

MineQuest Report #120
 Ref. No. RM2202

THOM - FEHR CLAIMS

GEOCHEMISTRY

Kamloops Mining Division

N.T.S. 92 I/10, 11, 13, 14

Latitude 50°42'N

Longitude 120°00'W

By

A.W. Gourlay

of

MineQuest Exploration Associates Ltd.

<u>CLAIM</u> <u>NAME</u>	<u>RECORD</u> <u>NUMBER</u>	<u>UNITS</u>	<u>DATE RECORDED</u>
Fehr I	4101	16	July 06, 1982
Fehr II	4102	16	July 06, 1982
Fehr IV	4394	18	March 31, 1983
Fehr V	4395	16	March 31, 1983
Thom I	4748	16	Sept. 15, 1983
Thom II	6002	08	Dec. 07, 1984
Thom III	6003	12	Dec. 07, 1984
Jim 1	5898	15	Sept. 18, 1984
Jim 2	5899	09	Sept. 18, 1984

May, 1986

86-287-14776

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N.T.S. 92 I/10, 11, 13, 14

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**GEOLOGICAL BRANCH
ASSESSMENT REPORT.**

May, 1986

14,776

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1.0

INTRODUCTION

The THOM and FEHR claims were staked in 1982 and 1983 on the basis of geochemical indications of gold associated with anomalous quantities of arsenic and antimony in heavy mineral concentrates collected from stream sediments. Follow-up work on the FEHR claims in 1983 produced some geochemically anomalous gold values with weakly anomalous lead, arsenic, and antimony in soil and silt samples. In 1984, a program of geological mapping, rock chip sampling, contour soil sampling and prospecting was concentrated on the THOM I claim. This work further defined the area of geochemically anomalous gold, lead and arsenic values in soils, and discovered outcrop of altered hornblende diorite with a carbonate quartz stockwork carrying geochemically significant values in gold.

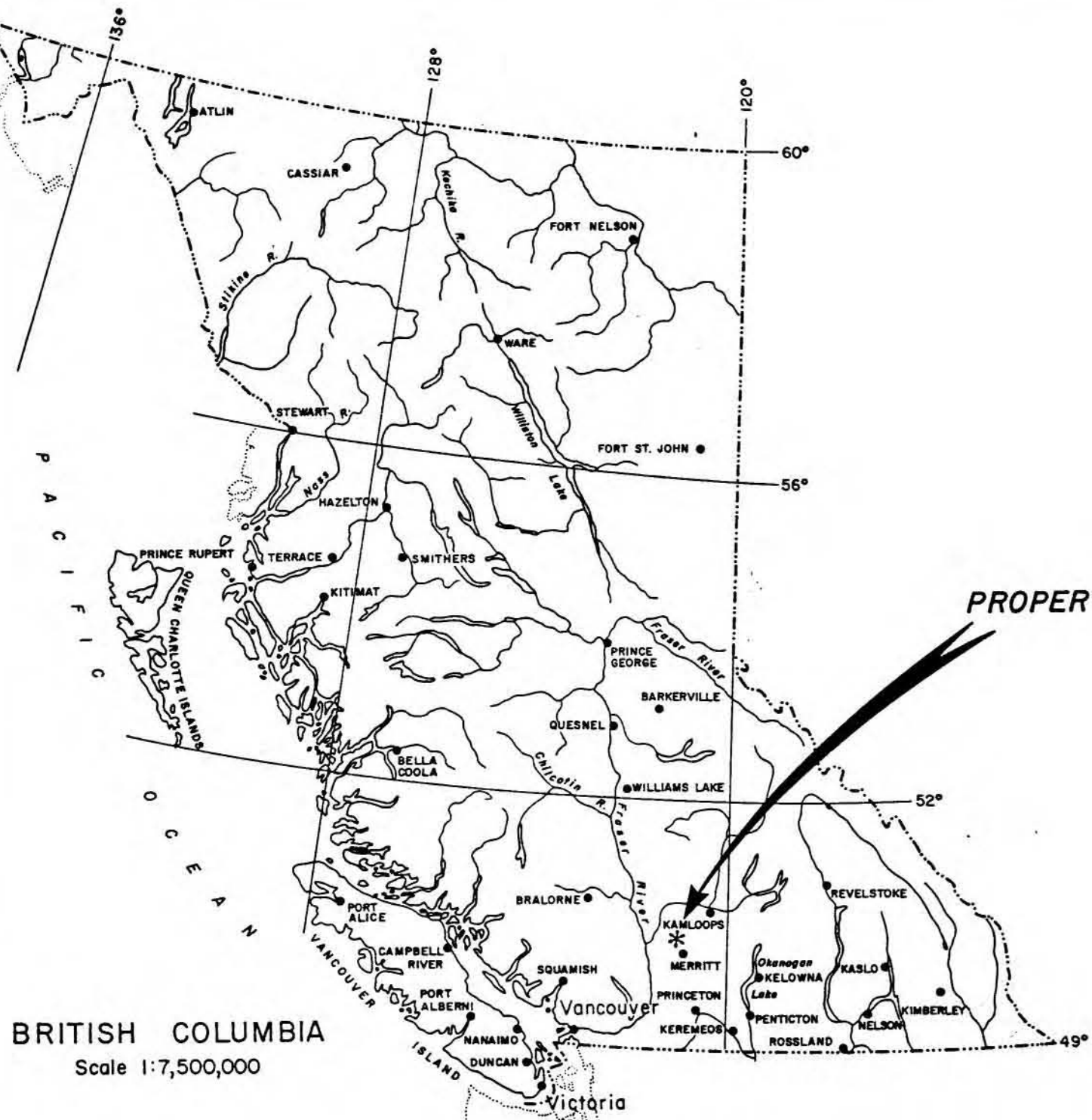
Work carried out in 1986, the subject of this report, consisted of contour soil sampling.

