1982 Geochemical Assessment Report

TITLE	Hess River Property
CLAIMS	FUN 1-25
COMMODITY	Pb-Zn
LOCATION-Area	MacMillan Pass, 180 kilometres northeast of Ross River
-Coordinates	Latitude N 63°15' Longitude 130°20'
-NTS	105 O/1
BY	F.R. Harris and N. Humphreys
FOR	AMAX OF CANADA LIMITED
WORK PERIOD	August 12-18, 1982

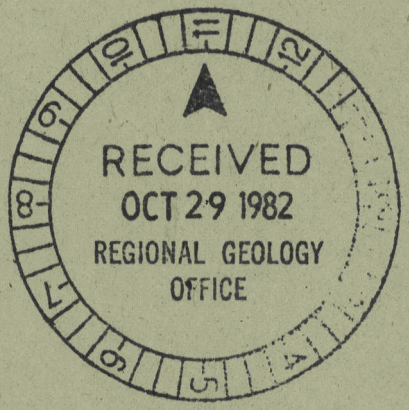
AMAX VANCOUVER OFFICE

091376

Th[illegible] been examined by
[illegible] Evaluation Unit
[illegible] Yukon Quartz
[illegible]
[illegible] Grant
on 3125

P Watson

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



#
NNREB WHSE

IAND MAYO

29 OCT82

GEOLOGY SECTION
P.WATSON

AMOUNT REWUIRED FOR FUN CLAIMS REPORT IS 3125.00

TIM
MMD
#
NNREB WHSE

IAND MAYO

Table of Contents

Appendices

Illustrations

SUMMARY

The FUN property consists of 25 claims located in the MacMillan Pass area of the east-central Yukon. In August, 1982, 218 soil samples and four stream sediment samples were collected at 50 metre spacing reconnaissance soil lines. The samples were analysed for Pb, Zn, Cu, Ag, Ba, Fe and Mn at Rossbacher Laboratory, Burnaby, B.C.

CONCLUSIONS

1) Areas anomalous in Pb, Zn, Cu and Ag are elongated parallel to the underlying sedimentary strata, suggesting the presence of "stratabound" sulphide mineralization.

2) There is a probable correlation between a Cu-Zn anomaly and a narrow zone of pyrite in graphitic shale near the baseline on line 16W.

3) Other soil anomalies are not related to any known mineralization.

RECOMMENDATIONS

Detailed prospecting of the anomalous area is recommended.

Anomalies that are open should be closed off by extension of the appropriate soil lines.

INTRODUCTION

Location and Access

The 25 FAN claims are located in the MacMillan Pass area of the east-central Yukon, three kilometres north of the Hudson Bay airstrip on the North Canol Road (see Figure 1). Work was done from a base camp at the airstrip with access to the claims supplied by helicopter.

Topography and Vegetation

The claims are located in a moderately rugged area with mountain peaks rising to 2,080 metres. Maximum relief is 650 metres. Outcrop is found mainly on the ridges and talus is abundant along most of the slopes.

