

LYNX #1	LYNX #2	LYNX #3
3082	3083	3132
49° 33'N,	116° 00W	82F/9, 826/12
by N. Gass		April 1989

18790



**AND ASSOCIATES EXPLORATION**

2604 EXSHAW ROAD N.W., CALGARY, ALBERTA T2M 4E5

LOG NO: 0526	RD.
ACTION:	
FILE NO:	

REPORT

ON

THE LYNX CLAIMS

FILMED

49° 33' N 116° 00' W

82 F/9

CRANBROOK B.C.

by

N. GASS

13<sup>th</sup> April 1989

*N. Gass*

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

18,790

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## APPENDIX A: Loring Lab Assays

## MAP #1: Prospecting/Geology

## INTRODUCTION

### Objectives and Scope

There were three primary objectives of the present work:

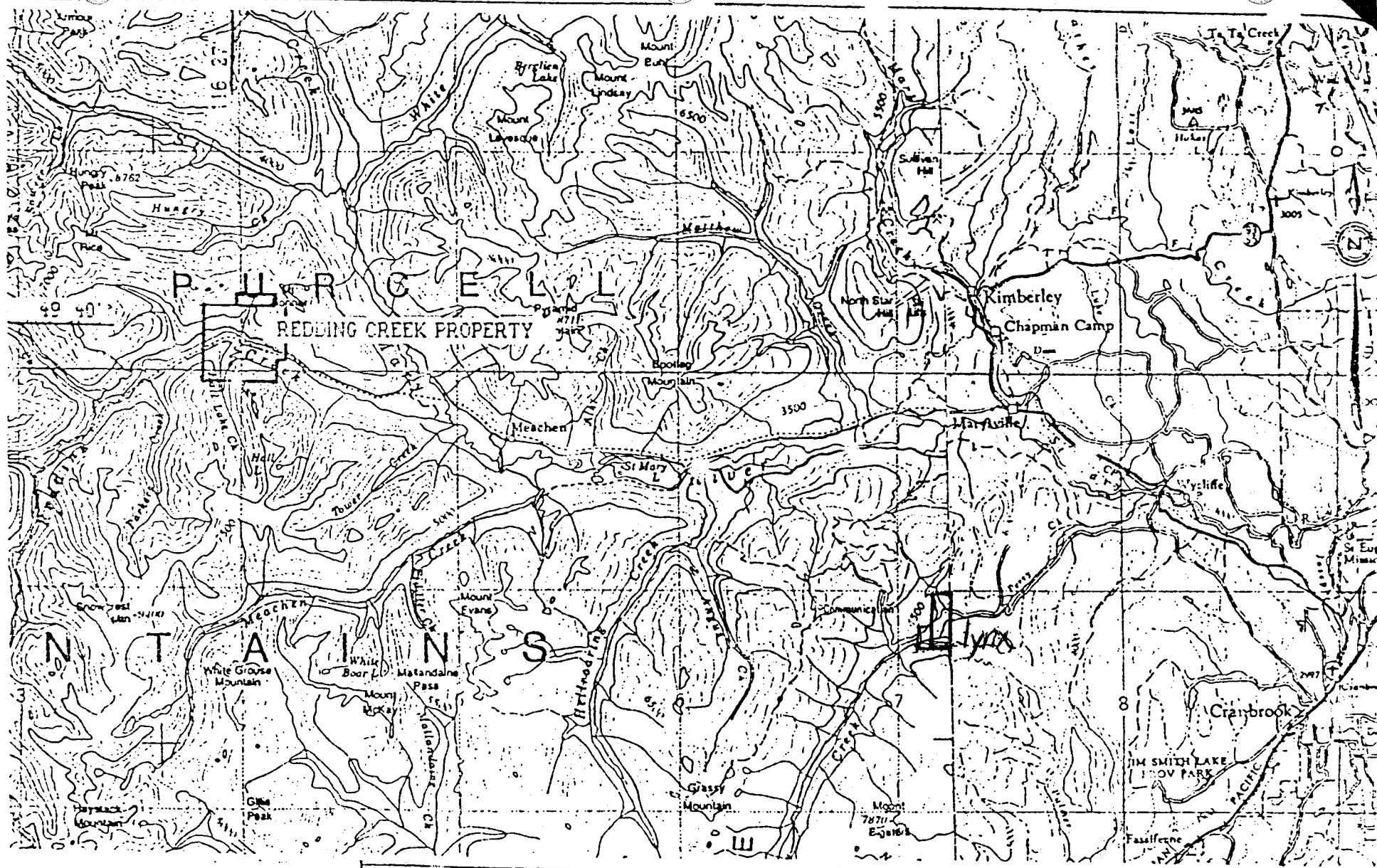
- A. Establish the quartz veining and mineralization of the Wycliff and Old Baldy faults;
- B. Sample quartz veins and soil sample suspected fault locations;
- C. Map and familiarize with the geology of the area.

