

FLUORITE CLAIMS  
Golden Mining Division

N.T.S. 82/J/3/E

E. Alionis December 1979

80-# 30-# 7830

	<u>Record No.</u>	<u>Date Recorded</u>
<u>Work performed on:</u>		
Deep Purple claim	154	July 21, 1977
Candy claim	183	Oct. 13, 1977

Latitude: 50°13'N, Longitude: 115°8'W

Operator: Rio Tinto Canadian Exploration Limited

7830

Fluorite Claims  
Golden Mining Division

N.T.S. 82/J/3/E

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Summary

The 1979 programme on the Deep Purple and Candy claims consisted of excavating three trenches with a backhoe, in an attempt to explore bedrock at the supposed source of a fluorine anomaly in soils. Bedrock was reached in only 10 metres of the 194 metres trenched. No fluorite was exposed.

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LIST OF ILLUSTRATIONS

<u>Dwg. No.</u>	<u>Description</u>	<u>Location in Report</u>
L-6532	Location Map	after page 1
C-8635	Claim Boundaries and Trench Locations	in pocket
GC-8694	Geochemical Results - of Trench Locations	in pocket
G-6597	Geology of Trenches	after page 2
GC-6598	Sample Locations and Assay Results	after page 2

## 1. INTRODUCTION

The 1977, Rio Tinto Canadian Exploration Limited sponsored the Graf Pb-Zn reconnaissance (Riocanex Report, Graf 1977) in the Rocky Mountains of south east British Columbia. One result of the work was the staking of the Deep Purple and Candy claims, collectively known as the Fluorite claims, on a poorly exposed fluorite showing in Middle Devonian carbonates in S.E. British Columbia.

This report describes the second attempt to expose bedrock by trenching.