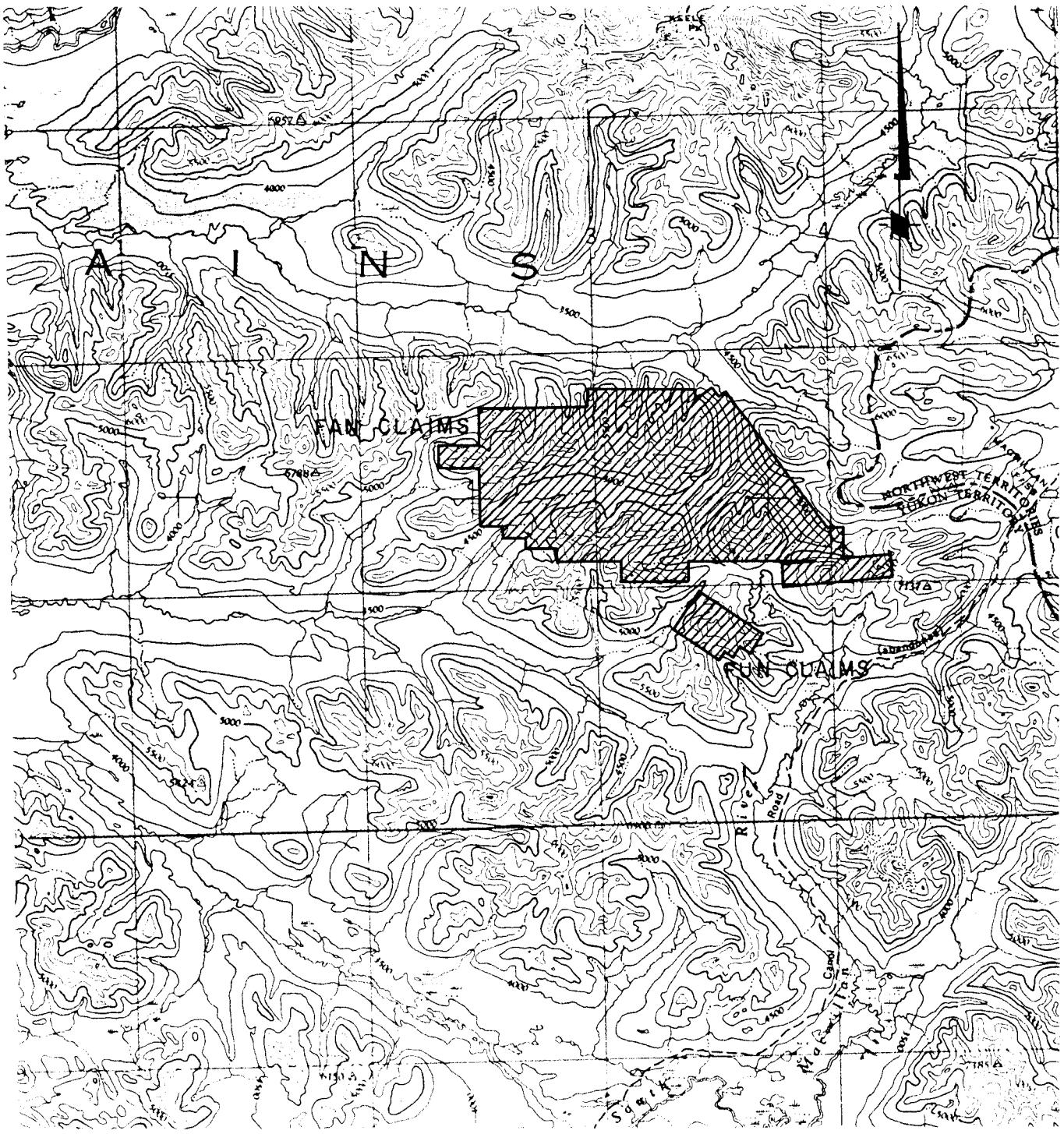
The claims are mainly above tree-line with only minor amounts of bush in the valley bottoms.

Claims Data

A list of the 25 FUN claims with grant numbers and anniversary dates is presented below.

Claim Name	Grant Numbers	Expiry Date
FAN 1-25	YA76037-YA76061	December 5, 1983*

*following application and acceptance of the assessment work described in this report.



AMAX OF CANADA LIMITED

HESS RIVER PROPERTY
FAN AND FUN CLAIMS
MAYO MINING DISTRICT — YUKON TERRITORY

LOCATION MAP

SCALE 8 0 8 KILOMETRES
4 0 4 MILES
1 : 250,000

N.T.S. Ref. 105 O 1, 7 and 8

FIG. 1

GEOCHEMICAL SURVEY

Procedure

From August 12-18, 1982, a flagged and picketed grid was put in over part of the claim block. The grid consists of a 2,200 metre - long northwest-striking base line with cross lines 200 metres apart. Soil samples were collected every 50 metres on the cross lines. Two reconnaissance soil lines were also completed with samples every 100 metres. A total of 218 soil samples and four stream sediment samples were collected.

Samples were collected from the B soil horizon where possible; however, soil horizons are poorly developed and many samples were from talus fines.

Samples were analysed at Rossbacher Laboratory in Burnaby, B.C. for Pb, Zn, Cu, Ag, Ba, Fe and Mn. Analytical methods are described in Appendix III.

Results

Sample locations are plotted on Figure 2. Analytical results for Pb, Zn, Ag, Cu and Ba are listed in Appendix III.

Interpretation of Results

Lead

The highest lead values are in the northwestern quadrant of the grid. Lines 18-22W at 150-250N contains values from 106 to 154 ppm Pb. Line 12W has two consecutive values of 100 and 200 ppm Pb. No known mineralization is associated with these anomalies.

Zinc

Three anomalous areas of zinc occur on the grid.

A) Values up to 2,300 ppm Zn occur in soils between lines 16W and 22W from 50S to 150N.
B) Values up to 1,600 ppm Zn occur in a 50 metre wide zone at 300N between lines 18W and 8W.
C) Values up to 840 ppm Zn occur on line 2W from 100 to 250 metres south.

A narrow zone of pyrite and graphitic shale is exposed near the baseline at 16W and may account for anomaly A. Anomaly B is parallel to the general strike of the underlying sedimentary rocks but is not associated with any known mineralization. Mineralization has not been located at anomaly C.

Copper

Three areas on the grid contain soils anomalous in copper.

A) From 50-150N and from 16-22W, soils contain up to 600 ppm Cu.
B) From 300-500N on lines 16-18W, soils contain up to 454 ppm Cu.
C) From 100-250S on line 2W, soils contain up to 444 ppm Cu.

Anomaly A is related to the pyrite zone discussed under zinc whereas the other two anomalous areas are not related to any known mineralization.