### Location and Access

The Lynx claims are 17 km W.N.W. of Cranbrook. They straddle the west end of the Perry Creek canyon and continue north up Lisbon Creek. To reach the claims one travels approximately 13 km to the N.W. from Cranbrook, up the Hospital Creek road past the Tudor House to the Wycliff Regional Park turnoff to the left. 3.5 km west along this road take the left fork up Perry Creek. Continue on this road for 4.5 km to the bridge across Perry Creek. Take the switchback to the left and travel 3 km to Lisbon Creek. Continue across the creek and up a steep hill. Take the first road on the left which takes one down into the canyon. Half a kilometer further along the main Perry Creek road, a road takes off to the right up Lisbon Creek.

### Previous work

A great deal of placer work has been done in the gravels of the canyon. There is presently a small placer operation on the large gravel cliff on the south bank just east of the right-angled turn in Perry Creek. Remnants of a large (1 m) metal flume can be seen. This carried water from Moose Lake to the south-east down into the canyon, presumably to sluice the gravels. Only one adit was found in 3W 2N. It was very old and caved-in, apparently following a quartz vein to the west. In the N.E. of this claim



LYNX CLAIMS

Property Location and Access Map

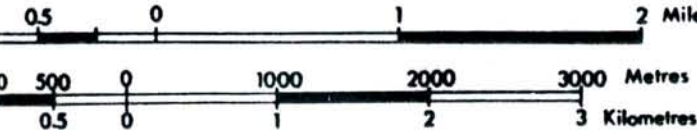
Scale: 0 Kilometres

N.T.S. 62 F/9W

Date: 7/9/65

Figure: 2

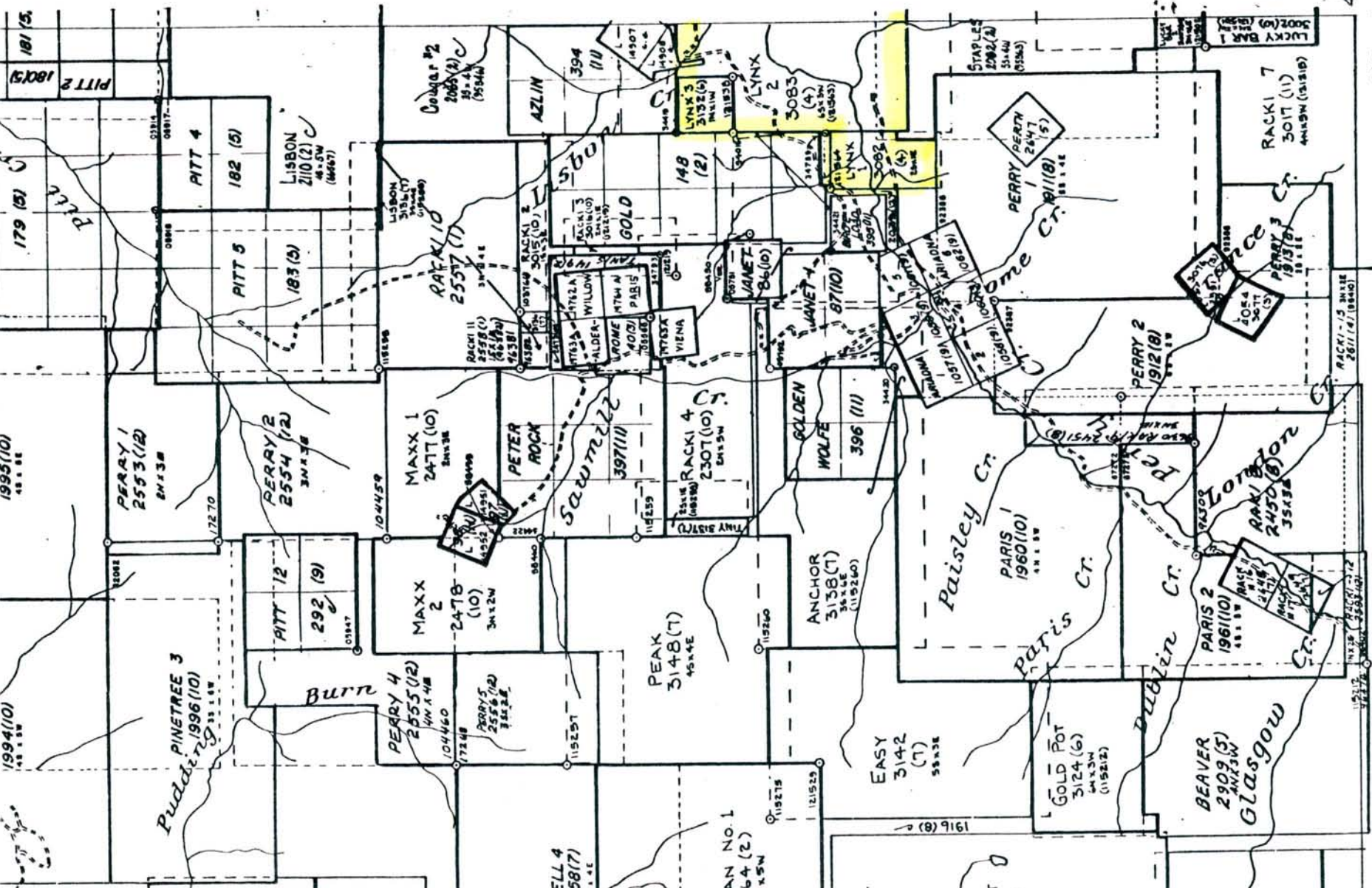




UNLESS VERIFIED OR SURVEYED, THE MAP POSITION OF A LEGAL CORNER POST IS BASED ON THE LOCATOR'S SKETCH. FOR FURTHER INFORMATION, APPLY TO THE OFFICE OF THE MINING DIVISION CONCERNED.

DATE OF MICROFILM: 89.06.09 *Ad.*

82F/9E (SEE ALSO PLACE MAP)



This map is prepared to serve as a guide to the positions of located mineral claims and Placer Mining Leases only. Unsurveyed claims and leases are plotted from locator's sketches and are not guaranteed. Letters