2.0

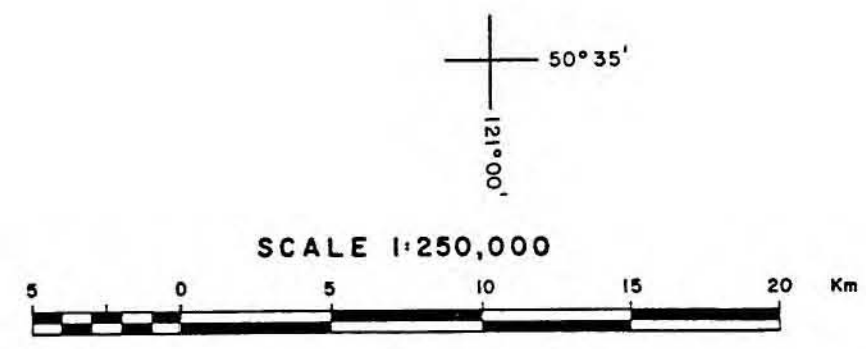
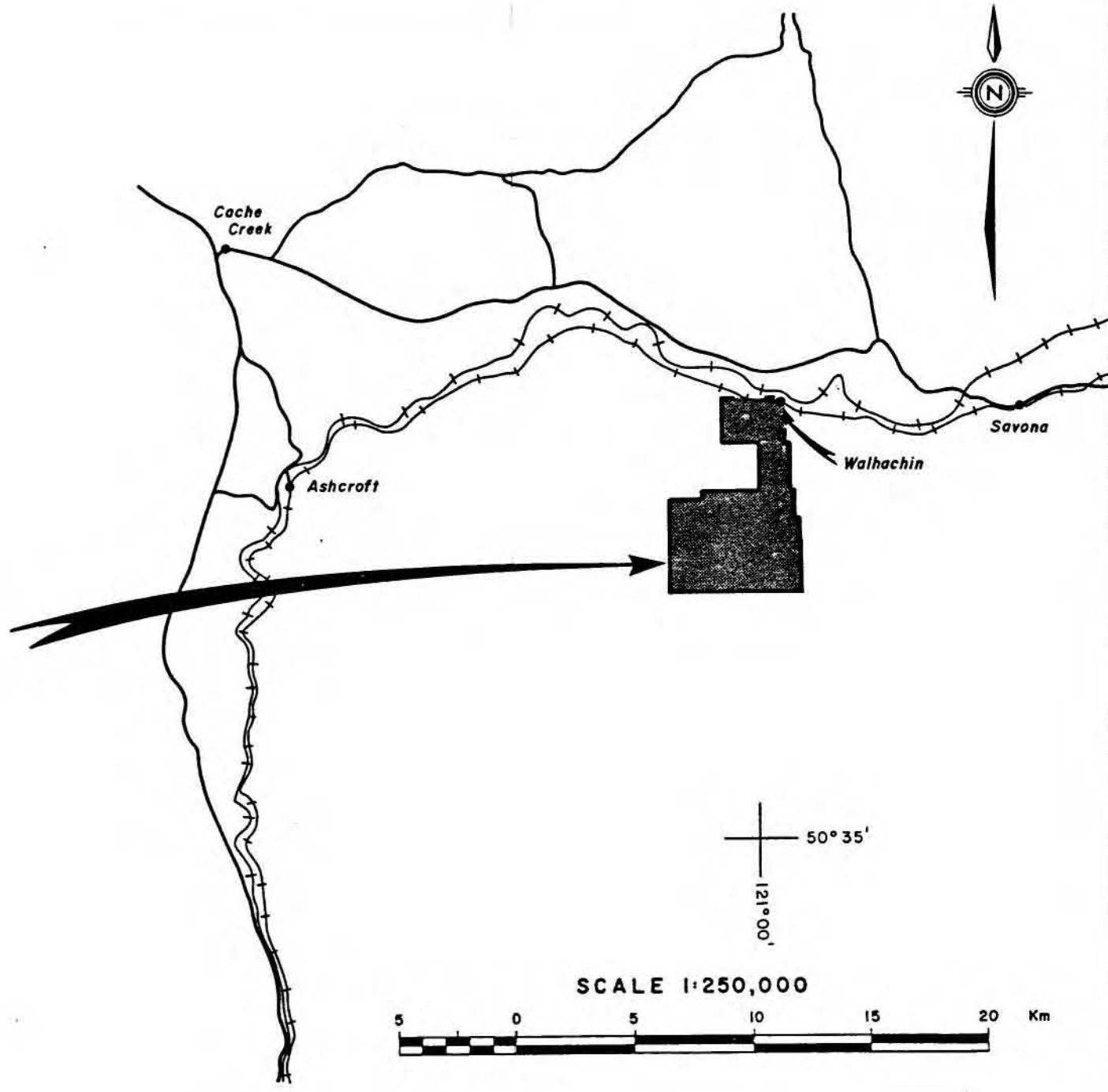
LOCATION, ACCESS AND TOPOGRAPHY

The property is located in south central British Columbia, south of the Thompson River, 11km south-west of Savona and 7km south of Walhachin. Access is by logging road from Savona.

The claims are situated on the north flank of Mount Fehr. Relief is 650m with higher elevations at 1525m. Much of the area has recently been logged; elsewhere it is covered by a moderate to light growth of timber with scattered clearings used by cattle for grazing.



PROPERTY



GOLDQUEST I PARTNERSHIP			
FEHR CLAIMS			
LOCATION MAP			
PLAN NO. 485.1	DRAWN	DATE AUG. 83	FIGURE I
Revised APRIL 1985		N.T.S. 92 I / 10, 11	
MINEQUEST EXPLORATION ASSOCIATES LTD.			

3.0

OWNERSHIP AND CLAIM STATUS

The claims listed below are held by MineQuest Exploration Associates Limited on behalf of GoldQuest I, a General Limited Partnership.

