

LOG NO: 0113	RD.
ACTION:	
FILE NO:	

ASSESSMENT REPORT

GEOLOGY AND GEOCHEMISTRY

URSA #1

OMINECA

NTS M930/SW

FILMED

by

ARTHUR A. D. HALLERAN

JANUARY 4, 1988

## TABLE OF CONTENTS

ITEMIZED COST STATEMENT	1
INTRODUCTION	2
LOCATION AND ACCESS	2
CLAIM STATISTICS	2
FIGURE 1: BRITISH COLUMBIA LOCATION MAP	3
FIGURE 2: PROPERTY LOCATION	4
GEOLOGY	5
GEOCHEMISTRY	5
FIGURE 3: DETAIL GEOLOGY	6
CONCLUSION	7
RECOMMENDATION	7
CERTIFICATION OF QUALIFICATIONS	
APPENDIX: GEOCHEMISTRY	

ITEMIZED COST STATEMENT

## LABOR:

2 man days of mapping by Arthur A.D. Halleran  
@ \$200.00 per day \$400.00

## FOOD AND ACCOMODATION:

2 man days @ \$27.50 per day \$55.00

## TRANSPORTATION:

1 day use of the 4-wheeler ATV @ \$45.00 per day \$45.00

## GEOCHEMISTRY:

\$111.50 (5 rocks and 1 soil) \$111.50

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TOTAL: \$611.50

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### INTRODUCTION

The Ursa #1 claim is located east of Manson River along the Munro Creek logging road. It consists of 6 units and is accessed by logging roads.

The property covers a sequence of the Omineca Crystalline belt of the Wolverine Complex, and a small pegmatite with monazite.

The Ursa #1 was staked in October 1986 by Arthur A.D. Halleran. Two days were spent sampling and mapping the outcrop at the showing to evaluate the economic potential of this deposit type.

### LOCATION AND ACCESS

The Ursa #1 property is located in central British Columbia approximately 160 km. north of Fort St. James. Access to the area is via the Fort St. James Manson Creek road and the Munro Creek logging road.

### CLAIM STATISTICS

All claims were staked using the modified grid system.

<u>CLAIM:</u>	<u>RECORD:</u>	<u>UNIT:</u>	<u>DATE:</u>	<u>OWNER:</u>
Ursa #1	8050	6	24/10/86	Arthur A.D. Halleran