RESOURCES

a large trench exposed a barren quartz vein. The gravels in this location have been deeply trenched.

## GEOLOGY

### Regional Geology and Theoretical Background

The main feature of these claims is the intersection of the two Old Baldy N-S imbricate faults with the N.E.-S.W. Wycliff regional type fault. The latter fault is one of a series of major N.E.-S.W. faults including the Mission, Cranbrook, and Moyie faults as well as numerous smaller parallel fractures. The origin of this major fault system would appear to be the ellipsoid tension relief directions developed from the E-W compressional forces in Laramide times, and evident mostly in the basal plate. The two Old Baldy faults are the most easterly representatives of the imbricate, cordilleran type faulting in the upper plate to be seen south of the St. Mary's fault between the Hall Lake fault to the west and the Palmer Bar fault to the east. The Old Baldy fault south of south Moyie Creek appears to be a relatively well defined sole fault which splits into at least three imbricates north of North Moyie Creek and the Palmer Bar fault takes over as the sole fault. All of these faults have been major silica conduits.

Base metal plays in this area are always related to the mineralization criteria of the Sullivan deposit at Kimberley. Here E-W faulting at the end of Lower Aldridge time developed an intraformational conglomerate which was subsequently replaced by mineralizing solutions to form massive stratiform lead-zinc deposits. Laramide faulting and silica injection have cut through or along this horizon picking up base metals and depositing them in quartz veins in the faults. The exploration requirement is to try to

predict these intersections.