TABLE I
CLAIM STATUS

<u>Claim Name</u>	<u>Record Number</u>	<u>No. of Units</u>	<u>Due date before submission of this report</u>
Fehr I	4101	16	July 06, 1986
Fehr II	4102	16	July 06, 1986
Fehr IV	4394	18	March 31, 1986
Fehr V	4395	16	March 31, 1986
Thom I	4748	16	Sept. 15, 1987
Thom II	6002	08	Dec. 7, 1986
Thom III	6003	12	Dec. 7, 1986
Jim 1	5898	15	Sept. 18, 1986
Jim 2	5899	09	Sept. 18, 1986

4.0

HISTORY AND PREVIOUS WORK

According to public records, the ground now covered by the FEHR claims has not been previously explored. The adjoining THOM I claim, has been explored and tested by various companies since 1970, is the subject of a separate report by Hodgson (1984), which contains a thorough review of work performed on that property.

In 1983 MineQuest Exploration Associates Ltd. performed silt sampling, contour soil sampling and prospecting. Follow-up work in 1984 consisted of geological mapping, rock chip sampling, contour soil sampling and prospecting.

5.0

WORK CARRIED OUT IN 1986

Contour soil lines established in 1984 on FEHR V and JIM 1 claims were extended to the east; FHR CSL-2 by 2000 metres, and FHR CSL-3 by 1000 metres. These extensions cover the presumed south extension of fault splay controlling Rattlesnake Creek and the source of the geochemically anomalous mercury and gold values returned from the east end of the FHR CSL-3.

A total of 300 soil samples were collected from the B horizon, at 10 metre intervals along each line. Every fifth sample from the south contour soil line, FHR CSL-2, from the first 150 metres of extension was analysed for gold, silver, and mercury. Soil sampling was carried out by P.D. McCarthy and B.G. Griffiths. The program was under the direction of R.V. Longe.

5.1

Laboratory Methods

The soil samples were sent to Chemex Labs Ltd. of North Vancouver, B.C., where they were dried and sieved to minus 80 mesh. Analysis was carried out as follows:

<u>Element</u>	<u>Extraction</u>	<u>Analytical Method</u>
Gold	Fire Assay	Atomic Absorption
Mercury	Nitric Acid	Flameless Atomic Absorption
Silver	Nitric Aqua Regia	Atomic Absorption

6.0

GEOLOGY

The vicinity of Kamloops Lake has been mapped at a regional scale by Cockfield (1948), Duffel and McTaggart (1952), and more recently by Monger (1983). In and around the FEHR claims the Triassic Nicola Group, consisting of intermediate volcanics and sedimentary rocks, has been intruded by a diorite or granodiorite of probable Jurassic age. These Triassic and Jurassic rocks are overlain unconformably by a Jurassic conglomerate. The high ground is covered by basalts and sediments of the Eocene Kamloops Group.

The Deadman River (north and east of the claims) is believed to occupy an extension of the Pinchi Fault which continues southwards through Tunkwa Lake down Guichon Creek. Off this major transcurrent fault is a northwest-trending splay which passes through both the FEHR and the THOM claims. Within the claims are a number of other fractures, notably that along Rattlesnake Creek, which are parallel to this splay. These fractures or faults are assumed to be late because they appear to affect the Tertiary Kamloops Group to the south (Hodgson, 1984).

7.0

RESULTS

The FHR CSL-2 extension returned geochemically anomalous gold values from six consecutive soil samples (FHR 1021 - FHR 1046). Values of 15 to 30 ppb are comparable to those returned from soil samples collected in the immediate vicinity of auriferous outcrop found on THOM I claims. This 250m zone covers the projected extension of the fault controlling Rattlesnake Creek. Scattered mercury values in excess of 50ppb, the threshold used in the 1984 soil survey, are found along the soil line. Two adjacent samples at the east end of the line returned strongly anomalous values of 490 and 210ppb. Silver was consistently low.

8.0

DISCUSSION

For a detailed discussion of the mineralization found in hornblende diorite rocks along Rattlesnake Creek, the reader is referred to Hodgson (1984).