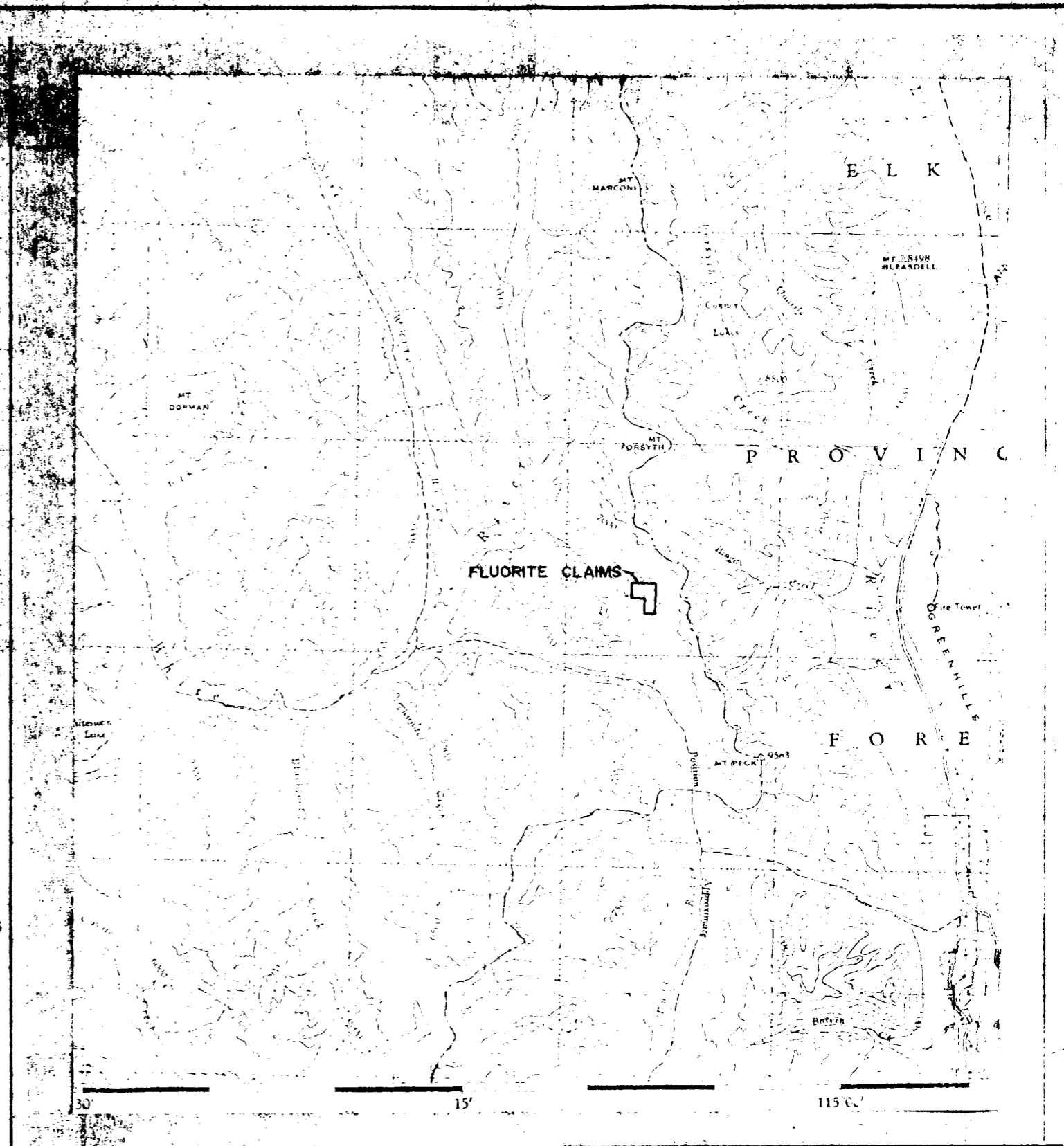
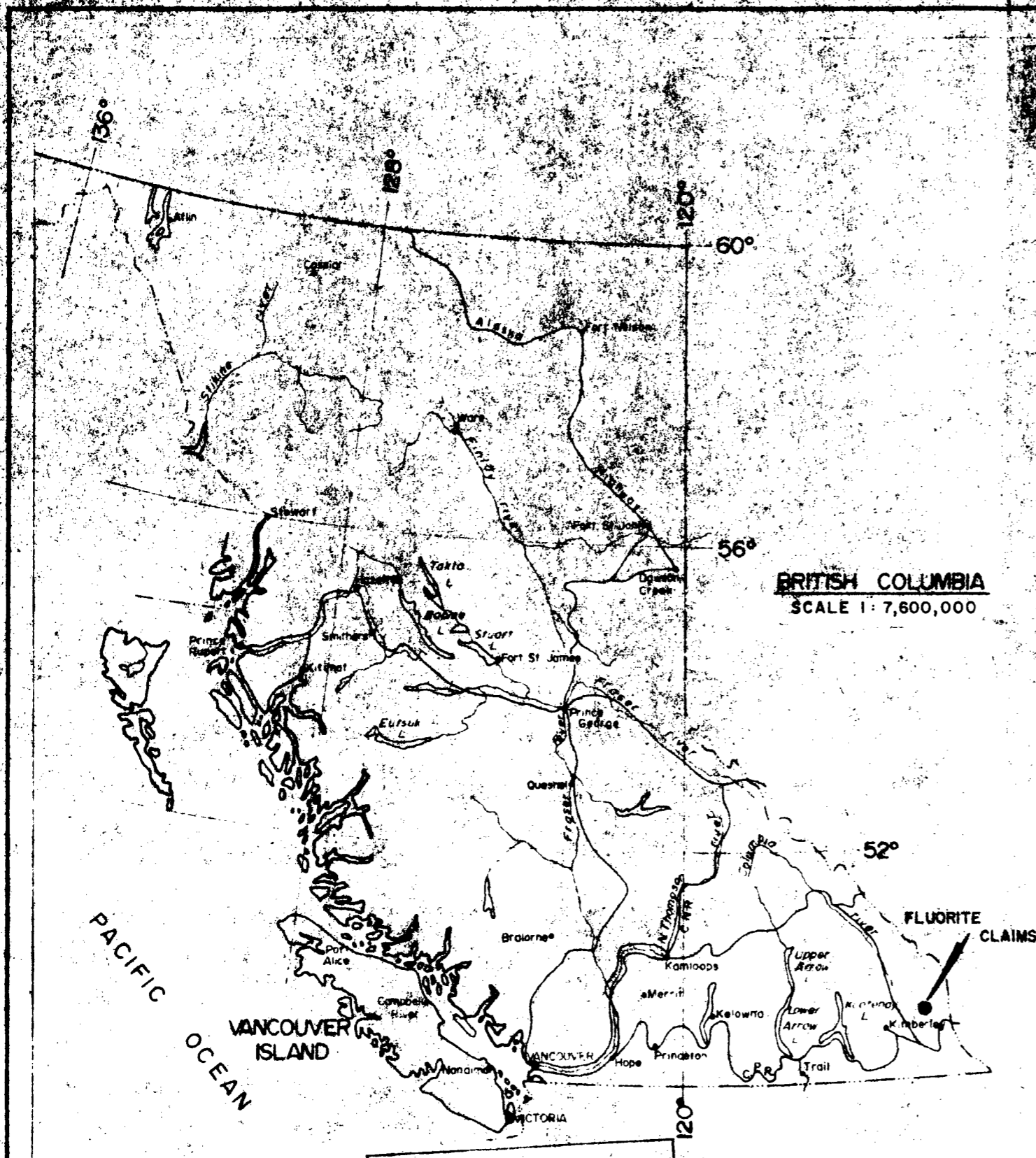
## 2. LOCATION AND ACCESS

The Fluorite claims lie on the upper reaches of Canyon Creek (DWG L-6532). They are accessible by conventional vehicles, about 7 km up a branch of the White River development road, 40 km east of Canal Flats. Latitude and longitude are approximately  $50^{\circ}13'N$ ,  $115^{\circ}8'W$ . N.T.S. quadrangle is 82/J/3/E.