A somewhat similar situation is hypothesized for the occurrence of gold. In this case the affinity of the precious metal for the carbonate molecule is presumed to have enriched the lower Kitchener dolomite with respect to gold. Subsequent faulting and silica injection through or along this horizon has further enriched some quartz veins, producing Bonanza type occurrences. None of this has of course been proved, but there is considerable circumstantial evidence.

The "giant quartz veins" (up to 20 m) of the Perry Creek valley are frequently seen to occur at or near intersections of major faults. These are thought to be quasi-magmatic outpourings closely related to granitic intrusions. As such they would be unlikely to contain much gold except perhaps on the very margins. Again the critical exploration requirement is to predict these intersections.

### Local Structure and Stratigraphy

#### The Wycliff Fault

The throw on this fault is in the order of thousands of feet. It forms the south boundary of the Lisbon Creek graben. South of the fault are massive dark quartzite beds of the Precambrian Middle Creston. North of the fault are the light grey to buff weathering siltstones and silty argillites of the Cambrian Eiger Formation. The fault is visible as a band of shattered buff silty argillites cutting through the corner of the Perry Creek canyon. Thin stringers of quartz carry only traces of gold.

#### Old Baldy #1 Fault

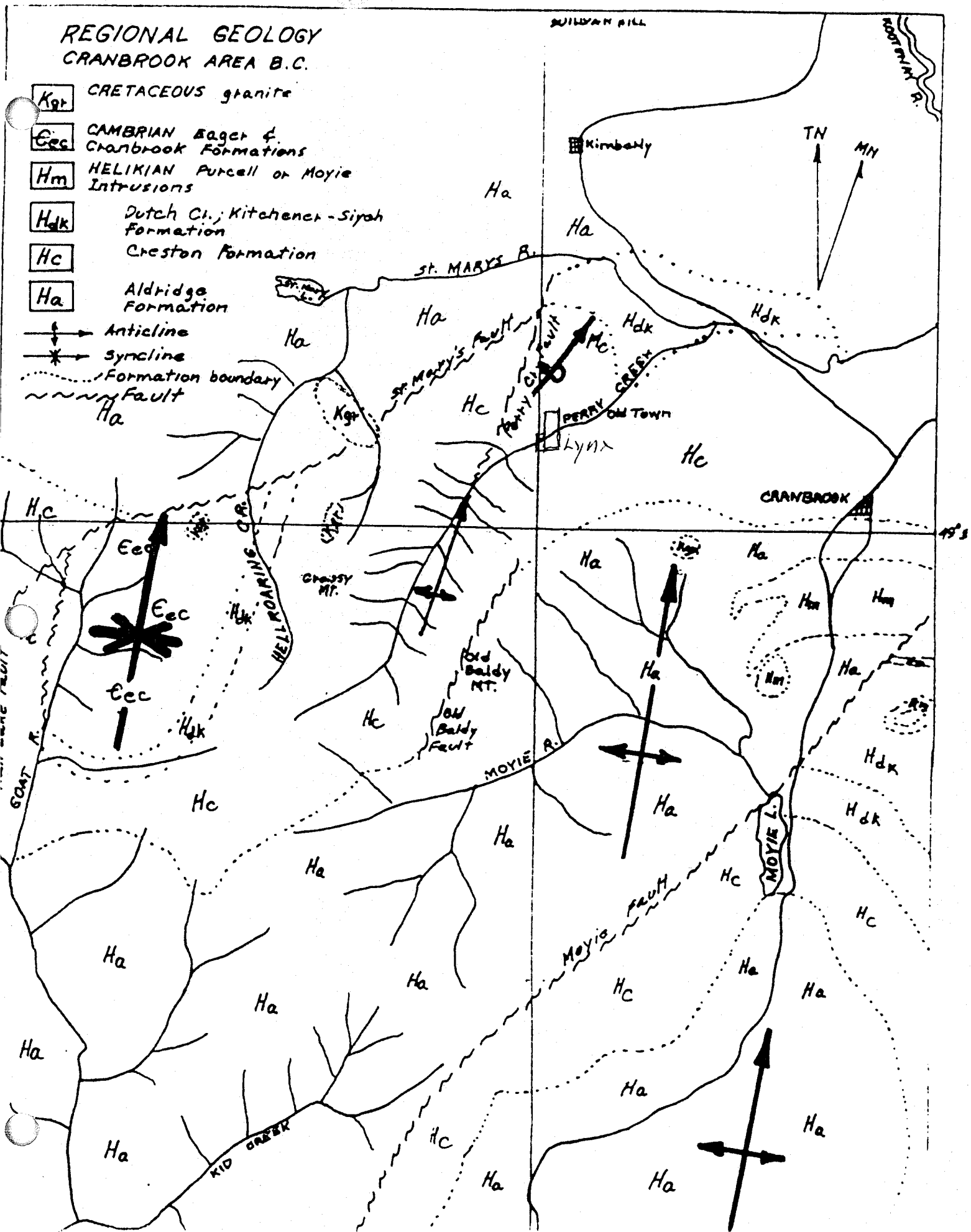
This fault very nearly intersects the Wycliff fault on the north bank of the Perry Creek canyon. Considerable haematite alteration is in