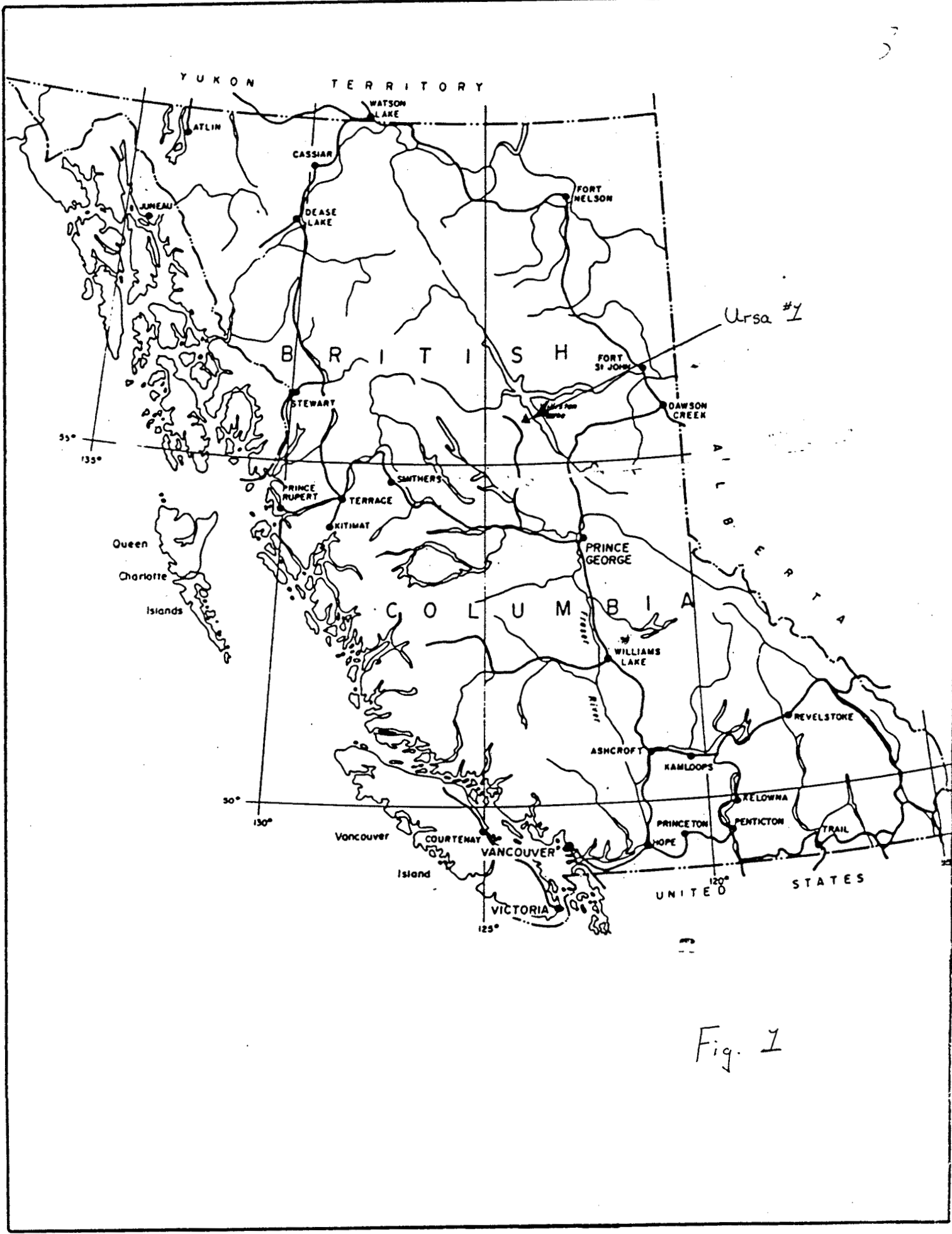
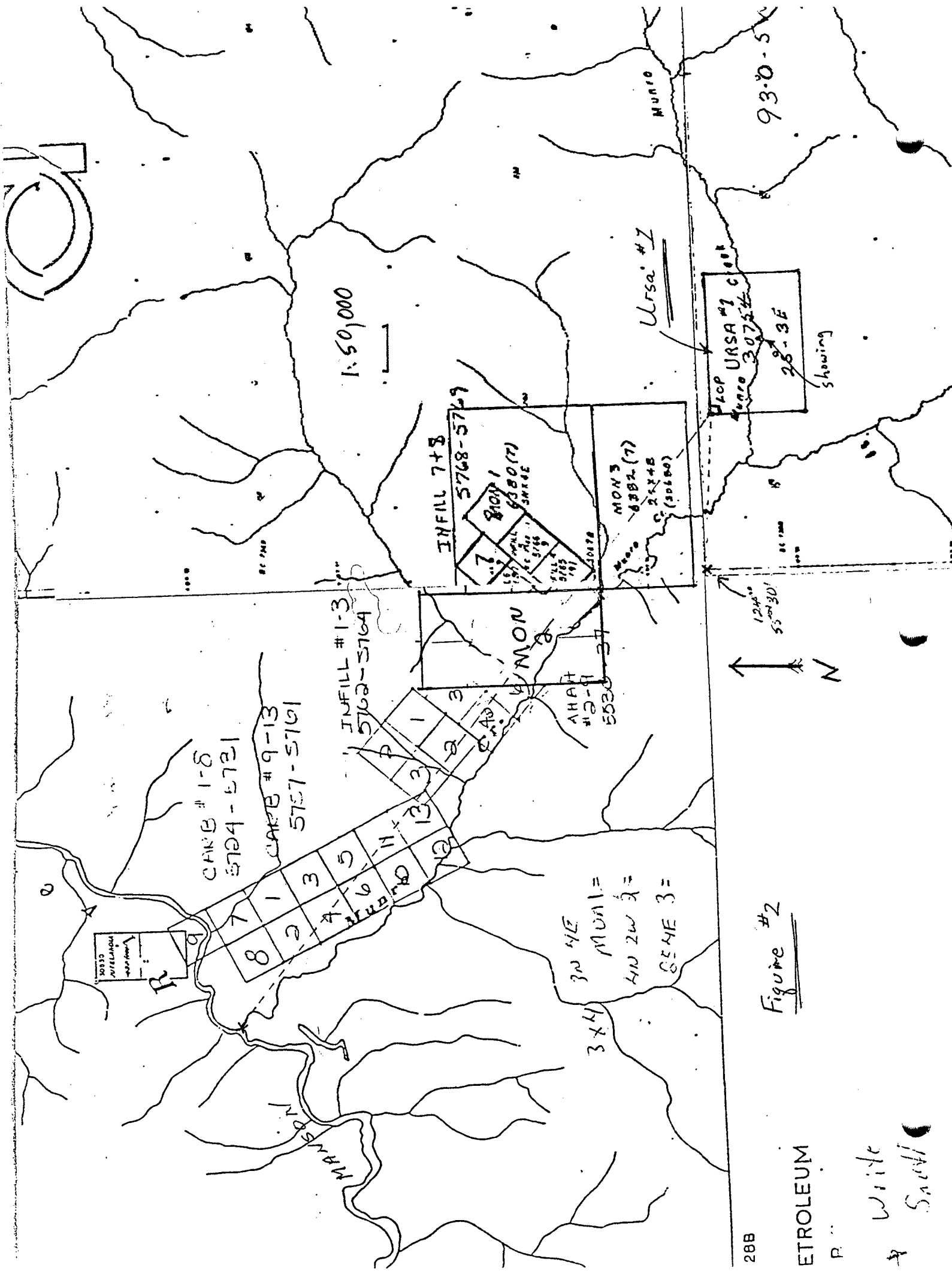


