

# ARCHER, CATHRO

& ASSOCIATES (1981) LIMITED

CONSULTING GEOLOGICAL ENGINEERS

Box 4127, 3125 THIRD AVENUE  
WHITEHORSE, Y.T. Y1A 3S9

(403) 667-4415

Report on  
1984 HAND TRENCHING  
on  
Rod 35 Claim  
in the



Mayo Mining District  
NTS 106D/1 and 106C/4  
Latitude 64°12' and Longitude 134°00'



for  
Serem Inc.

by  
R.C. Carne, M.Sc.  
Archer, Cathro & Associates (1981) Limited  
July 10, 1984

091545

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## INTRODUCTION

Archer, Cathro & Associates (1981) Limited was contracted by Serem Inc. to evaluate mineralized float occurrences on the Rod property with hand trenching. Earlier work by MacIntyre Mines Limited (later Canadian Superior Exploration Ltd.) as well as Serem Ltd. (now Serem Inc.) is detailed in reports filed previously for assessment credit.

Most of the 1977 to 1980 exploration was concentrated in the south part of the property where carbonate-hosted lead-zinc occurrences are present. Silver-rich galena float mineralization located in the north part of the claim group in an area underlain by Paleozoic black shales received little work until 1982 when Serem purchased the property and performed a detailed geochemical and prospecting survey. That exploration outlined a virtually continuous, 2 km long lead-silver soil anomaly associated with galena float occurrences.

This report summarizes a hand trenching program carried out during June 1984 to evaluate results of the earlier work on the northern part of the claim block.

## LOCATION AND ACCESS

The Rod property is located in the Mayo Mining District in central Yukon Territory, about 100 km northeast of the Keno Hill silver camp. The property comprises 100 claims totalling about 21 km<sup>2</sup> in area. Details are given below:

<u>Claim Name</u>	<u>Record No.</u>	<u>Expiry Date</u>	<u>No. of Claims</u>
Rod 1-12	YA15176-YA15187	28 June, 1988	12
Rod 13, 15, 17	YA15188, YA15190, YA15192	28 June, 1984	3
Rod 14, 16, 18	YA15189, YA15191, YA15193	28 June, 1988	3
Rod 19-30	YA15194-YA15205	28 June, 1984	12
Rod 31-47	YA15206-YA15222	28 June, 1988	17
Rod 48-100	YA15223-YA15275	28 June, 1984	53
		Total	<u>100</u>

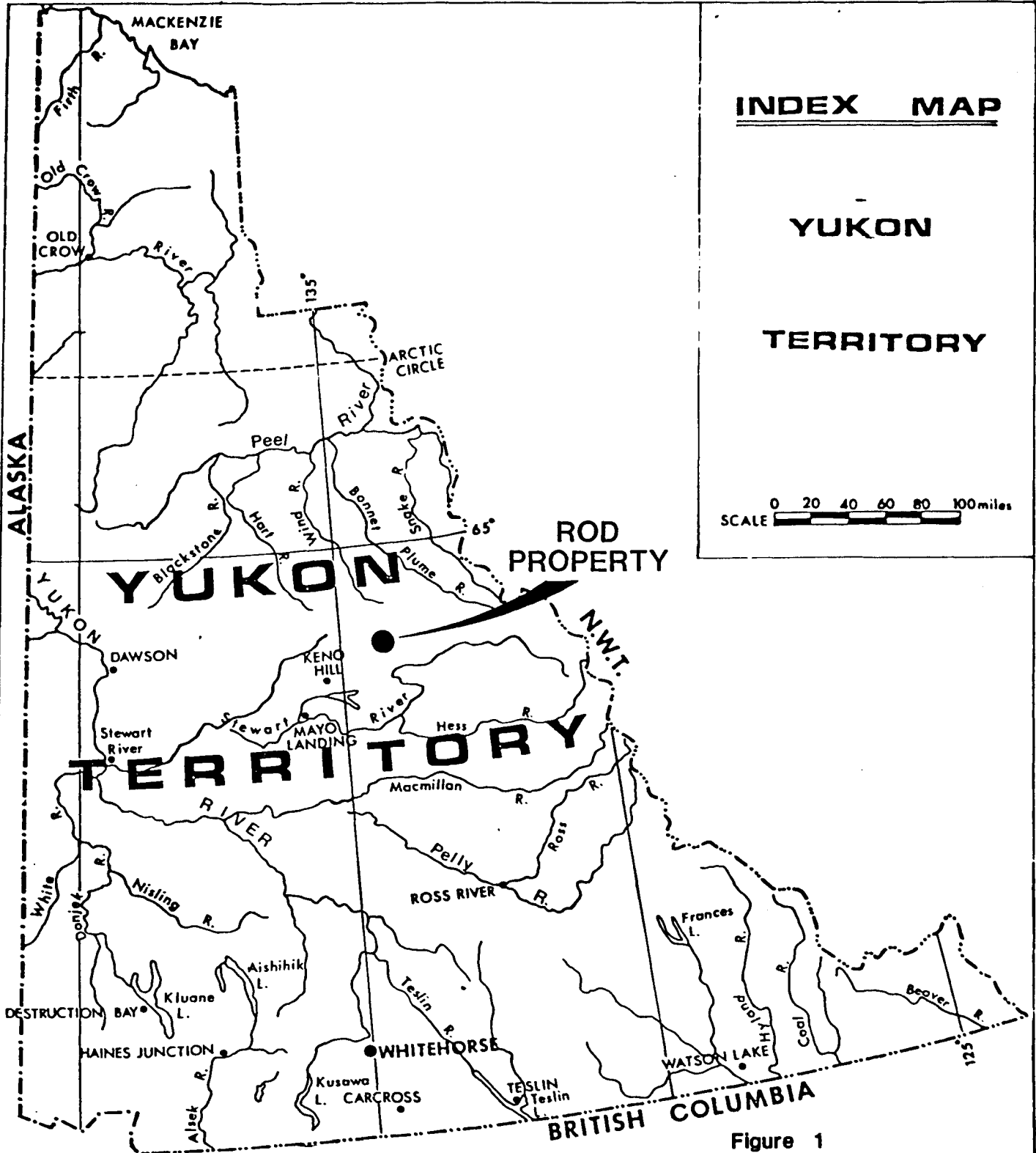
Note: Claim expiry dates are prior to assessment work filed in 1984.