# REGIONAL GEOLOGY CRANBROOK AREA B.C.

- Kgr CRETACEOUS granite
- Eec CAMBRIAN Eager & Cranbrook Formations
- Hm HELIKIAN Purcell or Moyie Intrusions
- Hdk Dutch Cl.; Kitchener-Siyah Formation
- Hc Creston Formation
- Ha Aldridge Formation

- Anticline
- Syncline
- Formation boundary
- Fault



evidence and pyrite is still extant in some of the veinlets. One sample (O.B.2) yielded .01 oz/ton Au. Other quartz veins to the south appear to be barren.

#### Old Baldy #2 Fault

This fault is inferred but due to depth of overburden was not seen anywhere. Soil samples gave no suggestion of values.

#### The E-W Fault and Sinkholes

Air photos evidence a considerable number of strong east-west lineations in the Lisbon Creek graben. A number appear to carry on across Perry Creek and through the ridge to the south. Up until the sink holes were discovered no evidence had been found on the ground. It is still, of course, unclear if that is what they represent.

Soil samples from the bottom of the pits dug in the bottom of the sink holes were analyzed for gold only and gave no such indication. The sink holes, however, have been filled to a considerable depth with windblown yellow ochre silt. Soil sampling does not appear to work in this material.

#### Economic Geology

To date most of the economic attention on the Lynx claims appears to have been focused on placer deposits on Perry Creek. Two situations exist to direct attention elsewhere.

- A. If the E-W lineation is a fault, it can have considerable base metal implications. Since the Wycliff fault belongs to the N.E.-S.W. strain faults of the base plate, it will in all probability penetrate deeply enough to intersect the Middle/Lower Aldridge contact with the potential of base metals; where these two features intersect will be a major objective.

- B. The overturned anticline of the Lisbon Creek graben appears to have been thrust over the more flat-lying Eiger to the east. This would mean that the basal Kitchener is several thousands of feet below the surface and would be intersected by the deep Wycliff fault. Lack of values in the tiny veinlets is not necessarily much of an indication of what happens a little deeper. The implied west dip of the imbricate Old Baldy fault could account for the higher gold values in the quartz stringers on this fault. There is not too much doubt that as one proceeds westwards in the bottom plate of the Lisbon Creek graben, one would move down section. The west-dipping imbricate on the south side of the Wycliff could easily be in contact with the basal Kitchener.

#### SUMMARY AND CONCLUSIONS

- A. Appreciable gold values on the Old Baldy #2 fault close to the Wycliff fault bear further investigation.
- B. A line of soil samples should be run along both Old Baldy #2 faults from the Wycliff fault south.
- C. Shallow holes could be driven into the fractured Eiger formation along the Wycliff fault to penetrate beyond any slump. Material from the end of these holes should be sieved and bulk sampled.
- D. The extrapolated intersection of the E-W fault and Wycliff fault should be located and soil sampled or augered (see below).
- E. The yellow ochre silt precludes valid soil sampling where any appreciable thickness exists. An auger or drill should be used to penetrate to the bottom of the sink holes and soil or rock samples assayed for gold, silver and base metals.