Silver

A large area anomalous in silver extends from 14W

to 22W and from 150S to 400N. Soils in this area contain up to 5.4 ppm Ag. The anomaly is not related to any known mineralization.

With the exception of one or two anomalous values (see Appendix III), analytical results for Mn, Fe and Ba were all below the established local anomalous threshold.

Fred R. Harris

F.R. Harris

APPENDIX I

STATEMENT OF COSTS

Statement of Costs

Geochemical Analyses - Rossbacher Laboratory 2225 S. Springer Avenue, Burnaby, B.C. Invoice No. 2245 189 Samples Cu, Fe, Mn, Ag, Zn, Pb, Ba	$ 1,159.80
Helicopter - Quasar Helicopter	
August 14, 1982 Invoice No. 82535 (11465)	603.00
August 16, 1982 Invoice No. 82535 (11467)	268.00
	871.00
Personnel and Salaries	
F.R. Harris - 601-535 Thurlow Street, Vancouver, B.C. Senior Geologist; 2.5 days @ $211.20	528.00
N.D. Humphreys - 131 LaLoche Court, Saskatoon, Sask. Geologist; 3 days @ $104.35	313.05
R.J. Boase - 609 E. Carisbrooke Rd., N. Vancouver, B.C. Junior Assistant; 1 day @ $63.52	63.52
P.R. Elkins - 1241 Barlynn Crescent, N. Vancouver, B.C. Junior Assistant; 6.5 days @ $63.52	412.88
A.M. Neill - 223 Keith Road, N. Vancouver, B.C. Cook; 3.5 days @ $79.39	277.86
Room and Board	
$25.00 @ 16.5	412.50
Drafting and Report Preparation	500.00
	$4,538.61

Quasar Helicopters Ltd

Box 565,
Abbotsford International Airport
Abbotsford, B.C.
V2S 5Z5
Phone – (604) 853-1215 Telex – 04-363565

INVOICE

Invoice Number: 82535

Invoice Date: 21 Sept 82

Customer Number: 010015000

Customer Order Number: 57025, 57028

Amax Exploration Inc.
601 - 535 Thurlow St.
Vancouver, B.C.
V6E 3L6

Helicopter Type	Registration	ATC Area	Period/Order Date
Hughes 500C	C-GWQR	10.3	2 Aug - 13 Sept 82

Description			Amount
Flying Hours:	149.4 @ $335.	$	50,049.00
	6.9* @ $335.		2,311.50
	156.3		
Crew Expenses:	as per attached		78.00
Landing Fees:	as per attached		15.60
Oil:	as per attached		508.25
	TOTAL	$	52,962.35

ADD & EXT. CORRECT $
COVER

PROJECT	ACCOUNT	SUB CLASS	AMOUNT
57025	8207		7,336.50
57028	8207		37,719.85
57032	8207		7,906.00
			52,962.35

* 6.9 hours additional required to bring total contract hours up to minimum guarantee of 340 hours.

CK. 23367 OCT 14 1982

Terms of payment are net 30 days from date of invoice. interest at 2% per month (being 24% per annum), will be charged on overdue accounts.

QUASAR AVIATION LTD.

AMAX RECEIVED SEP 27 1982 VANCOUVER OFFICE

VANCOUVER
150 - 10451 SHELLBRIDGE WAY
RICHMOND, B.C. V6X 2W8
(604) 270-9696 Telex: 04-357633

CALGARY
460 McTAVISH ST. N.E.
CALGARY, ALTA. T2E 7G5
(403) 2[illegible] Telex: [illegible]821901

№ 11467

FLIGHT REPORT

Date: 16 (Day) 08 (Month) 82 (Year)

A/C Regn.: C – FWOR 500C

Pilot: 1: W.E. Clifford Empl. No.: 8001

Pilot: 2: Empl. No.:

Engr. 1: " Empl. No.: 8001

Engr. 2: Empl. No.:

Customer Name and Address
Amax [illegible] Exploration
601-535 Thurlow
Vancouver B.C. V6E-3L6

Authorization No.: 57025

Customer No.: 0100150000 Contract No.: 0100150091 ATC Area: 103 Contract Type: M (H - Hourly, M - Monthly, D - Daily Min., O - Other)

Location	Operation	Time-Off	Time-Down	Flying Hours
Mac Millan Pass YT.				
	Crew Out	08:35	09:00	.4
	Crew In	17:25	17:50	.4
	whole crew.			
	Fred			

UEL & OIL SUPPLIED BY: ☐ Quasar ☑ Charterer ☐ Litre ☐ Gal. — litres gal. @$ = $

Total Revenue Hours: 00.8
Non-Revenue Hours:

Item	Extra Charge or Adjust.	Amount

Remarks:

Proj. 25

By the chartering of the noted services or the signing of this Flight Report, the Charterer acknowledges that all conditions associated with this charter shall be as set out in the Tariff filed with the A.T.C., which is available for examination at the office of Quasar Aviation Ltd.