## 3. HISTORY AND PREVIOUS WORK

During 1978 the Fluorite property was evaluated by geological mapping and geochemical sampling. An unsuccessful attempt was made to reach bedrock with a bulldozer (Riocanex report, Bending 1979).

At Monroe Lake, ten km to the south, in Devonian carbonates of the same age as those including the Fluorite claims, considerable staking and drilling have resulted from discovery of a sphalerite showing.



MINERAL RESOURCES DIVISION  
ASSESSMENT REPORT  
**7830**  
NO. \_\_\_\_\_

RIO TINTO CANADIAN EXPLORATION LTD		
FLUORITE CLAIMS		
LOCATION MAP		
NOV. 1978	R.V.L. / s.g.	DWG L-6532

#### 4. CLAIMS

The claims listed below are shown in DWG. C-8635.

<u>Claim Name</u>	<u>No. of Units</u>	<u>Record No.</u>	<u>Date Recorded</u>
Deep Purple	18	154	July 21, 1977
Candy	8	183	Oct. 13, 1977

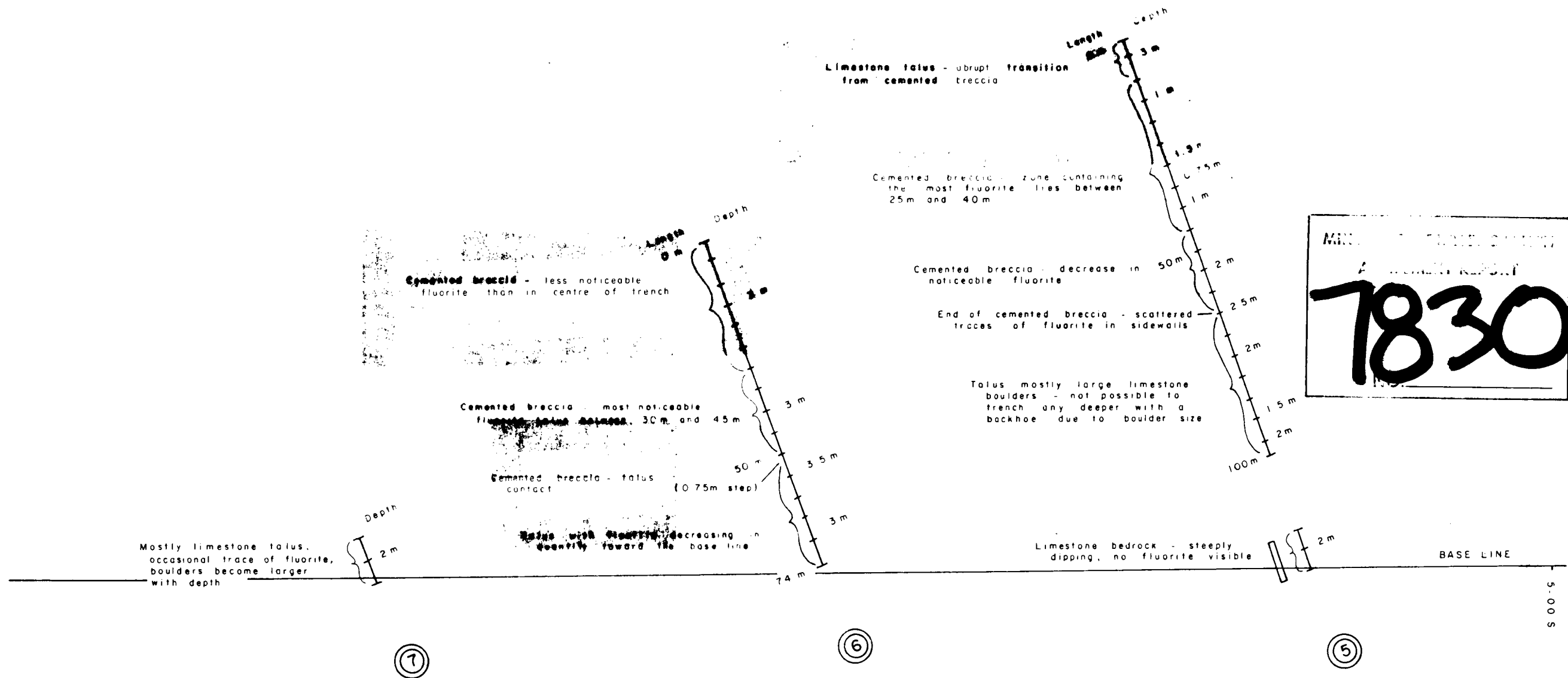
#### 5. WORK CARRIED OUT BY RIOCANEX IN 1979

Work performed on the Deep Purple and Candy claims in 1979 consisted of trenching the areas of high fluorine values obtained from 1978 geochemical results.