The Rattlesnake Creek fault zone is seen as having controlled the emplacement of not only the Rattlesnake Creek rhyolite, but also on auriferous hydrothermal system to which the rhyolite is probably related. The hydrothermal system contains gold, arsenic, antimony, and mercury, a suite of metals typical of such systems. The Jurassic Ashcroft Formation and the Tertiary Kamloops Group are presumed to pre-date both the rhyolite and the hydrothermal system. The poorly lithified matrix of the Ashcroft Formation conglomerate suggests it could be a good host for gold deposition but there is no indication of significant alteration peripheral to the granodiorite. However, the contour soil lines have provided some evidence of a hydrothermal event effecting the southern extension of the Rattlesnake Creek fracture. Sedimentary rocks of the Kamloops Group, exposed just to the north of the Thompson River, are inferred to overlie the Ashcroft Formation, but are not exposed. Permeable sedimentary units and breccia within the Kamloops Group are known elsewhere to have been intensely altered by high level hydrothermal systems. This suggests that the contour soil lines are underlain by altered Kamloops Group sedimentary rocks, adjacent to the Rattlesnake Creek fracture.

9.0

CONCLUSIONS

1. The FEHR and THOM claims cover a sequence of Triassic, Jurassic and Tertiary rocks that is to be prospective for epithermal gold deposits indicated by geochemical anomalies of gold, arsenic, antimony, silver, and mercury,
2. Volcanic rocks of the Triassic Nicola Group have been intruded by a hornblende diorite. Resting unconformably on the Triassic rocks is conglomerate of Jurassic Ashcroft Formation. Post-Jurassic faulting has controlled the emplacement of a Tertiary (?) rhyolite plug in Rattlesnake Creek. Tertiary Kamloops Group volcanic rocks now unconformably overlie the older units.
3. Geochemically anomalous gold and arsenic are found in altered diorite peripheral to the rhyolite plug in Rattlesnake Creek. Geochemically enhanced values of gold, arsenic, and mercury in soils are found along Rattlesnake Creek fault and along the southern extension of this fault zone, in an area underlain by Ashcroft Formation conglomerate and presumed Tranquille Formation lacustrine sediments of the Kamloops Group.

10.0

REFERENCES

- Gourlay, A.W., 1985
Fehr Claims - Geology and Geochemistry
MineQuest Exploration Associates Ltd., Report
Number 89 (submitted as Assessment Report)
- Hodgson, G.D., 1984
Thom Claims - Geology
MineQuest Exploration Associates Ltd., Report
Number 77 (submitted as Assessment Report)
- Longe, R.V., 1983
Fehr Claims - Geochemistry
MineQuest Exploration Associates Ltd., Report
Number 33 (submitted as Assessment Report)
- Monger, J.W.H., and McMillan, W.J., 1983
Bedrock Geology of Ashcroft (92I) Map Area
GSC Open File 980
- Ridley, S.L., and Moraal, D., 1984
Fehr Claims - Prospecting
MineQuest Exploration Associates Ltd., Report
Number 59 (submitted as Assessment Report)

APPENDIX I
Laboratory Results



Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

212 Brooksbank Ave.
North Vancouver, B.C.
Canada V7J 2C1

Phone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ANALYSIS

TO : MINEQUEST EXPLORATION ASSOCIATES LTD.