Fig. 1



28B

ETROLEUM

P.

Figure #2

Wide  
Saudi

## GEOLOGY

The Ursa #1 covers a mylonite gneiss pegmatite rare earth showing. The Ursa showing lies within the metamorphosed Late Proterozoic sediments of the Wolverine Complex. The metamorphosed sediments of the Wolverine Complex in this area are micaceous, chloritic and garnetiferous schists, crystalline limestone cut by granite gneiss, pegmatite, granite and syenites. Southwest across Munro Creek the Manson Creek belt of the Cache Creek Group occurs.

The Ursa showing is along a roadcut and is a mylonite gneiss (pegmatite?) 10 meters long and 1 to 2 meters wide; coarse to fine-grained monazite is disseminated in clotty layers. The quartz is shattered and black due to the radioactivity of the monazite. Rare earth metal content ranges from **3.18%** to .1%.

The monazite-bearing rock is bounded on its western side by a fine-grained, radioactive, light colored syenite with traces of biotite. The syenite appears to have cut across the mylonite gneiss. The remaining rock types are fine-grained calcsilicate rocks containing so much biotite/phlogopite that the rock appears grey/black. Also present in the calcsilicate is a green mineral (2%) that could be diopside or epidote; please see Figure 3. The mylonite zone cannot be found eastward due to glacial till; this till is present throughout the property and very little rock was found other than at the original showing.

## GEOCHEMISTRY

A total of 4 rocks and 1 soil sample were taken and analyzed for rare earth metals. Three of the rocks and the soil were geochemically analyzed for the following elements:

Be, Rb, Y, Zr, Nb, Sn, Cs, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Hf, Ta, W, Th and U by Acme Analytical Laboratories Limited. The remaining rock was geochemically analyzed by Chemex Laboratories for La, Nd, Ce, Y, Th, Nb, Sm and Eu.

Three of the rock samples were grab samples of type rocks: UG-1 and Mon-86 had visible monazite and were anomalous in rare earth metals - 2.16% and 3.18%. Sample 87EDR-6, which was over 6 meters long and representative of a mylonite zone, returned .1% rare earth metals (La, Ce, Pr, Nd and Sm are the anomalous rare earths). UG-31 was a rock sample of the calcsilicate and was not anomalous in rare earth metals. The soil UG-3, which was taken to see if soil sampling would work, has a higher rare earth metal content than UG-31.