Three trenches were excavated totalling 194 metres. Canadian Climbing Backhoe of Edmonton was contracted to carry out the work.

A 1:1000 scale map was compiled showing 1979 trenching and contoured geochemical fluorine results from the 1978 survey. All points were surveyed from the existing (1978) baseline.

This project was carried out under the general supervision of R.V. Longe.



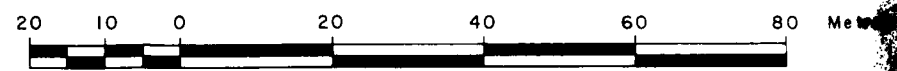
MIN. REPORT  
7830



- Trench
- Bedrock Reached
- Trench Number

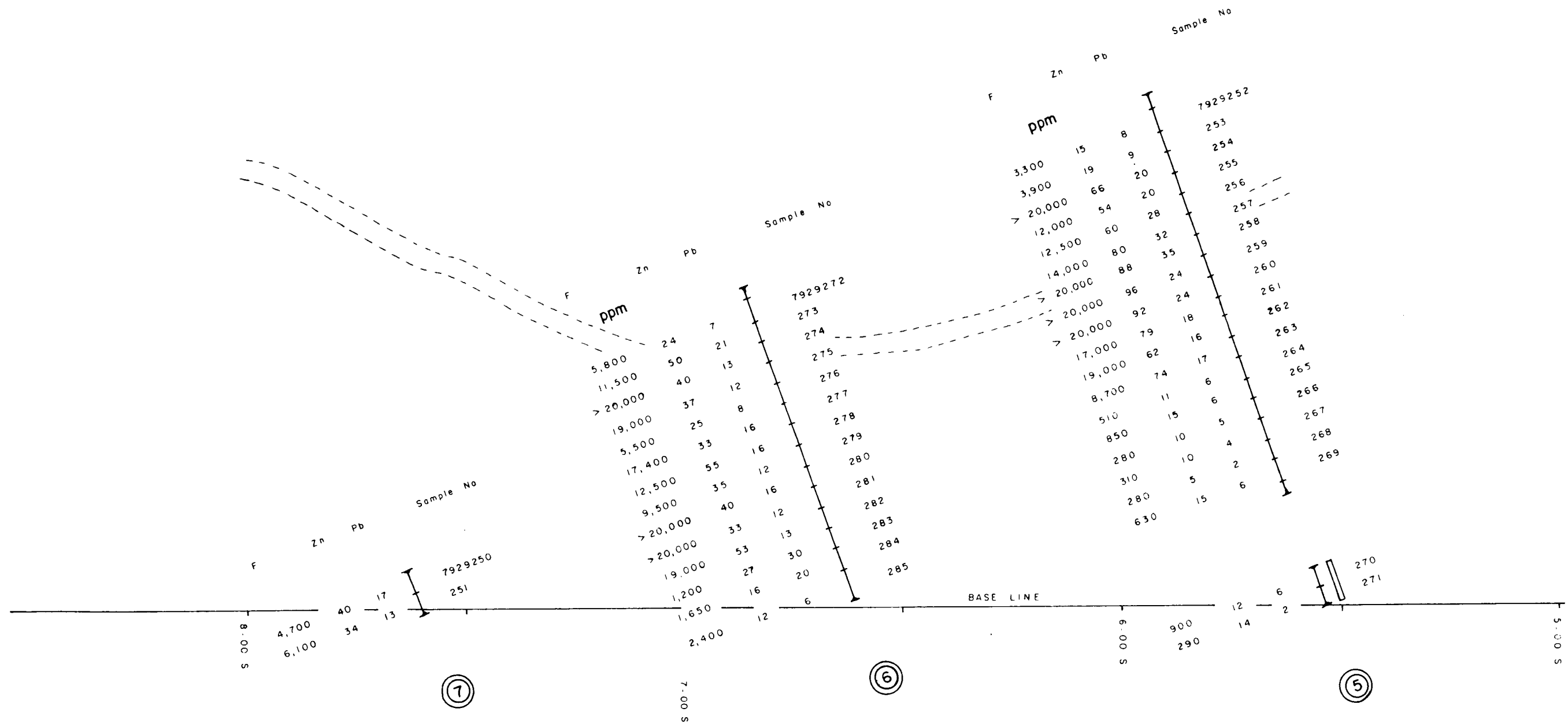
N.T.S. 82 J / 3





SCALE 1:1000



RIO TINTO CANADIAN EXPLORATION LTD.		
<b>FLUORITE CLAIMS</b>		
GEOLOGY OF TRENCHES		
E.A./E.W.	DEC. 1979	DWG. 8-6597



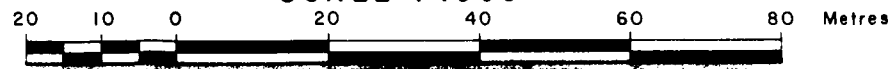


-  Trench Number
-  Trench Locations
-  Bedrock Reached
-  Road Cut

N.T.S. 82 J/3

Samples were collected along the floor of the trenches. Each sample represents 5 metres of the trench length.