201 - 311 WATER ST.
VANCOUVER, B.C.
V6B 1B9

CERT. # : A8612119-001-A
INVOICE # : 18612119
DATE : 28-APR-86
P.O. # : NONE

FHR

ATTN: A. W. GOURLAY

Sample description	Prep code	Ag ppm Aqua R	Hg ppb	Au ppb FA+AA			
FHR 1001	201	0.1	90	10	--	--	--
FHR 1006	201	0.1	60	<5	--	--	--
FHR 1011	201	0.1	40	10	--	--	--
FHR 1016	201	0.1	60	10	--	--	--
FHR 1021	201	0.1	40	15	--	--	--
FHR 1026	201	0.1	40	20	--	--	--
FHR 1031	201	0.1	40	30	--	--	--
FHR 1036	201	0.1	30	20	--	--	--
FHR 1041	201	0.1	30	20	--	--	--
FHR 1046	201	0.1	40	15	--	--	--
FHR 1051	201	0.1	40	<5	--	--	--
FHR 1056	201	0.1	40	10	--	--	--
FHR 1061	201	0.1	30	10	--	--	--
FHR 1066	201	0.1	40	<5	--	--	--
FHR 1071	201	0.1	30	5	--	--	--
FHR 1076	201	0.1	40	5	--	--	--
FHR 1081	201	0.1	60	<5	--	--	--
FHR 1086	201	0.1	30	<5	--	--	--
FHR 1091	201	0.1	30	<5	--	--	--
FHR 1096	201	0.1	30	5	--	--	--
FHR 1101	201	0.1	40	<5	--	--	--
FHR 1106	201	0.1	20	<5	--	--	--
FHR 1111	201	0.1	30	<5	--	--	--
FHR 1116	201	0.1	30	<5	--	--	--
FHR 1121	201	0.1	40	<5	--	--	--
FHR 1126	201	0.1	40	<5	--	--	--
FHR 1131	201	0.1	80	<5	--	--	--
FHR 1136	201	0.1	50	<5	--	--	--
FHR 1141	201	0.1	490	<5	--	--	--
FHR 1146	201	0.1	210	<5	--	--	--
FHR 1150	201	0.1	50	<5	--	--	--

VOI rev. 4/85

Certified by Hart Bichler

APPENDIX II
Cost Statement

COST STATEMENT

FEHR CLAIMS

January 1 to March 31, 1986

FEES AND WAGES

G.R. Peatfield			
1.25 hrs. at \$80.00	\$	100.00	
A.W. Gourlay			
1.25 hrs. at \$64.00		80.00	
B. Griffiths			
3 days at \$120.00		360.00	
P. McCarthy			
3 days at \$185.00		555.00	
P. McCarthy			
7.25 hrs. at \$24.00		<u>174.00</u>	\$1,269.00

DISBURSEMENTS

M.Q. Rental Vehicle Charges	180.00	
Vehicle Repair & Maintenance	7.00	
Fuels & Lubricants	75.54	
Taxis, Parking	3.00	
Meals, Accommodation	11.10	
M.Q. Equipment Charges, Field	48.00	
General Supplies	2.88	
Groceries	10.28	
Food, Accommodation, In Field	175.24	
Drafting	210.00	
Reprographics	13.31	
Photocopies	1.70	
Report Preparation	144.28	
Disbursement Over-Ride @ 10%	<u>50.84</u>	933.17
		<u>\$2,022.17</u>

APPENDIX III
Statement of Qualifications

STATEMENT OF QUALIFICATIONS

I, Andrew W. Gourlay, hereby certify that:

1. I am presently employed by MineQuest Exploration Associates Ltd. as Senior Geologist.
2. I am a graduate of the University of British Columbia (B.Sc. Hons., 1977, in geology).
3. I am a Professional Geologist in good standing with the Association of Professional Engineers, Geologists and Geophysicists of Alberta, and a Fellow of the Geological Association of Canada.
4. I have practised my profession as geologist for 8 years.
5. This report is based on information acquired from reports, maps, and data lists on file at MineQuest Exploration Associates Ltd.

Signed



Dated at Vancouver, B.C.
this 6th day of May, 1986

APPENDIX IV

Statement of Exploration and Development

C. DRILLING	(Details in report submitted as per section 8 of regulations.) (The itemized cost statement must be part of the report.)	COST
D. GEOLOGICAL, GEOPHYSICAL, GEOCHEMICAL		
(Details in report submitted as per section 5, 6, or 7 of regulations.) (The itemized cost statement must be part of the report.) (State type of work in space below.)		
Geochemical Soil Survey		1,250.00
Report to follow 9-2 days from Mar 31/86		
TOTAL OF C AND D		1,250.00

Where the above statement requires a technical report as per section C of the Mineral Act Regulations, the author of the report shall complete both copies of the ASSESSMENT REPORT TITLE PAGE AND SUMMARY form and include the completed forms in the assessment reports.

