380	5.3	0.2	168	56	1080	21
22	807			14	340	3.1	0.2	89	14	690	22
23	808			22	300	4.3	0.2	188	44	1220	23
24	809			10	130	2.8	0.4	68	22	1600	24
25	810			8	360	2.3	0.2	48	14	920	25
26	811			20	440	4.0	0.2	190	76	1160	26
27	812			20	260	4.0	0.2	92	14	520	27
28	813			18	280	3.7	0.2	58	10	480	28
29	814			10	180	1.5	0.2	28	8	870	29
30	82 PAS 815			8	340	3.3	0.2	106	18	940	30
31	816			6	90	1.7	0.2	100	16	1200	31
32	817			20	220	3.0	0.2	68	14	1180	32
33	818			8	70	1.9	0.2	52	6	1440	33
34	819			8	220	1.2	0.6	48	6	960	34
35	820			6	260	2.8	0.2	130	26	1520	35
36	821			10	300	3.8	0.2	292	44	1520	36
37	822			36	500	4.5	0.8	3000	64	2220	37
38	L 823			22	540	3.6	0.4	1500	50	2440	38
39	82 PAS 824			20	700	2.9	0.4	300	42	3240	39
40	STD E			76	300	3.0	0.2	152	18	1790	40

VALUES IN PPM UNLESS NOTED OTHERWISE.

Certified by: *[Signature]*

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

CERTIFICATE OF ANALYSIS

TO: AMAX MINERALS EXPLORATION
601 - 535 THURLOW ST.
VANCOUVER, B.C.

2225 S. SPRINGER AVE.
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910

CERTIFICATE NO. 82259-7

INVOICE NO. 3011

DATE ANALYSED 8/2/10/12

PROJECT 57032

No.	Sample	pH	Mo	Cu	Mn	%Fe	Ag	Zn	Pb	Ba	No.
01	82 PAS 825			22	440	2.2	0.2	196	30	1640	01
02	S 826			6	80	1.2	0.2	60	8	1220	02
03	L 827			22	640	2.8	0.2	260	28	2020	03
04	S 828			10	190	3.3	0.2	102	26	900	04
05	829			10	130	2.6	0.2	88	20	1060	05
06	830			10	160	2.5	0.2	90	14	1320	06
07	L 831			20	620	2.8	0.2	252	30	3740	07
08	832			8	130	1.6	0.2	64	10	1300	08
09	833			28	240	5.7	0.2	184	40	1700	09
26											26
27											27
28											28
29											29
30											30
31											31
32											32
33											33
34											34
35											35

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.
BURNABY, B.C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

ASSAY WORKSHEET

CLIENT: AMAX MINERALS EXPLORATION

601 - 535 THURLOW ST.
VANCOUVER, B.C. V6E 3L6

PROJECT: 57032

CERTIFICATE:

INVOICE NO.:

DATE RECEIVED:

DATE ANALYZED: 8/2/08/13

No.	Sample	% Pb	% Zn	oz/L Au	No.
01	82 PQA 293	0.30	0.26	0.18	01
02	82 PQA 300	0.28	0.38	1.00	02
03					03
04					04
05					05
06					06
07					07
08					08
09					09
10					10
11					11
12					12



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) ELIZABETH K. BOYD Occupation LAND MANAGER

(Postal Address) 601-535 THURLOW ST. VANCOUVER, B.C. V6E3L6

OFFICE DATE STAMP

MAKE OATH AND SAY, THAT:-

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

2. 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 69093	ZOO 17	YA 69099	ZOO 23
YA 69094	ZOO 18	YA 69100	ZOO 24
YA 69095	ZOO 19	YA 69101	ZOO 25
YA 69096	ZOO 20	YA 69102	ZOO 26
YA 69097	ZOO 21	YA 69103	ZOO 27
YA 69098	ZOO 22	YA 69104	ZOO 28

situated at HOOLE RIVER Claim Sheet No. 105 G 516

in the WATSON LAKE Mining District, to the value of at least \$2,400.00

dollars, since the 25TH day of SEPTEMBER 19 83,

to represent the following mineral claims under the authority of Grouping Certificate No. 3451

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

YA 69093	ZOO 17
YA 69094	ZOO 18
YA 69095	ZOO 19
YA 69096	ZOO 20
YA 69097	ZOO 21
YA 69098	ZOO 22
YA 69099	ZOO 23
YA 69100	ZOO 24
YA 69101	ZOO 25
YA 69102	ZOO 26
YA 69103	ZOO 27
YA 69104	ZOO 28

2 YEARS WORK TO EACH CLAIM

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.)