INDEX MAP

YUKON

TERRITORY

0 20 40 60 80 100 miles  
SCALE



ROD PROPERTY

YUKON TERRITORY

BRITISH COLUMBIA

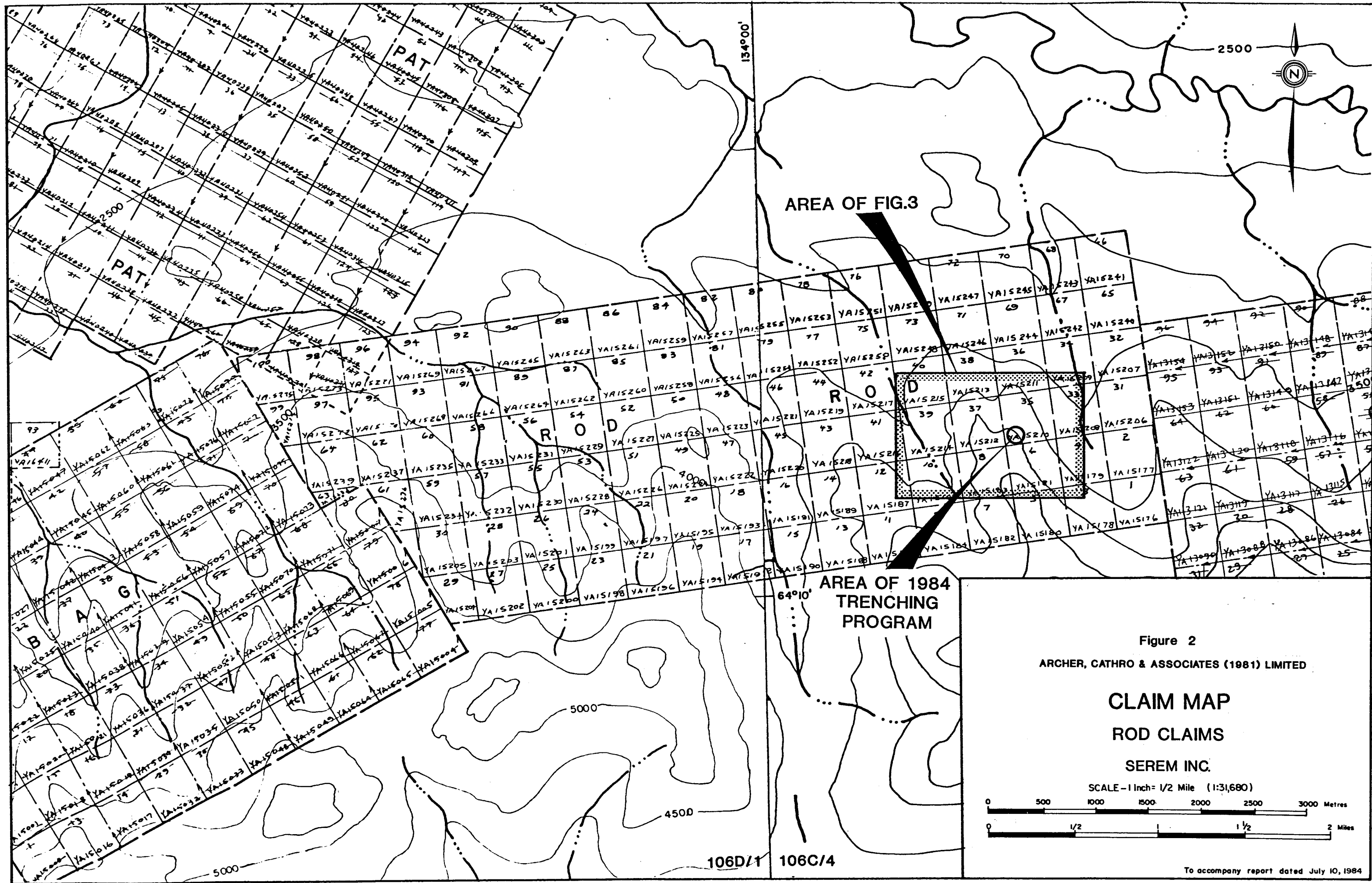
Figure 1

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

LOCATION MAP

ROD CLAIMS

SEREM INC

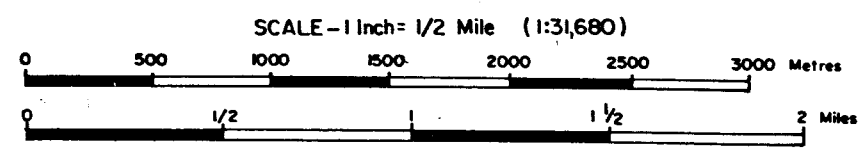


AREA OF FIG.3

AREA OF 1984  
TRENCHING  
PROGRAM

Figure 2  
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

**CLAIM MAP**  
**ROD CLAIMS**  
**SEREM INC.**



To accompany report dated July 10, 1984

106D/1 106C/4

The centre of the claim block is located at latitude 64°12' and longitude 134°00'W. Access is by helicopter from Keno City, the nearest settlement, a distance of 60 km. Support for relatively large-scale exploration is facilitated by the nearby Rackla East airstrip and a winter bulldozer tote road from Elsa that passes within 5 km of the Rod property.

### 1984 EXPLORATION

A three-man trenching crew consisting of blaster M. Cloutier, assistant B. Sinclair and geologist-supervisor R. Carne fly-camped on the property during the period June 7 to June 10, inclusive. R. Carne and B. Sinclair were employees of Archer, Cathro while M. Cloutier was a private contractor hired directly by Serem Inc.

Two hand trenches on the Rod 35 claim were blasted with powder and mucked by hand. The trenches were oriented to expose bedrock at the uphill edge of the lead-silver geochemical anomaly and coincident galena float train. Volume of the trenches is calculated below:

Trench 84-1:

$$\begin{array}{l} \text{western third}-[(1.6\text{m} \times 1.1\text{m})+(1.6\text{m} \times 1.2\text{m} \times \frac{1}{2})+(1.5\text{m} \times 1.6\text{m} \times \frac{1}{2})] 15\text{m} = 58.8\text{m}^3 \\ \text{central third}-[(1.1\text{m} \times 1.1\text{m})+(0.9\text{m} \times 1.1\text{m} \times \frac{1}{2})+(2.0\text{m} \times 1.1\text{m} \times \frac{1}{2})] 15\text{m} = 42.1\text{m}^3 \\ \text{eastern third}-[(1.6\text{m} \times 1.0\text{m})+(1.6\text{m} \times 1.6\text{m} \times \frac{1}{2})+(1.6\text{m} \times 1.7\text{m} \times \frac{1}{2})] 10\text{m} = 42.4\text{m}^3 \\ \hline 143.3\text{m}^3 \end{array}$$

Trench 84-2:

$$\begin{array}{l} \text{western half}-[(1.4\text{m} \times 1.0\text{m})+(1.4\text{m} \times 1.5\text{m} \times \frac{1}{2})+(1.4\text{m} \times 2.5\text{m} \times \frac{1}{2})] 10\text{m} = 42.0\text{m}^3 \\ \text{eastern half}-[(1.8\text{m} \times 1.1\text{m})+(1.8\text{m} \times 1.6\text{m} \times \frac{1}{2})+(1.8\text{m} \times 2.3\text{m} \times \frac{1}{2})] 9.5\text{m} = 52.2\text{m}^3 \\ \hline 94.2\text{m}^3 \end{array}$$

Total Volume 237.5m<sup>3</sup>

Mineralized veins and altered shale were sampled using 2 x 20 cm continuous channel sampling unless otherwise specified. The galena float train was sampled along its north-south upper limit for a distance of 80 m to determine if variations