Charterer's Signature: Fred Hani

Pilot's Signature: W. E. Clifford

QUASAR AVIATION LTD. AMAX

VANCOUVER
150 - 10451 SHELLBRIDGE WAY
RICHMOND, B.C. V6X 2W8
(604) 270-9696 Telex: 04-357633

CALGARY
460 McTAVISH ST. N.E.
CALGARY, ALTA. T2E 7G5
(403) 230-1231 Telex: 03-821901

RECEIVED SEP 27 1982 VANCOUVER OFFICE

№ 11465

FLIGHT REPORT

Date: 14 (Day) 08 (Month) 82 (Year)

A/C Regn.: C – FWQR 500C

Customer Name and Address
Amax Minerals Exploration
601 - 535 Thurlow
Vancouver B.C. V6E -3L6

Pilot: 1: W.E. Clifford Empl. No.: 8001
Pilot: 2: Empl. No.:
Engr. 1: " Empl. No.: 8001
Engr. 2: Empl. No.:

Authorization No.: 57025

Customer No.: 0100150001
Contract No.: 0100150001
ATC Area: 103
Contract Type: M (H - Hourly, D - Daily Min., M - Monthly, O - Other)

Location	Operation	Time-Off	Time-Down	Flying Hours
MacMillan Pass YT-				
	Crew Out	08:15	08:55	.7
	Crew ch	15:50	16:40	.8
	" "	17:25	17:40	.3
	While crew.			
	Fred			
	Fred Harris.			

FUEL & OIL SUPPLIED BY: ☐ Quasar ☑ Charterer ☐ Litre ☐ Gal. — litres gal. @$ = $

Total Revenue Hours: 1.8
Non-Revenue Hours:

Item	Extra Charge or Adjust.	Amount

Remarks:

Proj 25

By the chartering of the noted services or the signing of this Flight Report, the Charterer acknowledges that all conditions associated with this charter shall be as set out in the Tariff filed with the A.T.C., which is available for examination at the office of Quasar Aviation Ltd.

Charterer's Signature: Fred R. Harris
Pilot's Signature: W. E. Clifford

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

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

AMAX MINERALS EXPLORATION.

601-525 Thurlow Street

Vancouver, B.C.

re. Project 57025

DATE October 12, 1982.

INVOICE NO. 2245

CERTIFICATE NO. as marked.

EM	DESCRIPTION		SUB-TOTAL	TOTAL
38 ✓	Geochem. analysis for 6 elements	@ $ 3.80	40 $ 904.80	
6 ✓	Ba	3.00	408.00 ✓	
98 ✓	Soil sample prep.	0.40	79.20 ✓	
28 ✓	Rock sample prep.	1.75	49.00 ✓	
				$ 1,440.60 ✓

APPROVED [signature] DATE OCT 14/82

Project Number	Group Code	Activity Code	Account Class	Sub Class	Amount
5702			8080		1440.60

CK 23368 OCT 14 1982

TERMS – NET 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 — P.R. Elkins

ADDRESS — 1241 Barlynn Crescent,
North Vancouver, B.C.
V7J 1P5

EDUCATION — Capilano College - 1980/81
First Year Sciences:
Courses in Physics, Calculus, Chemistry, Computer Sience and English
Second Year Sciences:
Courses in Linear Algebra, Calculus IV, Thermodynamic Physics, Inorganic Chemistry, Physical Geography

EXPERIENCE — May 1 - August 29, 1981 - Campbell Resources Inc.
Geologist's helper

Summer 1980 - United Metal Fabricators
Production Worker

December 1980 - May 1982 - Sixth Field Squadron R.C.E.
Sapper (Private)

Summer 1982 - AMAX of Canada Limited
Geologist's 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

APPENDIX III

ANALYTICAL PROCEDURES, ANALYTICAL RESULTS

Rossbacher Laboratory
GEOCHEMICAL ANALYSTS & ASSAYERS

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

Jan. 1982

(1)

GEOCHEMICAL ANALYTICAL METHODS CURRENTLY IN USE AT ROSSBACHER LABORATORY LTD.

A. SAMPLE PREPARATION

1. *Geochem. Soil and Silt:* Samples are dried, and sifted to minus 80 Mesh, through stainless steel, or nylon screens.

2. *Geochem. Rock:* Samples are dried, crushed to minus $\frac{1}{4}$ inch, split, and pulverized to minus 100 mesh.

B. METHODS OF ANALYSIS

1. *Multielement:* (Mo, Cu, Ni, Co, Mn, Fe, Ag, Zn, Pb, Cd): 0.5 Gram sample is digested for four hours with a 15:85 mixture of Nitric-Perchloric acid. The resulting extract is analyzed by Atomic Absorption spectroscopy, using Background Correction where appropriate.

2. *Antimony:* 0.50 Gram sample is fused with Ammonium Iodide and dissolved. The resulting solution is extracted into TOPO/MIBK and analyzed by Atomic Absorption spectroscopy.