QUALIFICATIONS

- 14.1 The writer, N. Gass, obtained his B.Sc. in geology from Dalhousie University, Halifax, N.S. in 1955 and his M.Sc. in geology from the same institution in 1957.
- 14.2 Experience
- 1955 Detailed mapping & prospecting American Smelting and Refining Ltd., Newfoundland.
- 1956 Regional mapping and detailed study of Pegmatites of the Winnipeg River, Manitoba Department of Mines.
- 1957-62 Surface and subsurface exploration, mapping, wellsite and special projects in Saskatchewan, Alberta, & British Columbia. Chevron Standard Oil Co. Ltd.
- 1963 Wellsite consultant, Chevron Standard.
- 1964 Developed House Mt. Oil field for Chevron Standard.
- 1971 Uranium and base metal exploration in Saskatchewan for V. Zay Smith and Associates, Calgary.
- 1976 Uranium exploration northern Saskatchewan for Rio Alto Exploration Ltd.
- 1979 Drilling program on fossil placer, Gay's River, N.S., Calgary syndicate.
- 1980 Drilling program Nelson, B.C. for Dekalb Mining.
- 1981 Geological mapping and geophysical survey, La France Creek, B.C., Dekalb Mining.
- 1982 Lithium, tantalium, germanium prospecting and reconnaissance survey, Winnipeg River, Manitoba, Dekalb Mining.
- 1983-89 Base metals, gold/silver prospecting, Cranbrook, B.C.

REFERENCES

## Annual Reports of Department of Mines, Province of British Columbia

- 1898 p. 1016  
 1915 p. 108-109  
 1916 p. 190  
 1918 p. 151  
 1921 p. 127-166  
 1922 p. 188  
 1923 p. 207  
 1925 p. 230  
 1926 p. 243  
 1929 p. 297
- Banting R.T. Report on the Purcell Camp 1989
- Barlee, N.L. Guide to Gold Panning in B.C., 2nd Ed, 1979.
- Boyle, R.W. The Geochemistry of Gold and Its Deposits, G.S.C. Bulletin 280, 1976.
- Cairnes, C.E. G.S.C. Summary Report Pt. A., Some Mineral Occurrences in the Vicinity of Cranbrook, B.C. 1932, pp. 76-84.
- Leech, G.B. St. Mary Lake, B.C., G.S.C. Map #15
- Reesor, J.E. Grassy Mt., B.C., G.S.C. Open File #820
- Rice, H.M.A. G.S.C. Memoir #207, 1937
- Rice, H.M.A. G.S.C. Memoir #228, 1941
- Schofield, S.J. G.S.C. Memoir #76, pp. 147-152.



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TEL: (403) 274-2777

Fax: 403-275-0541

O GASS AND ASSOCIATES.....

INVOICE 31553

...2604 Exshaw Road N.W.....

DATE July 28, 1988.....

...Calgary, Alberta T2M 4E5.....

ATTN: N. Gass

...soil & rock SAMPLES

9	Rock sample preparation	@	2.75	24.75
67	Soil sample preparation	@	.90	60.30
76	Gold geochemical analysis	@	7.00	532.00
		@		
		@		
		@		
		@		
		@		
		@		
		@		
		@		
		@		
			<b>TOTAL</b>	<b>\$ 617.05</b>

*13 May 89  
N. Gass*

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673.35



04 Exshaw Road N.W.  
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 N. Gass.



Date July 28, 1988  
 Samples soil & rock

# Certificate of Assay

## LORING LABORATORIES LTD.

Page # 2

SAMPLE NO.	PPB Au
chemical analysis	
"Soil samples"	
BSH-1	nil
BSH-2	5
BSH-3	10
BSH-4	10
BSH-5	nil
BSH-6	nil
BSH-7	nil
<u>BSH-8</u>	<u>20</u>
BSH-9	10
BSH-10	5
BSH-11	5
BSH-12	5
BSH-13	5
<u>BSH-14</u>	<u>15</u> ?
BSH-15	5
BSH-16	nil
BSH-17	nil
NPBF-1	10
NPBF-2	nil
NPBF-3	nil
NPBF-4	nil
NPBF-5	nil
NPBF-6	nil
D-1	5
D-2	nil
D-3	nil
D-4	nil
D-5	nil
Ivan 350E +00	nil
Ivan 500E +30s	nil
Ivan 500E +65s	nil

