

MineQuest Report #137

Ref. No. RM2902

THOM - FEHR CLAIMS**GEOPHYSICS**

Kamloops Mining Division

N.T.S. 92 1/10W, 11E ~~11E~~Latitude 50° ~~42.4'~~ 43.4'
Longitude 120° ~~30.4'~~ 59.2'

By

A.W. Gourlay

of

Owner: MineQuest Exploration Associates Ltd.

Operator: GoldQuest I Limited Partnership

<u>CLAIM NAME</u>	<u>RECORD NUMBER</u>	<u>UNITS</u>	<u>DATE RECORDED</u>
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 I	5898	15	Sept. 18, 1984

December, 1986

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

FILMED

15,635

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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.

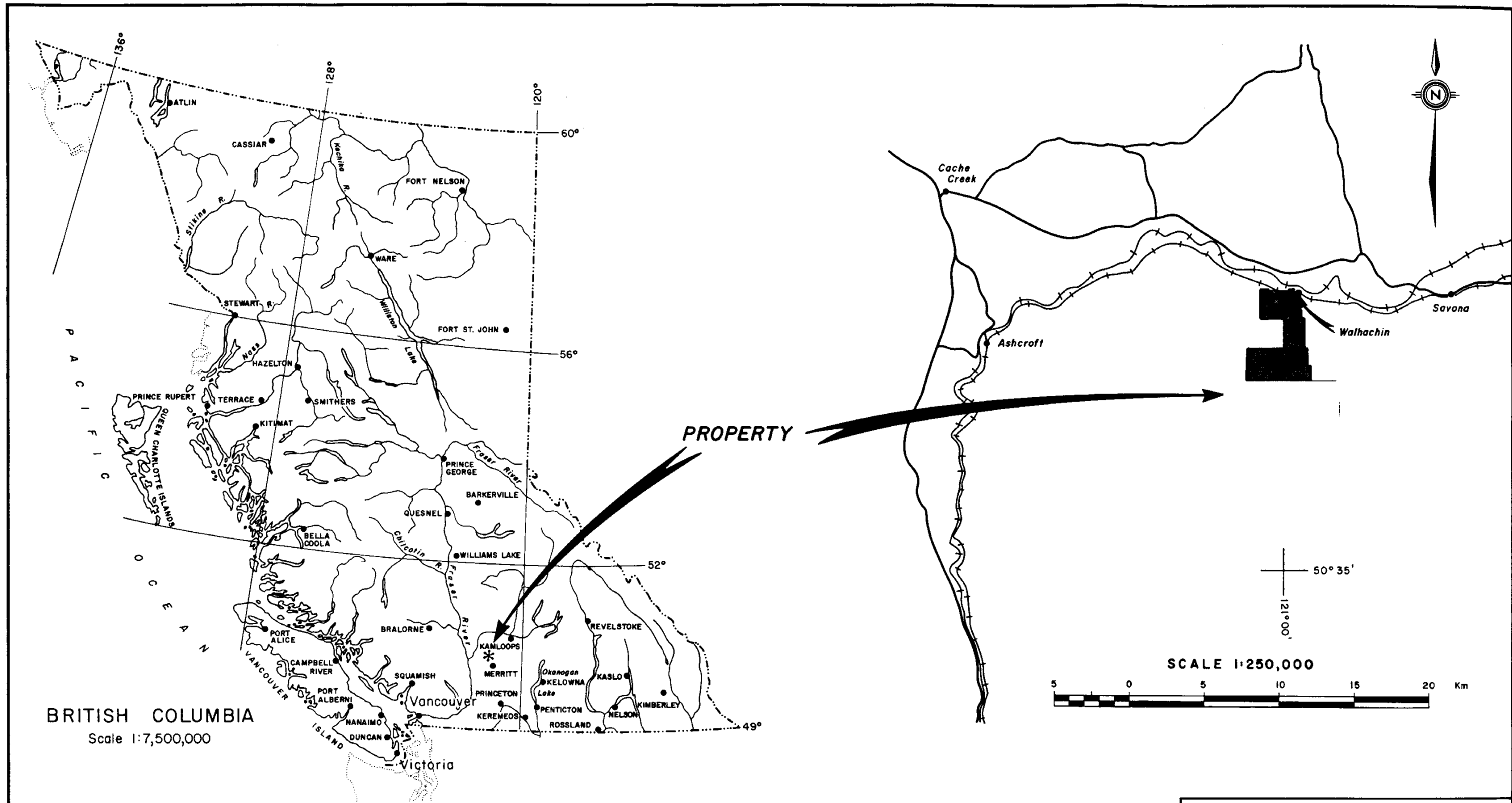
Work carried out in 1986, the subject of this report, consisted of VLF-EM geophysical survey.