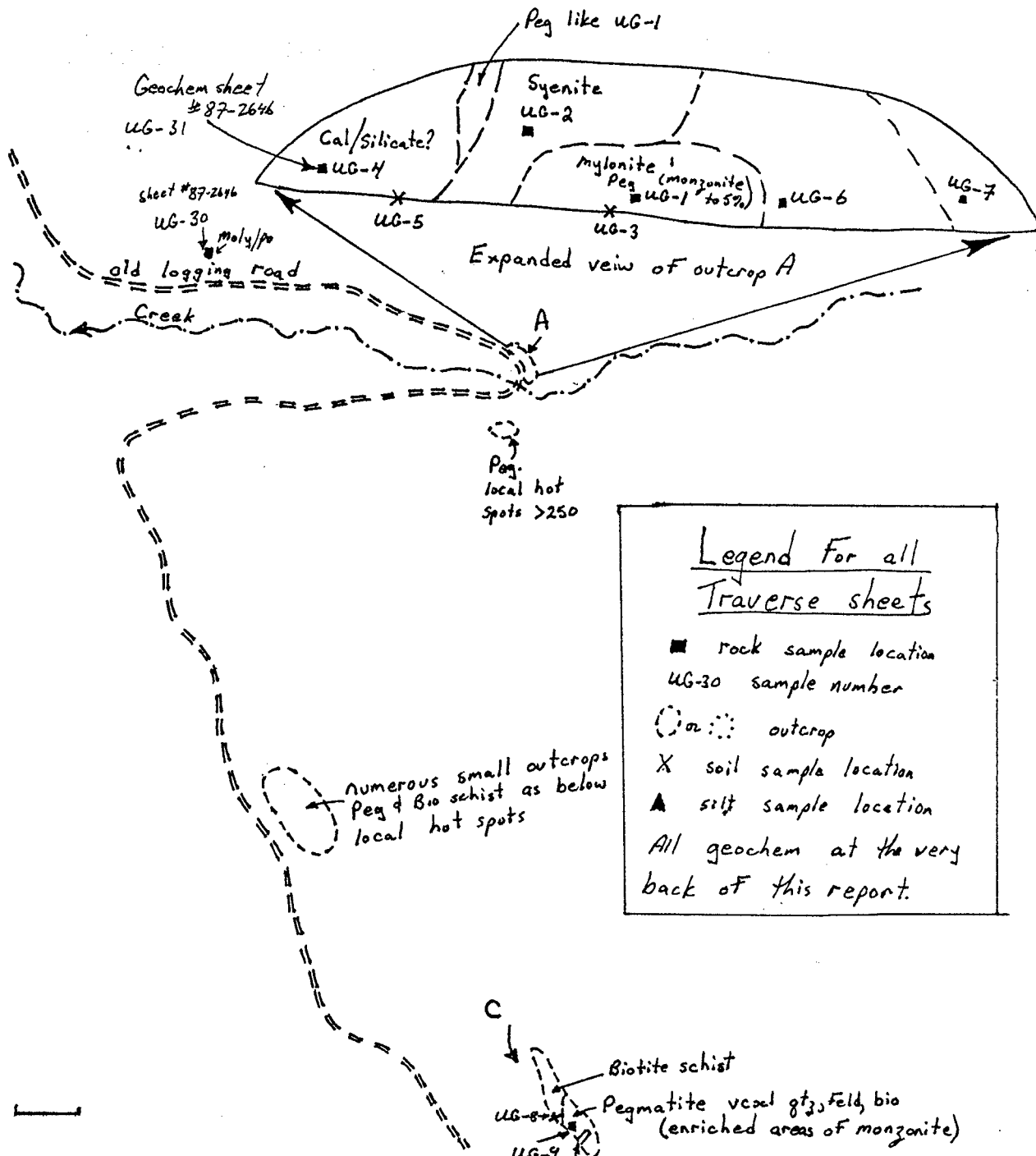
TRAVERSE SHEET-87 FAME

DATE JUNE 30 1987

MAP SHEET

NTS

NAME A. Halleran

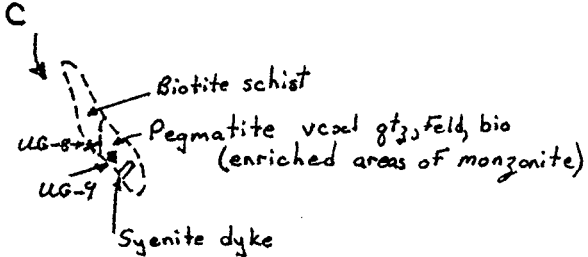


Legend For all Traverse sheets

- rock sample location
- UG-30 sample number
- or ⊙ outcrop
- X soil sample location
- ▲ silt sample location

All geochem at the very back of this report.

Numerous small outcrops  
Peg & Bio schist as below  
local hot spots



Scale 1:15,000  
Map type Forestry

Notes:

- C: The background count of the area is 150 with some areas 275. The biotite schist by soil UG-8 has highs of 300. The pegmatite has background of 180 with local areas of 250, closer look at the 250 areas gave one count of 464, and the 464 came from at 1" gtz/feldspar ext band with diss. xls of monzonite (UG-9), there were also small masses of intergrown monzonite
- A: UG-1, mylonite has counts as high as 600 and areas of 5% monzonite bands. The gtz is blk and fractured

assays



CONCLUSION

The Ursa showing is anomalous in rare earth metals, in particular La, Ce, Pr Nd and Sm and has potential to depth. Potential could also occur to the east where the glacial fill is very thick.

RECOMMENDATION

Continue to map the property, prospect up the creeks and carry out a scintillometer and soil geochemistry program.

CERTIFICATION OF QUALIFICATIONS

I, Arthur Halleran, of 7183 bridgewood Dr. Burnaby B.C. do hereby declare:

- (1) I am a 1980 graduate of the University of British Columbia with a Honours B.Sc. degree in Geology.
- (2) I have practiced my profession continuously, since graduation, in the Yukon, B.C., and Alberta.
- (3) This report is based on my field examination of the property and available government reports.