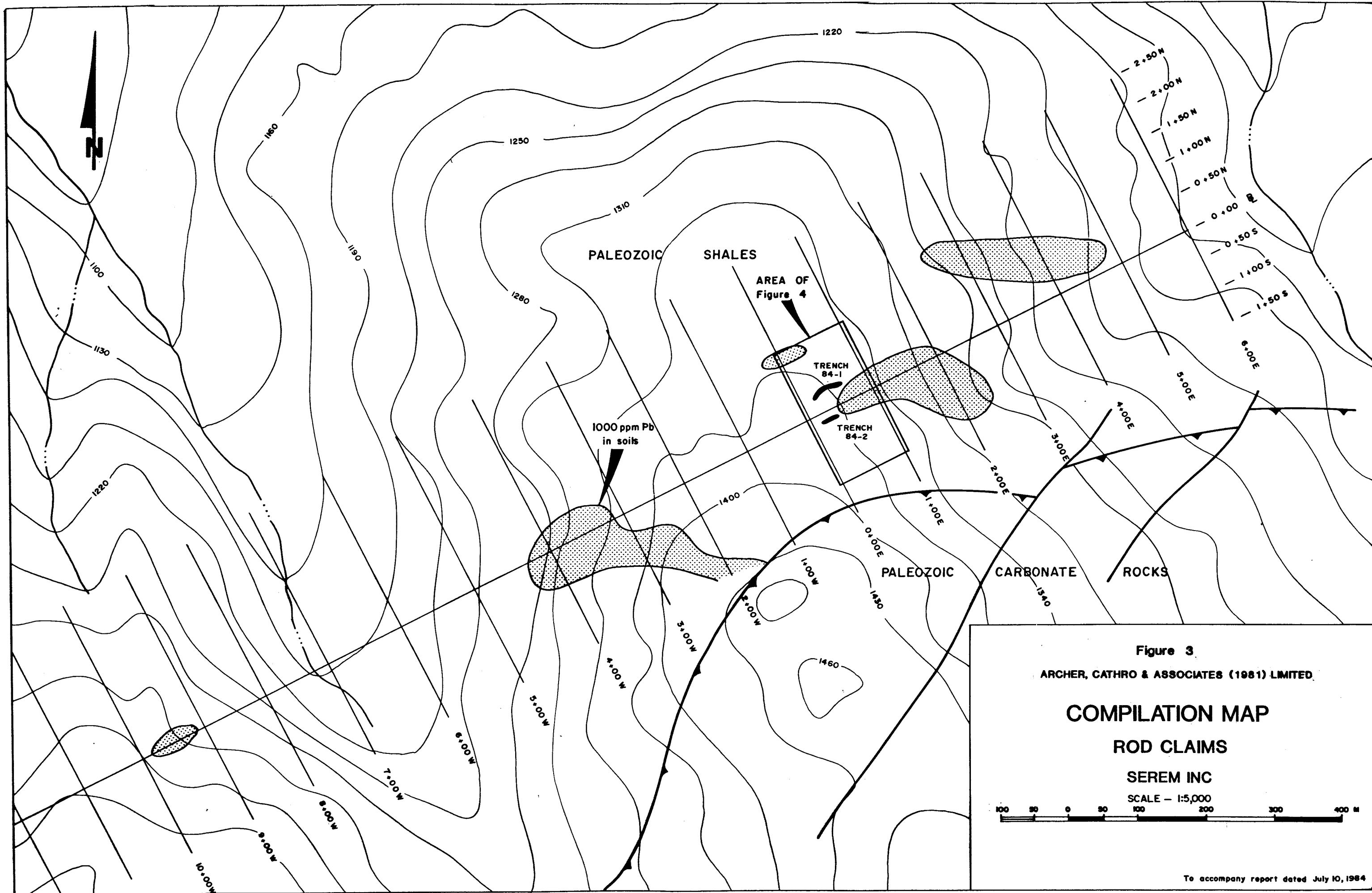
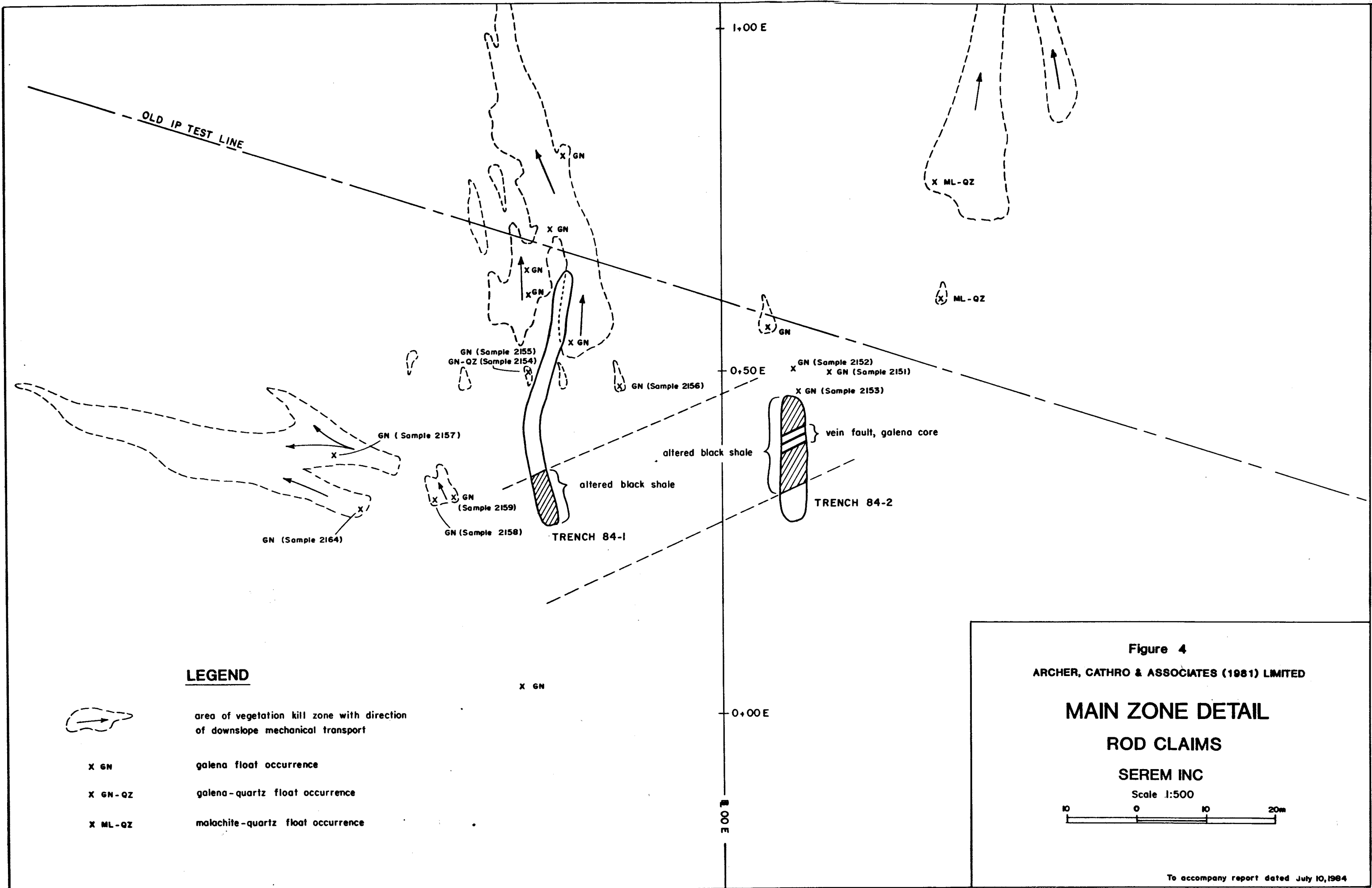
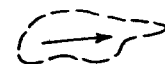