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.



BRITISH COLUMBIA
Scale 1:7,500,000

SCALE 1:250,000
5 0 5 10 15 20 Km

GOLDQUEST I PARTNERSHIP			
FEHR CLAIMS			
LOCATION MAP			
PLAN NO. 485.1	DRAWN	DATE AUG. 83	FIGURE 1
Revised APRIL 1985		N.T.S. 92 I / 10, 11	
MINEQUEST EXPLORATION ASSOCIATES LTD.			

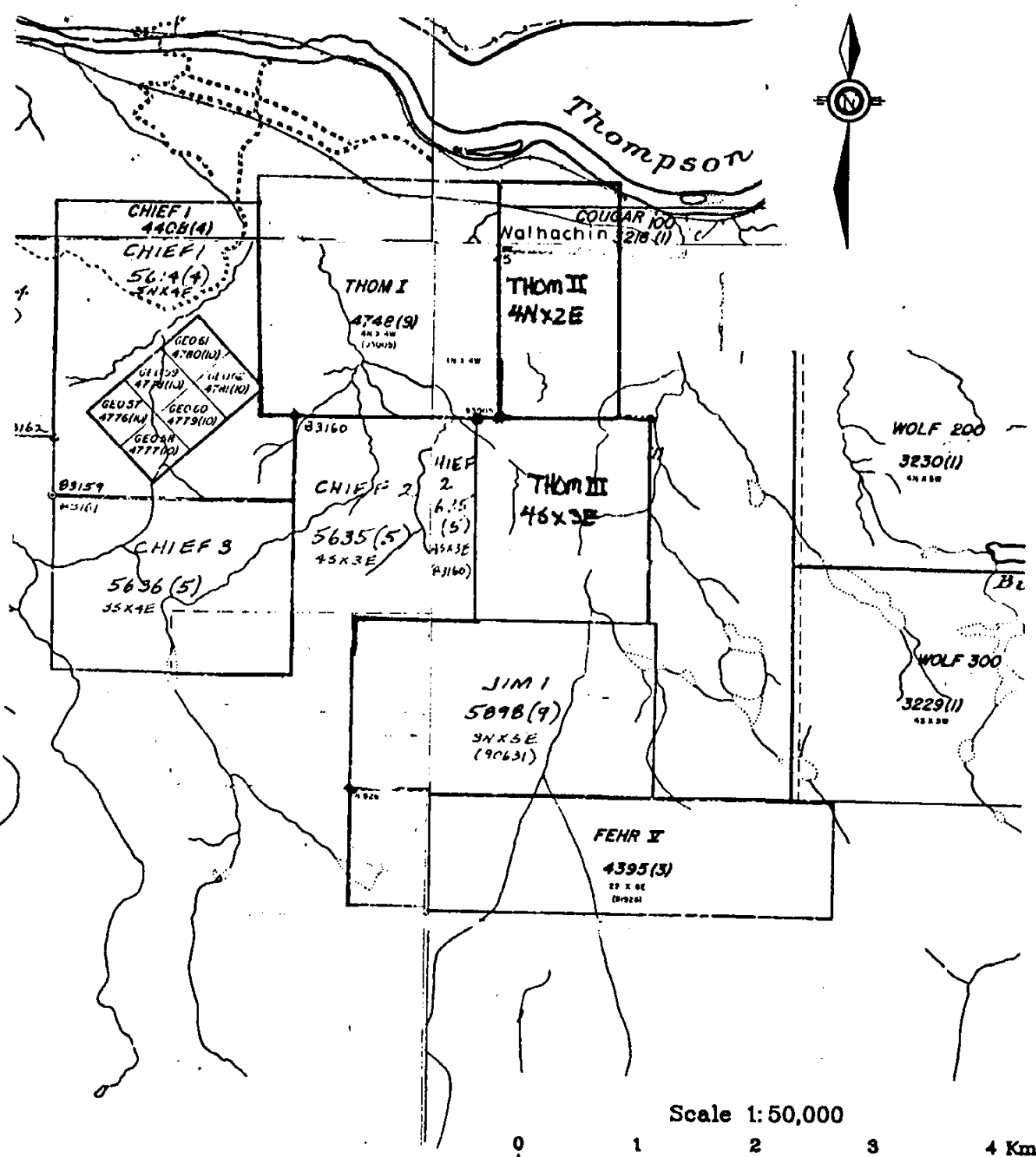
3.0

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 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 I	5898	15	Sept. 18, 1986



Scale 1:50,000



GOLDQUEST I PARTNERSHIP

FEHR CLAIMS

CLAIM MAP

PLAN NO.	DRAWN	DATE	FIGURE
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Revised APRIL 1988

N.T.S.