  
Arthur Halleran, B.Sc.

WHOLE ROCK ICP-MS ANALYSIS

.100 GRAM SAMPLE FUSED WITH .6 GM LiBO2 AND IS DISSOLVED AND DILUTED TO 50 ML WITH 5% HNO3.  
ANALYSIS BY ICP MASS SPECTROMETER  
- SAMPLE TYPE: Rock Chips

*Anal by AA 10 gm sample*

DATE RECEIVED: SEPT 15 1987

DATE REPORT MAILED: *Sept 28/87*

ASSAYER: *D. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER

CITY RESOURCES

File # 87-4198

*10P*  
*36*  
*26*

SAMPLE#	Be PPM	Rb PPM	Y PPM	Zr PPM	Nb PPM	Sn PPM	Cs PPM	La PPM	Ce PPM	Pr PPM	Nd PPM	Sm PPM	Eu PPM	Gd PPM	Tb PPM	Dv PPM	Ho PPM	Er PPM	Tm PPM	Yb PPM	Lu PPM	Hf PPM	Ta PPM	W PPM	Th PPM	U PPM	AUX PPM	
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	14	2	10	2	5	1	6	1	3	4	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	10	17	2	9	1	4	1	4	1	6	6	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	1	3	1	1	1	1	1	1	1	8	1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	6	12	1	4	1	2	1	2	1	6	3	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	9	19	2	4	1	1	1	1	1	5	1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	2
X	87-EDR-6	10	91	53	176	47	2	2	261	449	28	150	186	5	11	2	9	2	5	1	6	1	7	4	2	61	6	1
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	63	12	2	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	1	4	1	1	1	1	1	1	2	1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

ACME ANALYTICAL LABORATORIES

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

### WHOLE ROCK ICP-MS ANALYSIS

.100 GRAM SAMPLE FUSED WITH .6 GM LIBO2 AND IS DISSOLVED AND DILUTED TO 50 ML WITH 5% HNO3.

ANALYSIS BY ICP MASS SPECTROMETER

- SAMPLE TYPE: S/GL/ROCK

DATE RECEIVED: JUL 30 1987

DATE REPORT MAILED:

*Aug 11/87*

ASSAYER: *D. Toyer* DEAN TOYE, CERTIFIED B.C. ASSAYER

A.D. HALLERAN File # 87-2646

SAMPLE#	Be	Rb	Y	Zr	Nb	Sn	Cs	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Th	U	
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	
→ † U6-3	10	104	48	289	12	2	4	74	83	9	56	64	2	5	1	5	1	4	1	6	1	9	1	2	30	5	
→ † U6-1	10	47	193	112	2	2	2	5929	6529	708	4369	3643	10	97	24	58	6	8	1	4	1	3	1	2	2486	68	
→ † U6-30	10	6	41	166	20	2	2	41	57	7	51	77	1	5	1	8	1	4	1	5	1	5	1	2	243	162	
→ † U6-31	10	29	16	74	7	2	2	40	46	5	34	30	1	2	1	3	1	1	1	1	1	2	1	2	41	2	
DETECTION	10	2	2	2	2	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
212 BROOKSBANK AVE., NORTH VANCOUVER,  
BRITISH COLUMBIA, CANADA V7J-2C1  
PHONE (604) 984-0221

## CERTIFICATE OF ANALYSIS A8710477

To : HALLERAN, A.

BOX 793  
FORT ST. JAMES, B.C.  
VOJ 1P0

Page No. : 1  
Tot. Pages: 1  
Date : 17-FEB-87  
Invoice # : I-8710477  
P.O. # : NONE

Project : MUNRO  
Comments:

SAMPLE DESCRIPTION	PREP CODE	Sm NAA ppm	Eu NAA ppm	Ce NAA %							
MON 1-86	214 --	547	15.8	1.31							

CERTIFICATION : W. Kermonini



# 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 : HALLERAN, A.

BOX 793  
FORT ST. JAMES, B.C.  
VOJ 1P0

CERT. # : A8619208-001-A  
INVOICE # : I8619208  
DATE : 23-NOV-86  
P.O. # : NONE  
MUNRO

CC: NORTHWEST GEOLOGICAL

Sample description	Prep code	La NAA ppm	Nd NAA ppm	Ce NAA ppm	Y (XRF) ppm	Th NAA ppm	Nb(XRF) ppm
MON 1-86	205	8424	6307	>10000	166	3333	<20
MON 2-86	205	--	906	2023	--	--	<20

*Haut Buchler*

Certified by .....