3. *Arsenic:* 0.25 Gram sample is digested with Nitric-Perchloric acid. Arsenic from the solution is converted to arsine, which in turn reacts with silver D.D.C. The resulting solution is analyzed by colorimetry.

4. *Barium:* 0.50 Gram sample is repeatedly digested with $HClO_4$-HNO_3 and HF. The solution is analyzed by Atomic Absorption spectroscopy.

5. *Biogeochemical:* Samples are dried, and ashed at 550°C. and the resulting ash analyzed as in *1, multielement analysis.

6. *Bismuth:* 0.50 Gram sample is digested with Nitric acid. The solution is analyzed by Atomic Absorption spectroscopy.

7. *Chromium:* 0.25 Gram sample is fused with Sodium Peroxide. The solution is analyzed by Atomic Absorption spectroscopy.

Rossbacher Laboratory
GEOCHEMICAL ANALYSTS & ASSAYERS

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

METHOD OF ANALYSIS (CONT.)

8. *Fluorine:* 0.50 Gram sample is fused with a Carbonate Flux, and dissolved. The resulting solution is analyzed for Fluorine by use of an Ion Selective Electrode.

9. *Gold:* 10.0 Gram sample is roasted at 550°C. and dissolved in Aqua Regia. The resulting solution is subjected to a Methylisobutyl Ketone extraction, which extract is analyzed for Gold using Atomic Absorption spectroscopy.

10. *Mercury:* 1.00 Gram sample is digested with Nitric and Sulfuric acids. The solution is analyzed by Atomic Absorption spectroscopy, using a cold vapor generation technique.

11. *Partial Extraction and Fe/Mn oxides:* 0.50 Gram sample is extracted using one of the following: Hot or cold 0.5 N. HCL, 2.5% E.D.T.A., Ammonium Citrate, or other selected organic acids. The solution is analyzed by use of Atomic Absorption spectroscopy.

12. *pH:* An aqueous suspension of soil, or silt is prepared, and its pH is measured by use of a pH meter.

13. *Rapid Silicate Analysis:* 0.10 Gram sample is fused with Lithium Metaborate, and dissolved in HNO_3. The solution is analyzed by Atomic Absorption for SiO_2, Al_2O_3, Fe_2O_3, MgO, CaO, Na_2O, K_2O, TiO_2, P_2O_5, and MnO.

14. *Tin:* 0.50 Gram sample is sublimated by fusion with Ammonium Iodide, and dissolved. The resulting solution is extracted into TOPO/MIBK and analyzed by Atomic Absorption spectroscopy.

15. *Tungsten:* 1.00 Gram sample is sintered with a carbonate flux, and dissolved. The resulting extract is analyzed colorimetrically, after reduction with Stannous Chloride, by use of Potassium Thiocyanate.

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

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

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 82258-17

INVOICE NO.

DATE ANALYSED SEPT. 29/82

PROJECT 025

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

No.	Sample	pH	~~Mo~~	Cu	Mn	%Fe	Ag	Zn	Pb	Ba				No.
01														01
02														02
03														03
04														04
05														05
06														06
07														07
08														08
09														09
10														10
11														11
12														12
13														13
14	1250			28	80	2.6	0.4	78	22	1200				14
15	1251			66	70	3.7	0.8	206	50	—				15
16	1252			58	140	4.3	0.8	186	64	3860				16
17	1253			22	30	1.5	1.2	52	56	—				17
18	1254			20	20	0.8	0.4	30	10	1300				18
19	82 HKS 1255			20	40	1.7	0.4	72	24	—				19
20	STD A			22	400	2.5	0.2	40	18	1640				20
21	82 HKS 1256			26	180	2.9	0.2	72	20	3440				21
22	1257			30	70	1.9	0.6	38	20	—				22
23	1258			14	30	1.0	0.4	32	10	1740				23
24	1259			30	60	2.1	0.6	50	20	—				24
25	1260			116	400	4.6	0.6	240	24	2480				25
26	L 1261			280	720	3.4	1.8	206	34	3840				26
27	S 1262			66	380	3.2	0.6	138	36	2460				27
28	1263			34	90	3.5	4.0	58	98	—				28
29	1264			58	110	2.4	5.6	122	106	5500				29
30	82 HKS 1265			24	80	1.7	0.4	128	38	—				30
31	1266			24	30	2.2	0.2	74	34	1980				31
32	1267			24	60	2.8	0.4	56	24	—				32
33														33
34														34
35														35
36														36
37														37
38														38
39														39
40														40

VALUES IN PPM UNLESS NOTED OTHERWISE.

Certified by U. Rossbacher

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

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

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 82258-2

INVOICE NO.