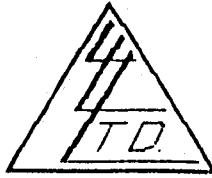
*Lynx claims  
 soil samples  
 N. Gass  
 13 May '89*

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Subjects retained one month.  
 Samples retained one month  
 unless specific arrangements  
 are made in advance.

*Gary J. Loring*  
 Assayer

Exshaw Road N.W.  
gary, Alberta T2M 4E5  
N. Gass.



Date July 28, 1988

Samples soil & rock

# Certificate of Assay LORING LABORATORIES LTD.

Page # 3

SAMPLE NO.

PPB  
Au

chemical analysis  
"Soil samples"

SIL-1	nil
O.B.E.	nil
P.B.S.S.	nil
PC-B-RR	nil
WC-PC-1	nil

chemical analysis  
"Rock samples"

BL-1	nil
C-1	50
W-1	30
OB-1	nil
<u>OB-2</u>	<u>425</u>
PB-1	5
PB-2	nil
PB-3	10
P.P.-4	10

Lynx claims  
Rock Samples

*N. Gass*  
13 May 89

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

...cts retained one month.  
...ips retained one month  
...less specific arrangements  
...e made in advance.

*Henry Swearing*  
Assayer



AND ASSOCIATES EXPLORATION  
2604 EXSHAW ROAD N.W., CALGARY, ALBERTA T2M 4E5

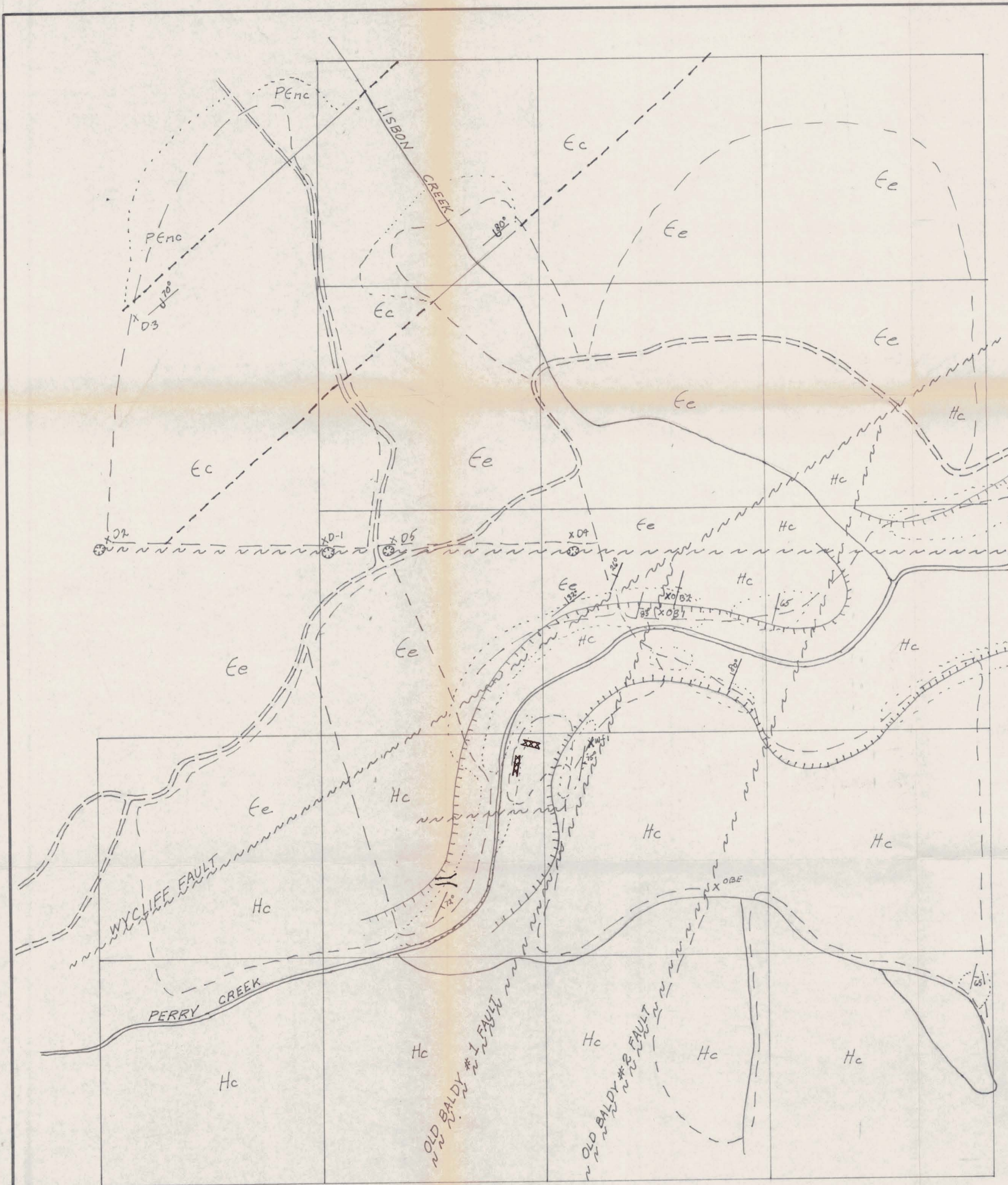
### COST BREAKDOWN

<u>Lloyd Morgan</u> (prospector)	5 days @ \$120	9- <del>13</del> <sup>16</sup> July	\$600	K.S.