Who was the operator (provided the financing)?
 Name GoldQuest I Limited Partnership
 Address 201-311 Water Street, Vancouver, B.C., V6B 1B8

Portable Assessment Credits (PAC) Withdrawal Request		AMOUNT
Amount to be withdrawn from owner(s) or operator(s) account(s):		
Name of Owner/Operator		
[May be no more than 30 per cent of value of the approved work submitted as assessment work in C and (or) D.]	1. <u>GoldQuest I Limited Partnership</u>	350.00
	2. _____	
	3. _____	
TOTAL WITHDRAWAL		350.00
TOTAL OF C AND (OR) D PLUS PAC WITHDRAWAL		1,600.00

I wish to apply \$ 1,600.00 of this work to the claims listed below.

(State number of years to be applied to each claim, its month of record, and identify each claim by name and record number.)

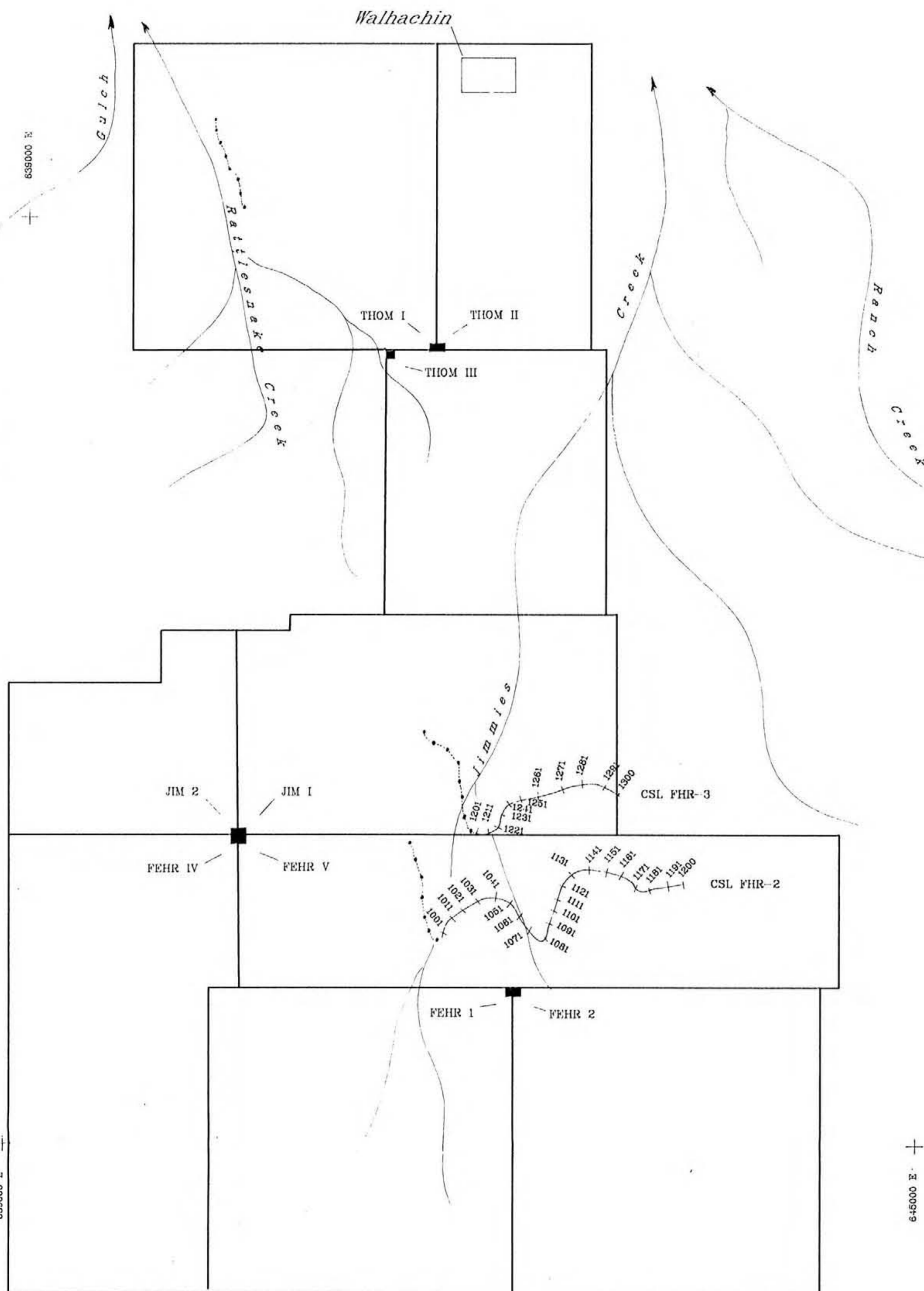
Claim	Record #	Units	Month Recorded	Apply	Years Earned
<u>Fehr V</u>	<u>4395</u>	<u>16</u>	<u>March 31st</u>	<u>1,600</u>	<u>1</u>