SCALE 1:1000



RIO TINTO CANADIAN EXPLORATION LTD.

**FLUORITE CLAIMS**

**Trench Sample Locations and Assay Results**  
LEAD, ZINC, & FLUORINE

E.A. / b.w.

DEC. 1979

DWG. GC-6598

## 6. RESULTS

The trenching proved unsuccessful in that it did not find the source of fluorine. The overburden was either too deep (greater than 5 m) to be penetrated by the backhoe or trenching was prevented by a hard, cemented till found in the bottom of two of three trenches.

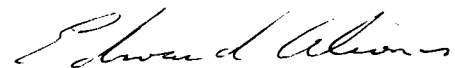
In trenches 5 and 6 the cemented till is continuous for approximately 20 metres and accounts for many of the high fluorine values obtained in the assay reports (see DWG GC-6598). The reason for the association between fluorite and the cemented till is not understood.

Plans to drill the property were made in hope of hitting fluorite in subcrop immediately beneath the overburden. This had to be abandoned due to shortages of water required for drilling.

## 7. CONCLUSIONS

1. The source of the fluorine anomaly remains unexposed.
2. Trenching being unsatisfactory for exposing bedrock, it is now necessary to resort to drilling.

February 4, 1980



E. Alionis

Appendix I  
Assay Results

REFERENCES

Bending, D. 1979  
Riocanex report: Fluorite Claims

Graf, C.W. 1979  
Riocanex report: Lead zinc reconnaissance  
Southern Rocky Mountains



Geochemical Lab Report

Extraction Pb,Zn; Hot Aqua Regia F; Basic Fusion Report No. 29 - 1802 PROJECT: 8651

Method Pb,Zn; Atomic Absorption F; Specific Ion From Rio Tinto Canadian Explorations

Fraction Used \_\_\_\_\_ Date September 14 19 79

SAMPLE NO.	Pb ppm	Zn ppm	F ppm	SAMPLE NO.	Pb ppm	Zn ppm	F ppm
7929250 ROCKS	17	40	4700	7929280	16	40	>20000
7929251	13	34	6100	7929281A	12	33	>20000
7929252	8	15	3300	7929281B	13	53	19000
7929253	9	19	3900	7929283	30	27	1200
7929254	20	66	>20000	7929284	20	16	1650
7929255	20	54	12000	7929285	6	12	2400
7929256	28	60	12500				
7929257	32	80	14500				
7929258	35	88	>20000				
7929259	24	96	>20000				
7929260	24	92	>20000				
7929261	18	79	17000				
7929262	16	62	19000				
7929263	17	74	8700				
7929264	6	11	510				
7929265	6	15	850				
7929266	5	10	280				
7929267	4	10	310				
7929268	2	5	280				
7929269	6	15	630				
7929270	6	12	900				
7929271	2	14	290				
7929272	7	24	5800				
7929273	12	50	11500				
7929274	13	40	>20000				
7929275	12	37	19000				
7929276	8	25	5500				
7929277	16	33	17000				
7929278	16	55	12500				
7929279	12	35	9500				

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Appendix II  
List of Samples

## LIST OF SAMPLES

NUMBER	INIT.	DATE	NAME	PAGE	REMARKS
7929250	E.A.	Aug24	Talus		Scoop sample 07+58S, 0+05W (baseline) Fluorite Claims
251					07+58S, 0+10W
252					trench 5+62S taken over 5m (trench floor) mostly mixed gravel
253					cemented talus on trench floor
254					trace of fluorite in side wall near base, cemented talus
255					trace of fluorite in side wall near base, cemented talus
256					in crease in float occurrences
257					cemented breccia
258					cemented breccia
259					cemented breccia
260					cemented breccia
261					cemented breccia
262					cemented breccia
263					cemented breccia
264					End of cemented breccia, no visible fluorite
265					End of cemented breccia, no visible fluorite
266					End of cemented breccia, no visible fluorite
267					Large boulders of limestone, no visible signs of fluorite
268					Large boulders of limestone, no visible signs of fluorite
269					Large boulders of limestone, no visible signs of fluorite
270			Chip		Limestone bedrock
271					Limestone bedrock
272					trench 6+70S, traces of fluorite, no cemented talus
273					trench 6+70S, traces of fluorite, no cemented talus
274					trench 6+70S, traces of fluorite