DATE ANALYSED SEPT. 24/82

PROJECT 025

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

No.	Sample	pH	Mo	Cu	Mn	% Fe	Ag	Zn	Pb	Ba				No.
01	82 HKS 1568'			104	400	4.3	1.4	282	64	4300				01
02	1569			62	400	5.6	0.2	256	28	—				02
03	1570			10	40	0.9	0.2	30	8	2460				03
04	1571			18	60	1.8	0.6	66	32	—				04
05	1572			28	70	1.8	0.2	50	8	1320				05
06	1573			72	130	6.3	0.4	110	24	—				06
07	1574			66	170	7.3	0.4	142	36	1520				07
08	1575			2	50	0.5	0.2	24	4	—				08
09	1576			56	140	5.3	0.4	120	44	1340				09
10	82 HKS 1577			52	200	5.3	0.4	142	56	—				10
11	1578			50	150	5.4	0.2	72	34	2160				11
12	1579			44	120	4.2	0.6	66	34	—				12
13	1580			22	70	2.4	0.2	44	14	1540				13
14	1581			26	70	1.9	0.8	56	42	—				14
15	1582			32	60	2.1	0.6	88	36	4600				15
16	1583			70	110	3.1	0.4	72	18	—				16
17	1584			40	80	2.2	0.2	52	12	1880				17
18	T 1585			58	80	3.9	0.4	92	8	3520				18
19	82 HKT 1586			132	180	8.7	0.4	206	8	3120				19
20	STD D			128	80	1.0	4.0	530	102	1560				20
21	82 HKS 1587			154	80	6.0	0.8	132	32	—				21
22	1588			102	150	5.5	1.0	112	44	3620				22
23	1589			126	160	7.1	1.6	116	44	—				23
24	T 1590			72	130	6.0	0.8	102	16	3100				24
25	1591			56	50	1.7	0.6	132	46	3400				25
26	S 1592			80	440	5.4	1.0	84	42	5000				26
27	1593			40	50	2.6	0.6	44	30	—				27
28	T 1594			116	200	>10.0	0.6	296	36	3980				28
29	S 1595			64	190	5.3	0.2	154	38	—				29
30	82 HKS 1596			82	620	6.6	0.8	212	54	5600				30
31	1597			72	460	5.2	1.4	70	46	—				31
32	1598			38	80	1.9	0.6	44	16	3720				32
33	1599			112	100	3.4	2.4	332	108	—				33
34	1600			122	180	3.5	2.0	410	86	>10,000				34
35	T 1601			108	100	2.3	1.2	324	36	>10,000				35
36	S 1602			52	200	2.8	0.4	152	36	4600				36
37	1603			36	70	2.0	0.6	68	36	—				37
38	1604			38	140	3.0	0.4	140	86	2400				38
39	82 HKS 1605			68	260	3.9	2.0	300	96	—				39
40	STD D			124	80	1.0	4.2	512	106					40

VALUES IN PPM UNLESS NOTED OTHERWISE.

Certified by J. Rossbacher

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

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

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 82258-3

INVOICE NO.

DATE ANALYSED SEPT. 24/82

PROJECT 025

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

No.	Sample	pH	Mo	Cu	Mn	%Fe	Ag	Zn	Pb	Ba				No.
01	82 HKS 1606			84	200	3.2	4.4	314	98	5800				01
02	T 1607			80	50	2.1	2.4	292	52	8000				02
03	S 1608			128	140	3.4	5.4	480	58	7400				03
04	1609			40	50	1.8	0.8	168	30	—				04
05	1610			80	100	3.7	4.4	246	70	5800				05
06	1611			136	700	6.4	1.6	180	60	—				06
07	1612			32	110	1.4	0.4	136	10	2140				07
08	1613			254	2700	>10	2.2	1180	154	—				08
09	1614			118	760	5.3	1.6	238	20	5000				09
10	82 HKS 1615			86	70	3.5	1.4	88	36	—				10
11	T 1616			86	80	3.7	0.8	106	10	3380				11
12	1617			80	60	2.7	0.8	102	18	3700				12
13	S 1618			240	120	8.9	2.0	130	62	3320				13
14	T 1619			36	30	1.8	0.8	72	16	3280				14
15	S 1620			132	60	7.4	1.4	88	34	2760				15
16	1621			108	70	6.6	2.8	86	74	—				16
17	1622			50	40	3.8	1.0	62	54	2720				17
18	1623			52	40	2.8	2.4	62	32	—				18
19	82 HKS 1624			72	640	5.2	1.0	234	42	5000				19
20	STD E			78	300	2.8	0.8	190	18	1740				20
21	82 HKT 1625			40	400	8.0	0.6	90	12	2720				21
22	S 1626			58	200	3.1	1.8	82	78	3740				22
23	1627			72	280	2.6	1.6	128	48	—				23
24	1628			74	150	3.0	1.0	136	54	3480				24
25	1629			132	170	3.0	3.4	580	74	—				25
26	1630			110	120	2.9	1.8	180	52	3940				26
27	1631			182	500	5.4	2.2	344	54	—				27
28	1632			86	420	3.7	1.8	244	88	4400				28
29	1633			66	150	4.7	0.8	138	66	—				29
30	82 HKS 1634			88	580	6.6	1.0	214	92	2640				30
31	1635			78	380	5.0	1.0	294	100	—				31
32	1636			140	240	4.3	1.6	386	200	4200				32
33	1637			126	400	5.6	2.0	396	50	—				33
34	1638			106	360	4.4	1.8	112	36	4100				34
35	1639			266	740	8.8	2.2	218	50	—				35
36	1640			106	1000	>10	1.0	102	26	3760				36
37	1641			146	560	5.9	0.8	90	36	—				37
38	1642			116	440	5.3	3.2	140	70	3420				38
39	82 HKS 1643			174	50	>10	3.2	64	72	—				39
40	STD E			78	280	2.9	0.4	174	18	—				40