Figure 3  
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED  
**COMPILATION MAP**  
**ROD CLAIMS**  
 SEREM INC  
 SCALE - 1:5,000  
 100 50 0 50 100 200 300 400 M  
 To accompany report dated July 10, 1984

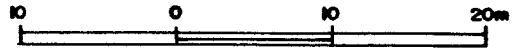


**LEGEND**

-  area of vegetation kill zone with direction of downslope mechanical transport
- X GN** galena float occurrence
- X GN-QZ** galena-quartz float occurrence
- X ML-QZ** malachite-quartz float occurrence

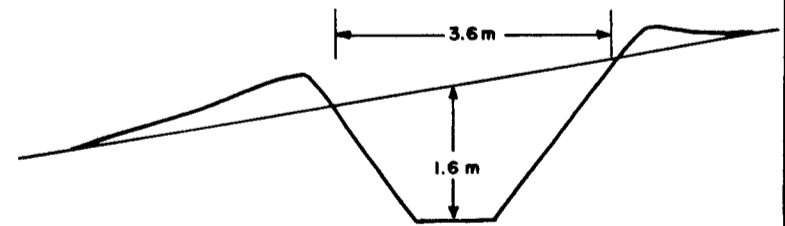
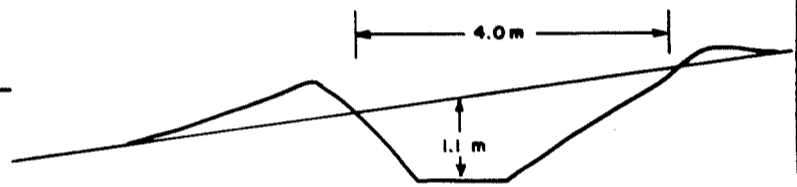
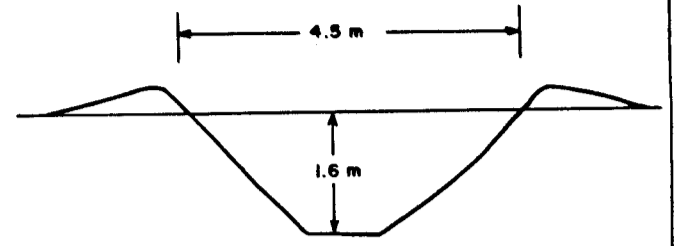
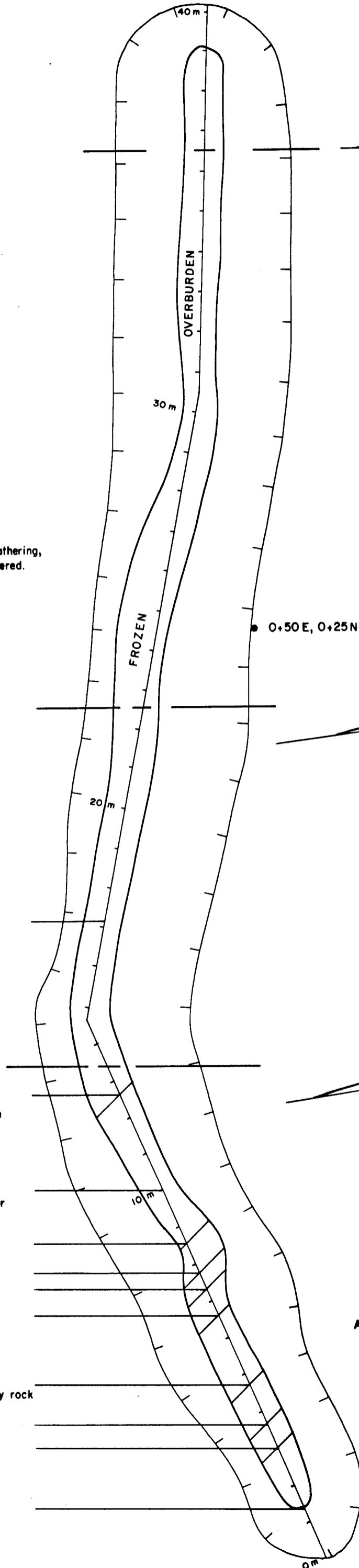
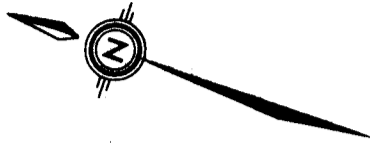
**Figure 4**  
**ARCHER, CATHRO & ASSOCIATES (1981) LIMITED**

**MAIN ZONE DETAIL**  
**ROD CLAIMS**

**SEREM INC**  
 Scale 1:500  


To accompany report dated July 10, 1984





26.5 m pit to bedrock through frozen overburden; rusty weathering, fissile black shale with cherty interbeds, unaltered. Sample No. 2175 (grab)