JANUARY /83- TOPOGRAPHIC MAPPING - PACIFIC SURVEY CORPORATION
VANCOUVER, B.C.

INV # 1236 = \$ 4,850.00

SEE ACCOMPANYING REPORT

Sworn before me at VANCOUVER, B.C.
this 24TH day of JUNE 1983

Thomas

Notary Public

Elizabeth K. Boyd
Applicant.

A Notary Public in and for the Province of British Columbia

JANINE LYNN THOMAS
The Burrard Building
1400 - 1030 W. Georgia Street
Vancouver, B.C. V6E 3C2

091400



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.)



OFFICE DATE STAMP

I (Name) ELIZABETH K. BOYD Occupation LAND MANAGER
(Postal Address) 601-535 THURLOW ST. VANCOUVER, B.C. V6E 3L6

MAKE OATH AND SAY, THAT:-

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

2. 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 69081	200 5	YA 69087	200 11
YA 69082	200 6	YA 69088	200 12
YA 69083	200 7	YA 69089	200 13
YA 69084	200 8	YA 69090	200 14
YA 69085	200 9	YA 69091	200 15
YA 69086	200 10	YA 69092	200 16

situated at HOOLE RIVER Claim Sheet No. 105-G-586

in the WATSON LAKE Mining District, to the value of at least \$2,400.00

dollars, since the 25 TH day of SEPTEMBER 19 82

to represent the following mineral claims under the authority of Grouping Certificate No. 3450

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

YA 69081 200 5
YA 69082 200 6
YA 69083 200 7
YA 69084 200 8
YA 69085 200 9
YA 69086 200 10
YA 69087 200 11
YA 69088 200 12
YA 69089 200 13
YA 69090 200 14
YA 69091 200 15
YA 69092 200 16

2 YEARS WORK TO EACH CLAIM

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.)

JANUARY/83 - TOPOGRAPHIC MAPPING - PACIFIC SURVEY CORPORATION
VANCOUVER, B.C.

INV #1236 = \$ 4,850.00

SEE ACCOMPANYING REPORT

Sworn before me at VANCOUVER, B.C.

this 29 TH day of JUNE 1983

Janine Lynn Thomas

Notary Public

A Notary Public in and for the Province of British Columbia

JANINE LYNN THOMAS
The Burrard Building
1400-1030 W. Georgia Street
Vancouver, B.C. V6E 3P2

Elizabeth K. Boyd
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) ELIZABETH K. BOYD

Occupation HAND MANAGER

(Postal Address) 601-535 THURLOW ST. VANCOUVER, B.C. V6E 3L6

OFFICE DATE STAMP

MAKE OATH AND SAY, THAT:-

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

2. 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)

<u>YA 68705</u>	<u>Z001</u>	<u>YA 68699</u>	<u>ZAP1</u>
<u>YA 68706</u>	<u>Z002</u>	<u>YA 68700</u>	<u>ZAP2</u>
<u>YA 68707</u>	<u>Z003</u>	<u>YA 68701</u>	<u>ZAP3</u>
<u>YA 68708</u>	<u>Z004</u>	<u>YA 68702</u>	<u>ZAP4</u>
		<u>YA 68703</u>	<u>ZAP5</u>
		<u>YA 68704</u>	<u>ZAP6</u>

situated at HOOKER RIVER Claim Sheet No. 105 G 586

in the WATSON LAKE Mining District, to the value of at least \$5,000.00

dollars, since the 20TH day of JULY 19 82.

to represent the following mineral claims under the authority of Grouping Certificate No. 3449

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

<u>YA 68705</u>	<u>Z001</u>
<u>YA 68706</u>	<u>Z002</u>
<u>YA 68707</u>	<u>Z003</u>
<u>YA 68708</u>	<u>Z004</u>
<u>YA 68699</u>	<u>ZAP1</u>
<u>YA 68700</u>	<u>ZAP2</u>
<u>YA 68701</u>	<u>ZAP3</u>
<u>YA 68702</u>	<u>ZAP4</u>
<u>YA 68703</u>	<u>ZAP5</u>
<u>YA 68704</u>	<u>ZAP6</u>

5 YEARS WORK TO EACH CLAIM

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.)

JULY 21-23/82 - GEOCHEMICAL SURVEY \$5,079.18

SEE ACCOMPANYING REPORT FOR DETAIL

Sworn before me at VANCOUVER, B.C.

this 29TH day of JUNE 1983

Thomas

Notary Public

A Notary Public in and for the Province of British Columbia

JANINE LYNN THOMAS
The Burrard Building
1400 - 1030 W. Georgia Street
Vancouver, B.C. V6E 3C2

Elizabeth K Boyd
Applicant.