92 I / 10, II

MINEQUEST EXPLORATION ASSOCIATES LTD.

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 claim.

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. Early in 1986 a contour soil sampling survey was carried out on Jim 1 and Fehr V claims.

5.0

WORK CARRIED OUT IN 1986

A reconnaissance grid was established on Jim 1 claim, covering the projected extension of the fracture controlling Rattlesnake Creek. Lines were run east-west, 500 metres in length, spaced 100 metres apart. Stations were chained at 25 metre intervals, and flagged.

The initial survey was carried out on September 4, 1986 by A.W. Gourlay, and A.R. Zuk. The extension of the survey was carried out by Peter Walcott and Associates Ltd. on December 6 and 7, 1986. Both surveys used a Geonics EM-16 field unit and Seattle, Washington, as a transmitting station.

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

A four stranded barbed wire fence that runs between Lines 39 and 40N, and across the west end of the Line 41N renders data collected here meaningless.

Lines 43, 42, and the eastern half of Line 41N cover a series of north-northwest trending conductors, parallel to the trend of Rattlesnake Creek. To the south, from Lines 39N to 35N the conductors trend north-south. This suggests that there may be a flexure in the main northwest trending fractures, or an intersection of the northwest trending fractures and fractures trending northeast, parallel to Jimmies Creek.

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. A preliminary geophysical survey has confirmed the presence of northwest fractures, and discovered a previously unrecognized north-northeast trending set of fractures, in the area of anomalous geochemistry.

9.0

CONCLUSIONS

1. The FEHR and THOM claims cover a sequence of Triassic, Jurassic and Tertiary rocks that is prospective for epithermal gold deposits as 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.
4. A preliminary geophysical survey has confirmed the presence of northwest trending fractures parallel to Rattlesnake Creek, and a north-northeast trending set of fractures.

10.0

REFERENCES

- Gourlay, A.W., 1986
Thom-Fehr Claims - Geochemistry.
MineQuest Exploration Associates Ltd. Report
Number 120 (submitted as Assessment Report).
- 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
Cost Statement

APPENDIX I

Cost Statement

Thom - Fehr Claims

Fees, Salaries and Wages

A.W. Gourlay	2 days at \$385.00	\$ 770.00	
A.R. Zuk	1 day at \$135.00	<u>135.00</u>	\$ 905.00

Disbursements

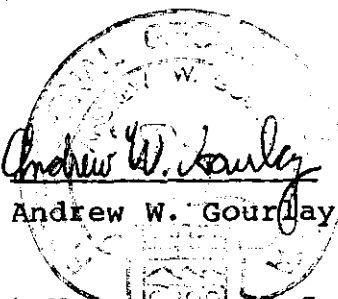
Contract Geophysics	2,106.71	
Truck Rental 1 day at \$50.00	50.00	
Meals	19.40	
Highway Toll	8.00	
Telephone	4.91	
Courier	5.50	
Photocopies	13.30	
Maps	4.50	
Reprographics	6.00	
Word Processing	<u>20.00</u>	2,238.32
		<u>\$3,143.32</u>

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 9 years.
5. This report is based on personal participation in the early geophysical survey, and acquired from reports, maps, and data lists on file at MineQuest Exploration Associates Ltd.

Signed



Andrew W. Gourlay

Dated at Vancouver, B.C.
this 9th day of December, 1986

APPENDIX II
Statement of Qualifications

APPENDIX III

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)	
	Geophysical Survey (Report to follow)	1,600
TOTAL OF C AND D		1,600

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>	400
	2. _____	
	3. _____	
TOTAL WITHDRAWAL		400
TOTAL OF C AND (OR) D PLUS PAC WITHDRAWAL		2,000

I wish to apply \$ 2,000 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 NO.	UNITS	MONTH DUE	WORK APPLIED	YEARS EARNED
<u>Thom II</u>	<u>6002</u>	<u>8</u>	<u>December</u>	<u>800</u>	<u>1</u> ✓
<u>Thom III</u>	<u>6003</u>	<u>12</u>	<u>December</u>	<u>1200</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.