12.6-17.3m: gossanous frozen soil horizon with quartz vein fragments.  
Sample No. 2173 (Mn-rich grab)  
Sample No. 2174 (Fe-rich grab)

10.0-12.6m: unaltered dark grey, blocky, non-siliceous shale (not sampled)

8.6-10.0m: weakly altered grey shale (weak bleaching, minor clay alteration)  
Sample No. 2172

7.9-8.6m: unaltered black siliceous shale  
Sample No. 2171  
7.5-7.9m: massive limonite; Sample No. 2170  
6.4-7.5m: moderately altered grey shale  
Sample No. 2169  
4.7-6.4m: moderately altered grey shale  
Sample No. 2168

3.7-4.7m: limonite with quartz stringers, bands of country rock and plumbogarsite (?); Sample No. 2167

3.0-3.7m: strongly altered grey shale; Sample No. 2166

1.5-3.0m: moderately altered grey shale  
Sample No. 2165

Figure 5

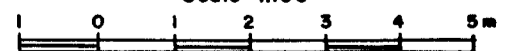
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

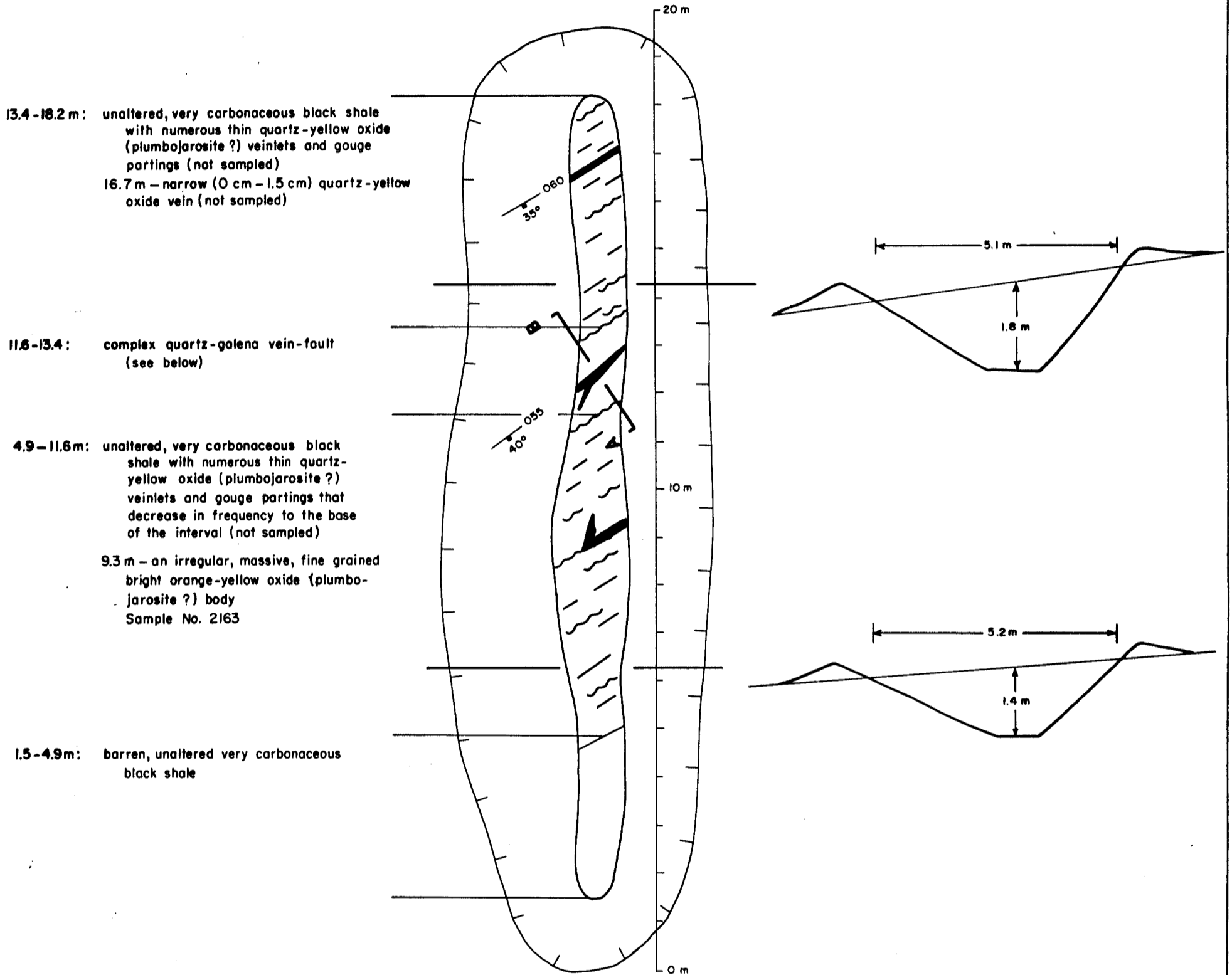
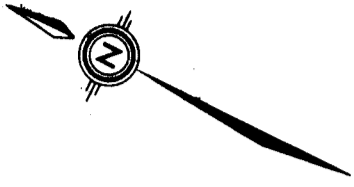
TRENCH 84-1

ROD CLAIMS

SEREM INC.