VALUES IN PPM UNLESS NOTED OTHERWISE.

Certified by U. Rossbacher

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

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

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 82258-1

INVOICE NO.

DATE ANALYSED SEPT. 24 '82

PROJECT 025

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

No.	Sample	pH	Mo	Cu	Mn	%Fe	Ag	Zn	Pb	Ba				No.
01	82 HKS 1644			128	80	>10.0	3.0	60	150	1120				01
02	1645			348	90	>10.0	4.6	92	86	—				02
03	1646			86	40	5.5	1.6	194	66	4000				03
04	1647			78	100	2.9	1.0	60	76	—				04
05	T 1648			24	120	1.9	0.2	40	24	880				05
06	S 1649			76	110	2.8	5.4	56	50	—				06
07	1650			94	50	3.8	1.8	40	54	2040				07
08	T 1651			112	260	2.2	0.8	126	48	5800				08
09	T 1652			94	260	2.5	0.8	308	14	4800				09
10	82 HKS 1653			440	500	9.1	4.4	130	44	—				10
11	1654			346	600	7.9	2.4	120	40	4900				11
12	1655			250	460	6.6	3.0	640	186	—				12
13	1656			116	150	3.7	2.8	106	66	4200				13
14	1657			132	70	3.2	2.4	66	76	—				14
15	1658			454	400	9.5	4.0	1600	66	5800				15
16	1659			182	620	4.7	2.6	146	66	—				16
17	1660			164	1300	7.7	2.0	150	112	5300				17
18	1661			52	240	3.4	0.8	146	50	—				18
19	82 HKS 1662			208	840	>10.0	2.4	156	58	7200				19
20	STD E			78	300	3.0	0.4	156	16	1700				20
21	82 HKS 1663			356	240	5.3	3.8	74	56	—				21
22	T 1664			148	150	2.9	0.8	78	20	4900				22
23	S 1665			124	1380	>10.0	2.0	560	116	—				23
24	1666			192	460	5.2	3.0	252	74	6000				24
25	T 1667			24	30	0.8	0.4	16	22	3740				25
26	S 1668			214	50	2.7	5.6	122	22	3500				26
27	1669			336	380	6.3	3.4	940	68	—				27
28	1670			600	360	8.7	5.0	1100	58	5000				28
29	1671			140	180	2.7	2.8	266	44	—				29
30	82 HKT 1672			22	60	0.6	0.6	22	20	4400				30
31	S 1673			254	760	8.5	2.8	260	56	—				31
32	1674			114	520	5.3	2.2	262	60	7100				32
33	1675			174	740	9.6	2.6	184	154	—				33
34	1676			98	140	3.7	3.6	82	150	4600				34
35	1677			126	580	6.1	2.4	170	106	—				35
36	1678			80	920	6.9	1.2	260	50	4600				36
37	1679			144	1240	10.0	1.8	362	82	—				37
38	1680			116	1100	7.7	2.0	296	204	4600				38
39	82 HKS 1681			10	30	0.4	1.2	24	30	—				39
40	STD E			86	300	2.9	0.4	170	18					40

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VALUES IN PPM UNLESS NOTED OTHERWISE.

Certified by C. Rossbacher

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

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

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 82258-5

INVOICE NO.