Appendix III  
Cost Statement

COST STATEMENT  
B.C. FLUORITE CLAIMS  
TRENCHING  
23 JULY TO 17 AUGUST 1979

SALARIES & WAGES

3 men, 23 Jul-17 Aug, 40 man days @ \$43/man day \$ 1,724

BENEFITS @ 20% of Salaries & Wages 345

RIOCANEX EQUIPMENT

40 man days @ \$3.00 120

RENTAL EQUIPMENT

E.K. Economy, '77 Boler Trailer, 4-18 Aug,  
14 days @ \$175/wk \$ 364  
Canadian Climbing Backhoe, EH, 22 Jul-  
17 Aug, 128 hrs @ \$62 7,928 8,292

GEOCHEMICAL ANALYSIS

Bondar-Clegg 36 rocks for Pb,Zn,F @ \$8.00 286

FIXED WING

Universal Travel Agency, 28 Jul, 1 Ret. 126

HELICOPTER

Okanagan, 206B, 18 Jul, 3-4 Aug, 5 hrs  
@ \$375 \$1,859  
Crowsnest, CFAHH, 31 Jul., 1.1 hrs  
@ \$323 340 2,199

FOOD & ACCOMMODATION

40 man days @ \$19/man day 763

SUPPLIES 131

FUEL 299

REPORT PREPARATION 363

TOTAL

\$14,648

STATEMENT OF QUALIFICATIONS

I, Edward Alionis do hereby declare that;

I graduated from Concordia University, Montreal, in 1979, with a degree in physical geography.

From June 1979 to December 1979, I worked in mineral exploration as a geological assistant for Riocanex in British Columbia.