Scale 1:100





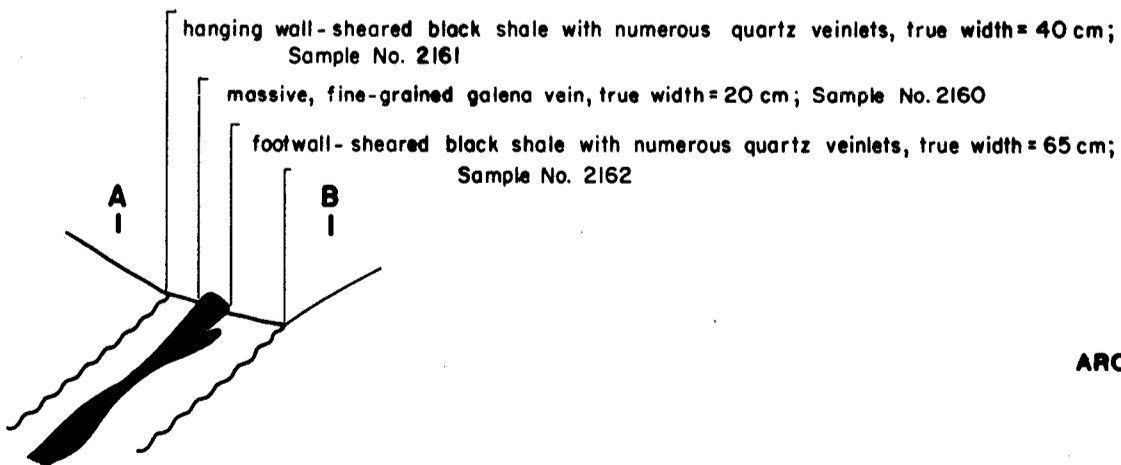
13.4-16.2 m: unaltered, very carbonaceous black shale with numerous thin quartz-yellow oxide (plumbojarosite?) veinlets and gouge partings (not sampled)  
16.7 m - narrow (0 cm - 1.5 cm) quartz-yellow oxide vein (not sampled)

11.6-13.4: complex quartz-galena vein-fault (see below)

4.9-11.6 m: unaltered, very carbonaceous black shale with numerous thin quartz-yellow oxide (plumbojarosite?) veinlets and gouge partings that decrease in frequency to the base of the interval (not sampled)

9.3 m - an irregular, massive, fine grained bright orange-yellow oxide (plumbojarosite?) body  
Sample No. 2163

1.5-4.9 m: barren, unaltered very carbonaceous black shale



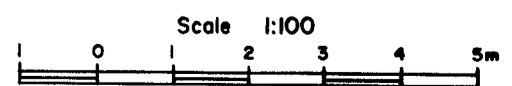
section through vein fault (looking northwest)

Figure 6  
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

TRENCH 84-2

ROD CLAIMS

SEREM INC



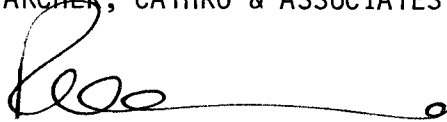
in silver-lead ratios occur along its length. The locations of galena float samples and channel samples in the floors of the trenches are shown on the accompanying detailed maps. Assays are listed by sample number in Appendix II.

#### RESULTS AND CONCLUSIONS

Hand trenching on the Rod 35 claim exposed numerous, narrow northwest-trending quartz veins stained with yellow oxide (plumbojarosite?). One complex vein-fault exposed in Trench 84-2 reaches a width of 1.3 m, including a 20 cm wide central zone of massive, fine-grained galena. Hydrothermal alteration consisting of bleaching and clay mineral alteration accompanies the vein system. The mineralization encountered in the trenches satisfactorily explains the distribution of galena float on surface and the associated soil lead-silver geochemical anomaly.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED



R.C. Carne, M.Sc.

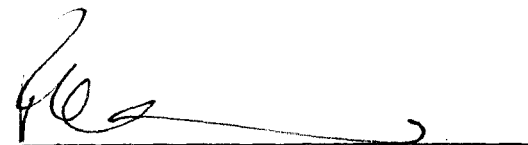
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APPENDIX I - STATEMENT OF QUALIFICATIONS

## STATEMENT OF QUALIFICATIONS

I, Robert C. Carne, geologist, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia and residential address in Burnaby, British Columbia, hereby certify that:

1. I graduated from the University of British Columbia in 1974 with a B.Sc. and in 1979 with an M.Sc. majoring in Geological Sciences.
2. I am a member of the Geological Association of Canada.
3. From 1974 to the present, I have been actively engaged as a geologist in mineral exploration in British Columbia and Yukon Territory and on June 1, 1981 became a partner of Archer, Cathro & Associates (1981) Limited.
4. I have personally participated in or supervised the field work reported herein and have interpreted all data resulting from this work.



Robert C. Carne, B.Sc., M.Sc.

APPENDIX II - ASSAY CERTIFICATES



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1

TELEPHONE: (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

## CERTIFICATE OF ASSAY

TO : ARCHER CATHRO & ASSOC. (1981) LTD.