DATE ANALYSED SEPT 24/82

PROJECT 025

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

No.	Sample	pH	Mo	Cu	Mn	%Fe	Ag	Zn	Pb	Ba				No.
01	82 HKT 1682			64	400	4.0	0.8	130	36	4200				01
02	S 1683			68	740	4.6	0.8	170	54	—				02
03	1684			148	1220	5.3	1.6	168	54	6200				03
04	1685			148	1040	>10.0	1.6	236	62	—				04
05	1686			152	220	5.3	5.0	188	132	3520				05
06	1687			200	480	5.1	4.8	160	92	—				06
07	1688			146	160	3.0	3.4	102	60	3780				07
08	1689			130	660	4.8	1.4	262	58	—				08
09	1690			416	540	5.6	1.8	840	64	4200				09
10	82 HKS 1691			248	190	2.7	1.0	2300	62	—				10
11	1692			94	200	4.6	1.0	170	56	4500				11
12	1693			112	90	4.2	1.4	74	48	—				12
13	T 1694			20	30	0.7	0.6	58	14	1580				13
14	S 1695			72	70	3.1	1.6	84	42	—				14
15	1696			94	170	5.5	1.8	90	48	2800				15
16	1697			104	240	4.6	1.6	246	36	—				16
17	1698			54	20	2.5	1.4	68	98	2400				17
18	1699			78	40	3.5	1.2	70	42	—				18
19	82 HKS 1700			94	40	3.8	1.8	64	48	2640				19
20	B			148	120	0.8	1.0	172	94	1680				20
21	82 HKS 1701			142	160	8.1	1.8	92	54	—				21
22	1702			134	160	7.7	1.4	90	46	4000				22
23	1703			102	100	5.7	1.8	78	48	—				23
24	1704			100	80	3.7	1.2	72	36	2420				24
25	1705			84	70	3.9	1.4	72	36	—				25
26	1706			94	80	3.3	1.0	74	28	1720				26
27	82 HKS 1707			108	80	4.7	1.6	78	56	—				27
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30														30
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40														40

VALUES IN PPM UNLESS NOTED OTHERWISE.

Certified by U. Rossbach

Kossbacher Laboratory Ltd.

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

GEOCHEMICAL ANALYSTS & ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 82258-32

INVOICE NO.

DATE ANALYSED OCT. 12/82

PROJECT 57025

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

No.	Sample	pH	Mo	Cu	Mn	%Fe	Ag	Zn	Pb	Be				No.
01														01
02														02
03														03
04														04
05														05
06														06
07														07
08														08
09														09
10														10
11														11
12														12
13														13
14	867			204	420	6.2	1.6	620	56	—				14
15	868			136	380	5.4	1.8	482	44	4900				15
16	869			114	480	5.9	1.2	348	32	—				16
17	870			132	380	5.5	1.6	390	56	3800				17
18	871			120	420	6.2	1.8	484	58	—				18
19	82 HO S 872			56	150	4.5	2.2	138	92	2560				19
20	STD B			138	150	0.8	0.8	132	90	1580				20
21	82 HO S 873			78	400	5.6	2.2	308	84	—				21
22	874			90	1120	9.0	0.8	316	44	2720				22
23	875			84	200	3.3	1.0	264	22	—				23
24	876			78	280	3.9	1.6	286	104	2680				24
25	877			22	90	1.9	0.2	40	16	—				25
26	878			50	260	5.7	0.4	134	54	1780				26
27	879			154	500	6.8	1.2	364	60	—				27
28	880			38	170	3.9	0.2	58	36	1540				28
29	881			22	90	1.6	0.2	30	10	—				29
30	82 HO S 882			42	260	3.6	0.4	86	180	2000				30
31	883			72	340	4.2	0.4	150	48	—				31
32	884			42	1760	3.8	0.6	160	24	1860				32
33	885			146	240	4.8	2.8	560	94	—				33
34	L 886			198	740	4.8	1.6	530	52	4200				34
35	887			188	240	4.4	1.2	92	40	3360				35
36	S 888			22	40	0.9	0.2	16	2	1020				36
37	889			26	50	1.4	0.4	22	4	—				37
38	890			102	150	4.1	1.0	88	24	3900				38
39	82 HO S 891			144	150	5.2	1.6	106	48	—				39
40	STD B			140	130	0.8	1.0	136	86					40

VALUES IN PPM UNLESS NOTED OTHERWISE.

Certified by J. Kossbacher

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

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

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 82258-33

INVOICE NO.

DATE ANALYSED OCT. 12/82

PROJECT 57025

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

No.	Sample	pH	~~Mo~~	Cu	Mn	% Fe	Ag	Zn	Pb	Ba				No.
01	82 H05892			222	160	4.3	2.8	78	64	3140				01
02	893			126	420	4.1	1.4	288	46	—				02
03	894			110	130	2.3	1.4	80	50	2300				03
04	895			136	280	3.6	1.8	176	44	—				04
05	896			18	20	0.8	0.6	.6	3.0	880				05
06										3				06
07														07
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VALUES IN PPM UNLESS NOTED OTHERWISE.

Certified by U. Rossbacher

SYMBOLS

○ 82HK1267	Soil	sample site, sample number. (for results see APPENDIX)
□ 82HO887	Silt	
⊕ 82HK1652	Rock chip	

Claim post, claim location line.

Claim boundary.

Stream.

2000 Topographic contour (contour interval 20 metres).

AMAX OF CANADA LIMITED

HESS RIVER PROPERTY
FUN CLAIMS
NAHANNI MINING DISTRICT — YUKON TERRITORY

GEOCHEMICAL MAP

091376

SCALE 400 0 400 METRES
1000 0 1000 FEET
1 : 10,000

To accompany 1982 Assessment Report by: F. R. Harris.

Vancouver Fred Harris Oct 15, 1982 H. P.

N. T. S. Ref. 105 O 1
FIG. 2