U. W. Stanley
Signature of Applicant

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.)		
	Geophysical and Geochemical Surveys	1,160.00
TOTAL OF C AND D		1,160.00

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 St., 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>	340.00
	2. _____	
	3. _____	
TOTAL WITHDRAWAL		340.00
TOTAL OF C AND (OR) D PLUS PAC WITHDRAWAL		1,500.00

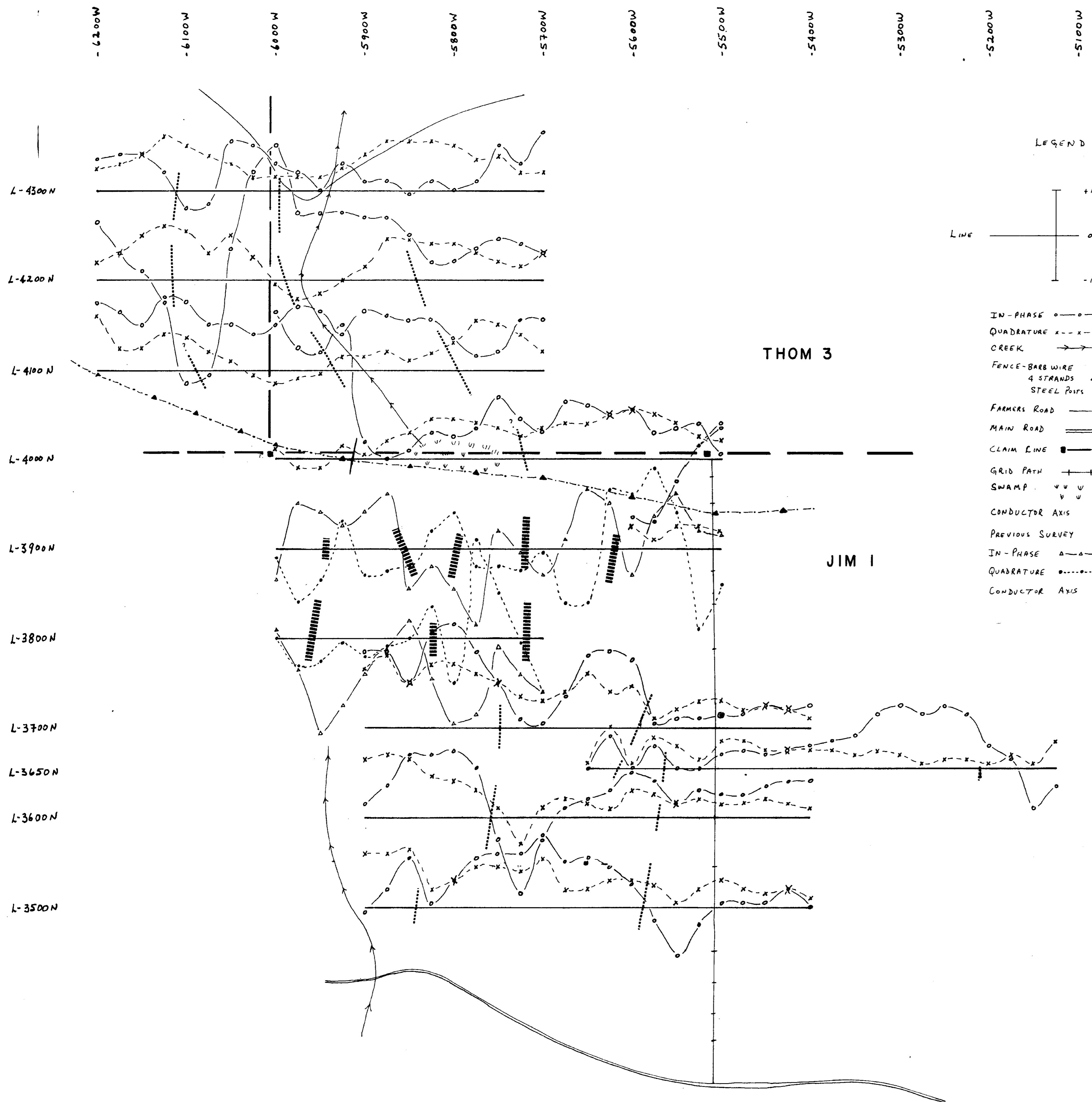
I wish to apply \$ 1,500 of this work to the claims listed below.
(State number of years to be applied to each claim, its month of record, and identify each claim by name and record number.)