1016 - 510 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6B 1L8

CERT. # : A8412625-001-A  
INVOICE # : I8412625  
DATE : 28-JUN-84  
P.O. # : NONE  
SEREM ROD

Sample description	Prep code	Pb %	Ag FA oz/T				
2151	207	79.20	57.68	--	--	--	--
2152	207	78.90	58.52	--	--	--	--
2153	207	59.80	65.32	--	--	--	--
2154	207	48.20	34.52	--	--	--	--
2155	207	69.70	54.54	--	--	--	--
2156	207	74.90	58.44	--	--	--	--
2157	207	79.20	68.26	--	--	--	--
2158	207	76.40	56.44	--	--	--	--
2159	207	73.70	56.10	--	--	--	--
2160	207	66.20	57.56	--	--	--	--
2161	207	2.03	5.04	--	--	--	--
2162	207	5.82	3.28	--	--	--	--
2164	207	80.70	52.68	--	--	--	--

.....  
Registered Assayer, Province of British Columbia



MEMBER  
CANADIAN TESTING  
ASSOCIATION



# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO : ARCHER CATHRO & ASSOC. (1981) LTD.

1016 - 510 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6B 1L8

CERT. # : A8412626-001-A  
INVOICE # : I8412626  
DATE : 28-JUN-84  
P.O. # : NONE  
SEREM ROD

Sample description	Prep code	Cu ppm	Pb ppm	Zn ppm	Ag ppm		
2163	205	1200	820	640	14.0	--	--
2165	205	60	45	120	0.7	--	--
2166	205	35	31	90	0.1	--	--
2167	205	343	50	1200	0.9	--	--
2168	205	47	30	180	0.6	--	--
2169	205	43	50	142	0.4	--	--
2170	205	55	62	82	2.2	--	--
2171	205	39	22	75	1.0	--	--
2172	205	26	22	52	0.2	--	--
2173	205	20	13	88	2.4	--	--
2174	205	100	80	1480	1.7	--	--
2175	205	165	75	673	1.5	--	--

*Hart Bichler*

Certified by .....





APPENDIX III - STATEMENT OF EXPENDITURES

**ARCHER, CATHRO**  
& ASSOCIATES LIMITED

CONSULTING GEOLOGICAL ENGINEERS

VANCOUVER, B.C. (604) 688-2568

BOX 4127, WHITEHORSE, Y.T. Y1A 3S9 (403) 667-4415


---

1016 - 510 WEST HASTINGS STREET  
VANCOUVER, B.C. V6B 1L8

AFFIDAVIT

I, Joan Mariacher, of Whitehorse, Y.T. make oath and say:

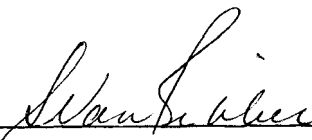
That to the best of my knowledge the attached Statement of Expenditures for exploration work on the Rod 35 mineral claims on Claim Sheet 106D/1 & 106C/4 is accurate.

  
Joan Mariacher

Sworn before me at Whitehorse, Y.T.

this 11<sup>th</sup> day of

July, 1984

  
Notary, Yukon Territory

Notary, Yukon Territory

Statement of Expenditures  
Rod 35 Mineral Claim  
June 28, 1984

Trenching Program

Contract blaster - M. Cloutier - 7 days at \$350/day (including equipment)	\$ 2,450.00
CP Air - Vancouver/Whitehorse return for Cloutier	493.00
Archer, Cathro & Associates (1981) Limited - management and expense for program	<u>11,797.06</u>
Total	<u>\$14,740.06</u>

# ARCHER, CATHRO

& ASSOCIATES (1981) LIMITED

## CONSULTING GEOLOGICAL ENGINEERS

Box 4127, 3125 THIRD AVENUE  
WHITEHORSE, Y. T. Y1A 3S9

(403) 667-4415

In Account With  
Serem Inc.  
June 30, 1984

Re: Trenching Program - Rod Property, Yukon

### Consulting Fees

R.J. Carne - 3/4 day pre-field preparation in Vancouver  
in May; 7 1/2 days travel, field and report preparation  
June 3-12; 1/2 day assessment reports July - total  
8 3/4 days at \$350/day \$ 3,062.50

### Labour

B. Wengzynowski - 1 day June 4-5 preparing field equipment and loading truck	\$ 140.00	
B. Sinclair - 4 days June 7-10 assisting in field at \$185/day	740.00	
J. Mariacher - 9 1/4 hours typing reports and assessment	<u>315.00</u>	1,195.00

### Expenses

R. Carne - CP Air Vancouver/Whitehorse return	493.00	
Room and board in Whitehorse - 1 day	50.00	
in Sadie camp - 4 mandays	200.00	
Rental AC field camp equipment June 6-10 total 15 mandays at \$20/day	300.00	
Rental SBX11 radio - 5 days at \$11/day	55.00	
AC truck rental - 8 days at \$40/day plus 340 miles at \$.35/mile	439.00	
Gasoline - \$61 + \$107.50	168.50	
Groceries - Super Valu + Mayo Caselot	345.10	
Okanagan Helicopters	3,094.35	
Helicopter fuel purchased from Sadie camp; 300 litres including delivery cost and drum charge	327.60	
Chemex Labs Ltd.	243.32	
Yukon Explosives	808.59	
B.C. Telephone & Northwestel	111.81	
Xeroxing	70.00	
Drafting - total 22 hours June & July	660.00	
Receiver General - assessment filing fees	671.25	
Northern Metallic & Beaver Lumber - crowbars	59.94	
Freight - AC petty cash & CP Air	55.90	
Books on Main	5.45	
ICG - propane	<u>52.00</u>	8,210.81

Total

\$12,468.31

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

A handwritten signature in cursive script, appearing to read "A.R. Archer".

A.R. Archer

/mjm