Value of work to be credited to portable assessment credit (PAC) account(s).
 [May only be credited from the approved value of C and (or) D not applied to claims.]

Name	AMOUNT
Name of owner/operator 1. _____	
2. _____	
3. _____	

I, the undersigned Free Miner, hereby acknowledge and understand that it is an offence to knowingly make a false statement or provide false information under the *Mineral Act*. I further acknowledge and understand that if the statements made, or information given, in this Statement of Exploration and Development are found to be false and the exploration and development has not been performed, as alleged in this Statement of Exploration and Development, then the work reported on this statement will be cancelled and the subject mineral claim(s) may, as a result, forfeit to and vest back to the Province.


 Signature of Applicant



Results
(from individual samples,
intervening samples not analysed)

Sample	Ag ppm	Hg ppb	Au ppb
FHR 1001	0.1	90	10
FHR 1006	0.1	60	<5
FHR 1011	0.1	40	10
FHR 1016	0.1	60	10
FHR 1021	0.1	40	15
FHR 1026	0.1	40	20
FHR 1031	0.1	40	30
FHR 1036	0.1	30	20
FHR 1041	0.1	30	20
FHR 1046	0.1	40	15
FHR 1051	0.1	40	<5
FHR 1056	0.1	40	10
FHR 1061	0.1	30	10
FHR 1066	0.1	40	<5
FHR 1071	0.1	30	5
FHR 1076	0.1	40	5
FHR 1081	0.1	60	<5
FHR 1086	0.1	30	<5
FHR 1091	0.1	30	<5
FHR 1096	0.1	30	5
FHR 1101	0.1	40	<5
FHR 1106	0.1	20	<5
FHR 1111	0.1	30	<5
FHR 1116	0.1	30	<5
FHR 1121	0.1	40	<5
FHR 1126	0.1	40	<5
FHR 1131	0.1	80	<5
FHR 1136	0.1	50	<5
FHR 1141	0.1	490	<5
FHR 1146	0.1	210	<5
FHR 1150	0.1	50	<5

Note: samples 1151-1300 collected but not analysed.

LEGEND

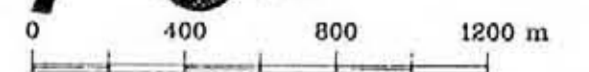
--- 1985 Soil Samples

--- 1984 Soil Samples

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

14.776

SCALE
1:20,000



GOLDQUEST I LIMITED PARTNERSHIP				
THOM & FEHR CLAIMS				
<i>GEOCHEMISTRY</i>				
<i>Soil Sample Locations & Results</i>				
Originator	Drawn	Date	PLAN No.	FIGURE
Original AWG	Geo-Comp	May '88	885	2
Revision			N.T.S.	
Revision			921/10.11	
MINEQUEST EXPLORATION ASSOCIATES LTD.				