E. Alionis  
#805-1345 Nelson Street,  
Vancouver, B.C.

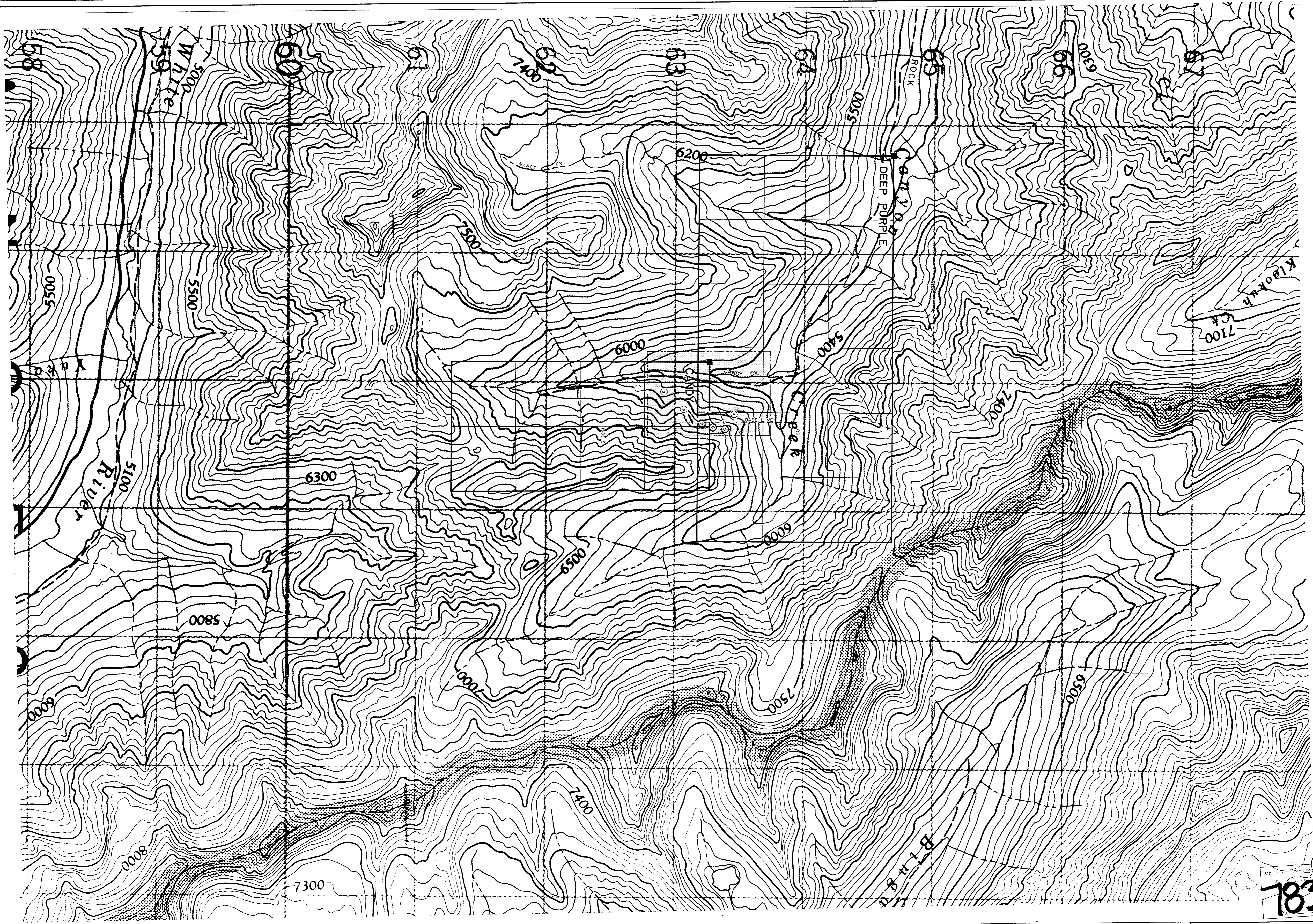
STATEMENT OF QUALIFICATIONS

I, Robert V. Longe, hereby declare that:

- 1) Since 1968, I have been employed as an exploration geologist by Rio Tinto Canadian Exploration Limited in Vancouver.
- 2) Between 1965 and 1967, I was employed on a temporary basis by Selco Limited of Toronto, and by Amax Exploration Inc. of Vancouver.
- 3) I graduated from McGill University, Montreal with an M.Sc in 1965.
- 4) Between 1961 and 1964, I was employed by the Selection Trust group of companies as an exploration geologist in Western Africa.
- 5) I graduated from Cambridge University with a B.A. (Hons) in 1961.

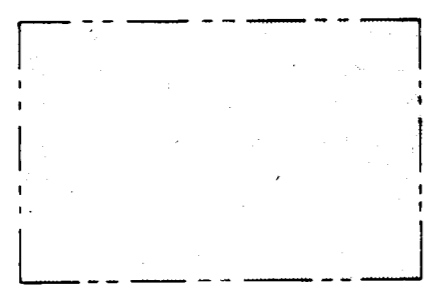
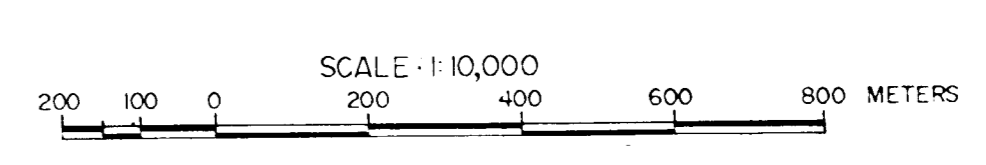
A handwritten signature in cursive script, appearing to read 'R.V. Longe', with a horizontal line extending from the end of the signature.