Claim Name	Record No.	Units	Month Due	Apply	Years Earned
<u>Jim 1</u>	<u>5898</u>	<u>15</u>	<u>September</u>	<u>1,500</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.)		AMOUNT
Name of owner/operator	Name	
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.

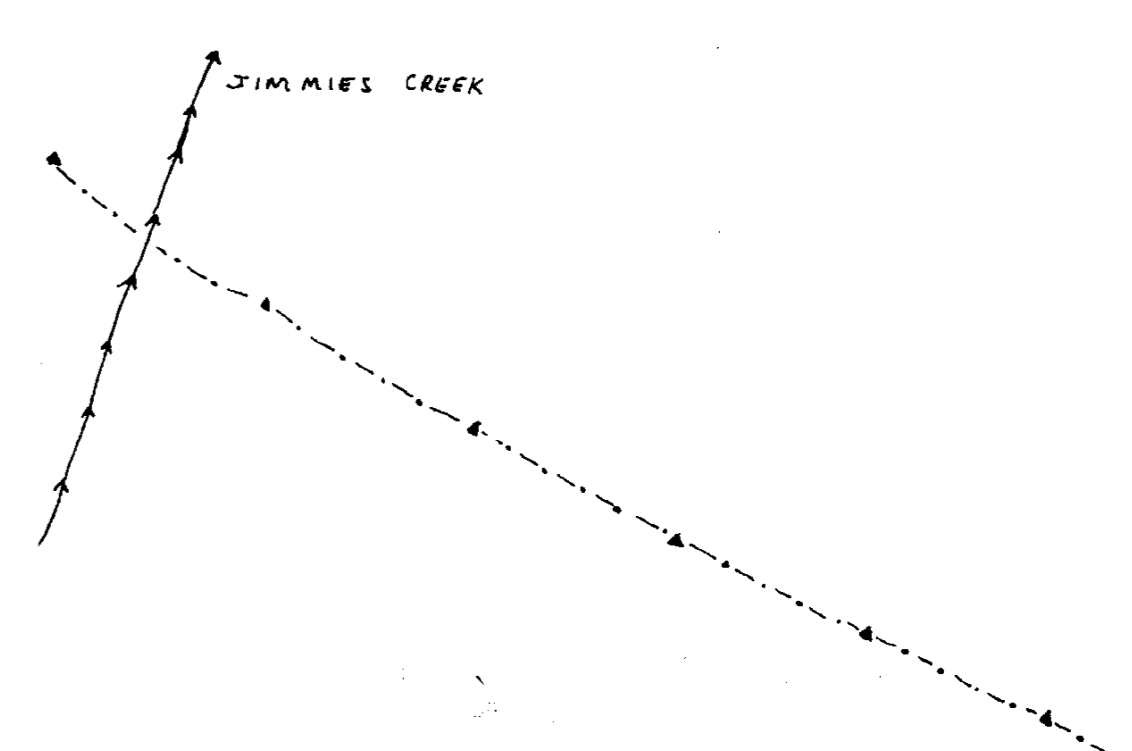
[Signature]
Signature of Applicant



LEGEND

- LINE
- IN-PHASE
- QUADRATURE
- CREEK
- FENCE-BARB WIRE 4 STRANDS STEEL POSTS
- FARMERS ROAD
- MAIN ROAD
- CLAIM LINE (APPROX. POSITION)
- GRID PATH
- SWAMP
- CONDUCTOR AXIS
- PREVIOUS SURVEY
- IN-PHASE
- QUADRATURE
- CONDUCTOR AXIS

Tx
NLK SEATTLE 24.8 KHZ.
DIRECTION OF READING



GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,635

MINEQUEST EXPLORATION ASSOC. LTD.
 SAVONA PROPERTY, KAMLOOPS M.D., B.C.

E.M. 16 - VLF
ELECTROMAGNETIC SURVEY
 PROFILES OF IN-PHASE & QUADRATURE READINGS
 SCALE 1:2,500

MAP No. W-407-1
 PETER F. WILCOTT & ASSOC. LTD.
 DECEMBER, 1986

Figure 2 N.T.S. 921/10,11,13,14 External Plan 535