SYMBOLS

- Trench.
- Diamond drill hole.
- Claim post, claim location line.
- Stream.
- Swamp.
- Topographic contour (contour interval 10 metres).
- Extent of mapped outcrop.
- Geological contact.
- Fault, thrust fault.
- Bedding, schistosity.
- Mineralized float and site where mineralization noted.
- Ferricrete and gossan.

ABBREVIATIONS

- ba barite.
- bx breccia.
- fluor fluorite.
- gal galena.
- py pyrite.
- sphal sphalerite.
- tr trace.

LEGEND

CARBONIFEROUS AND UPPER TRIASSIC

- 4 Brown shale, siltstone.

UPPER DEVONIAN TO MISSISSIPPIAN

- 3 Undivided felsic to intermediate volcanic rocks.
- 3a Coarse grained syenite.
- 3b Felsic volcanic tuff, lapilli, agglomerate (pyritic, brecciated).
- 3c Sheared lapilli tuff with pyrite, barite, trace galena and sphalerite.
- 3d Carbonate.
- 3e Andesite and dacite flows.
- 3f Basalt flows.
- 3g Chert.
- 3h Black shale.

UPPER SILURIAN AND LOWER TO MIDDLE DEVONIAN

- 2 Dolostone, sandy dolostone.

UPPER CAMBRIAN TO ORDOVICIAN

- 1 Gray slate with diabase sills.

AMAX OF CANADA LIMITED

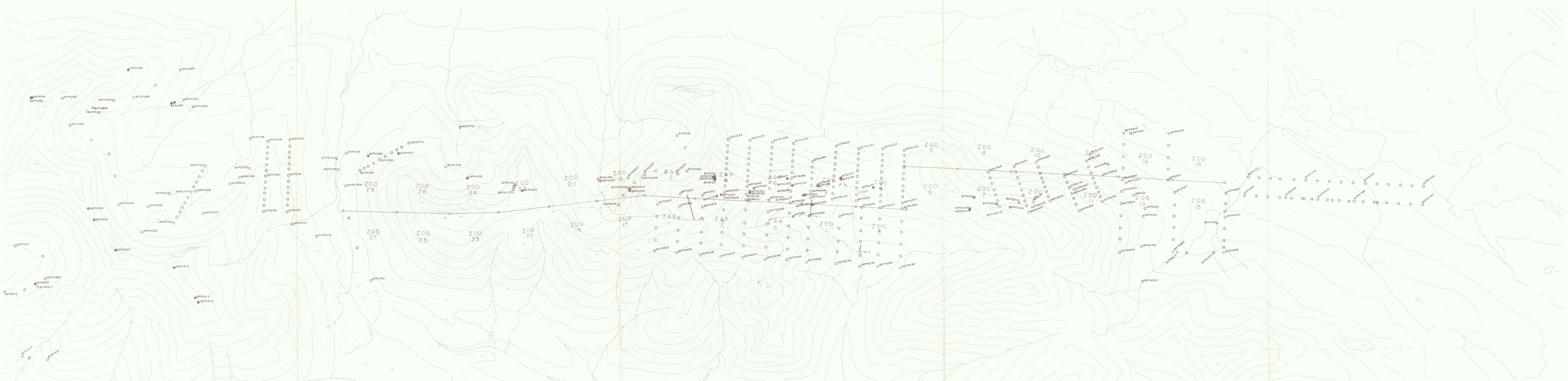
HOOLE RIVER PROPERTY
WATSON LAKE MINING DISTRICT — YUKON TERRITORY

GEOLOGICAL MAP

SCALE 400 0 400 METERS
1 10,000

To accompany 1982 Report by F.R. Harris.

Vancouver 091405 H.P.
N.T.S. Ref 105 G 5 and 6
FIG. 3



- S Y M B O L S**
- □ ● Geochemical sample site showing sample number (soil, silt, rock chip). — See Appendix for analytical results.
 - Trench.
 - Diamond drill hole.
 - Claim post, claim location line.
 - Stream.
 - Swamp.
 - Topographic contour (contour interval 10 metres).



AMAX OF CANADA LIMITED

HOOLE RIVER PROPERTY
WATSON LAKE MINING DISTRICT — YUKON TERRITORY

**GEOCHEMICAL MAP
SAMPLE LOCATION**

SCALE 400 0 400 METRES
1 : 10,000

To accompany 1983 Report by F.R. Harris.
Vancouver — **091465** H.P.

N.T.S. Ref 105.6.5 and 6
FIG. 4