R.V. Longe



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N.T.S. 82 J 3E

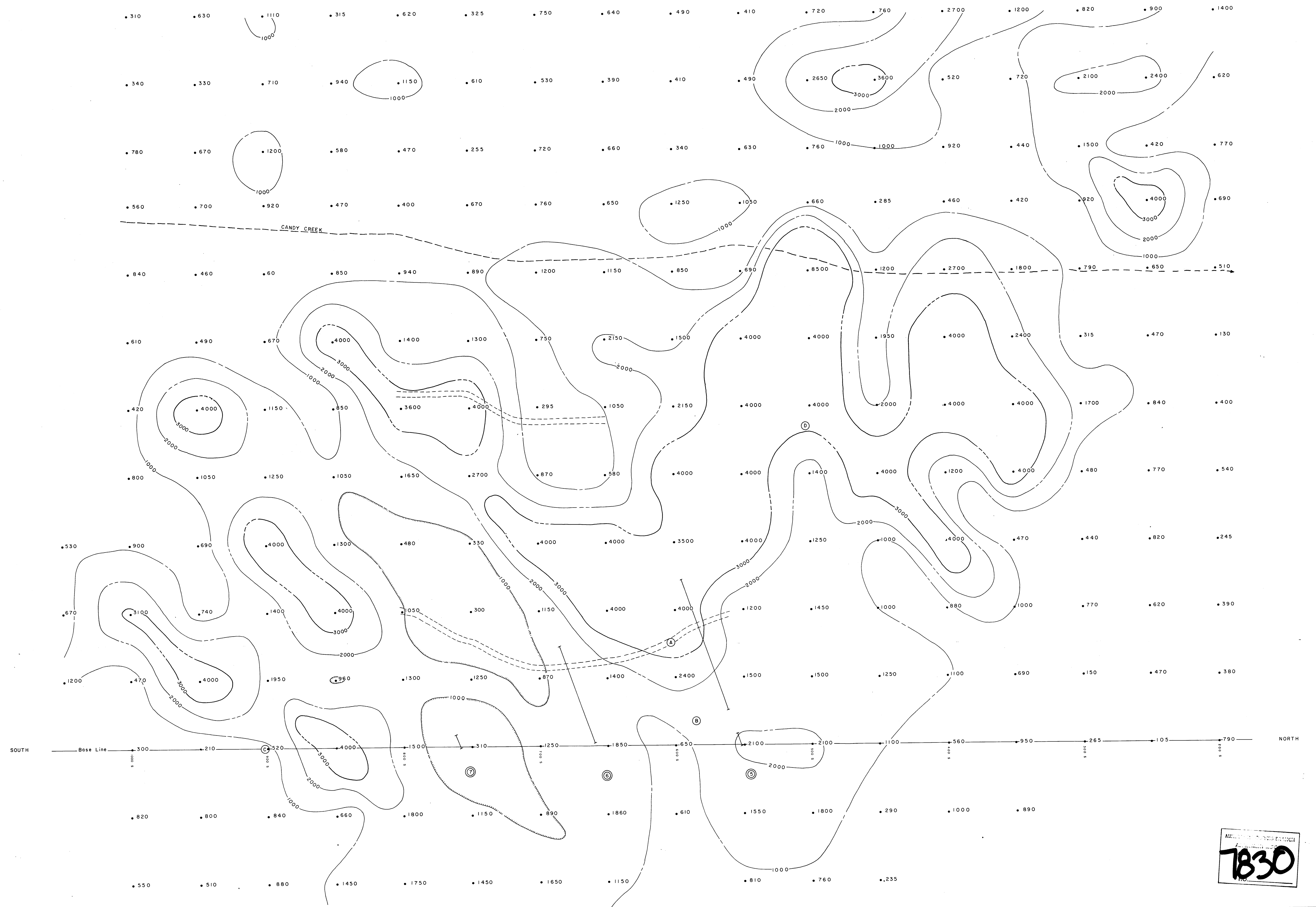


Area covered by 1:1,000 scale map DWG. GC-8694

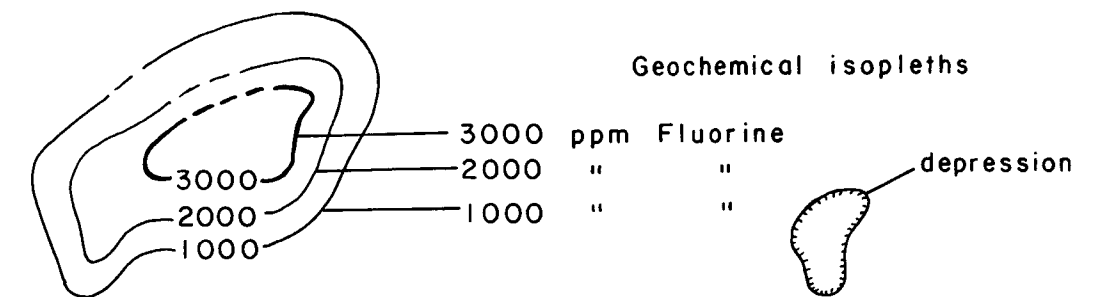
Legal corner post  
Base line

Location and number of trench 1978  
Location of climbing backhoe trench 1979

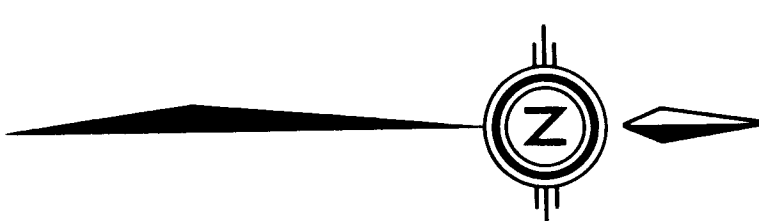
RIO TINTO CANADIAN EXPLORATION LIMITED		
FLUORITE CLAIMS		
CLAIM BOUNDARIES & TRENCH LOCATIONS		
D.B./s.g. Amended by B.W. '79	NOV. 1978	DWG. C-8635



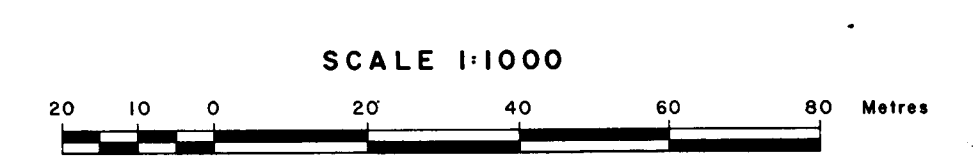
**LEGEND**



- Base Line
- Trench location
- Road cut
- Proposed drilling site
- Stream
- .760 Soil sample location ppm fluorine



N.T.S. 82 J / 3 E



**7830**

RIO TINTO CANADIAN EXPLORATION LIMITED		
FLUORITE CLAIMS		
Geochemical Results Fluorine, Trench Locations		
E.A. & B.W.	DEC. 1979	DWG. GC-8694