	4x4 x 5 days @ \$40	—	200	
	food x 5 days @ \$20	—	100	
<u>John Morgan</u> (prospector)	2 days @ \$120	9+10 July	240	K.S.
	food x 2 days @ \$20	—	\$0	
<u>Nick Gass</u> (geologist)	5 days @ \$250	9- <del>13</del> <sup>16</sup> July	1250	K.S.
	4x4 + Camper x 5 days @ \$65	—	325	
	food x 5 days @ 20	—	100	
	Soil samples 5 @ \$9.50	—	47.50	
	Rock 9 @ \$10.75	—	96.75	
			<u>2989.25</u>	
			2999.25	

Dated at Calgary 13 May 1989

*N. Gass*



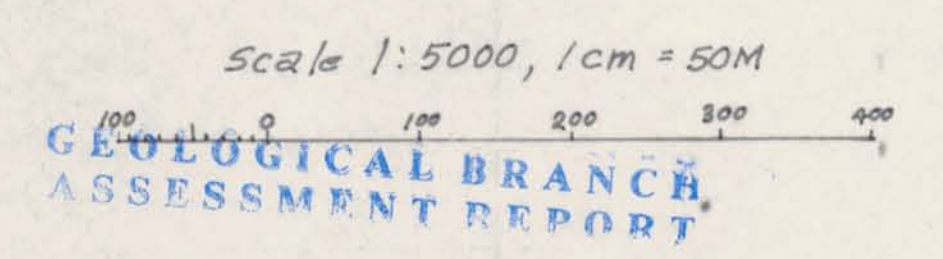


**LEGEND**

- LOWER CAMBRIAN**
- Ee** Shale, siltstone, limestone  
Quartzite EIGER FM.
  - Ec** Mainly quartzite some  
limestone occasional conglomerate  
CRANBROOK FM.
- HELIKIAN**
- PEnc** Basalt  
NICOL CREEK FM.
  - Hk** Green argillite, siltstone &  
dolomitic siltstone  
KITCHENER FM.
  - Hc** Green/grey quartzite & siltstone  
dark grey argillite  
CRESTON FM.
- PRECAMBRIAN**
- claim lines
  - traverse
  - ~ stream
  - == logging road
  - outcrop
  - - - geological boundary  
(approx., defined)
  - ~~~~ fault (defined)
  - ~ ~ ~ fault (approx)
  - ~ ~ ~ fault (assumed)
  - strike & dip
  - strike & dip overturned
  - x05 sample location
  - ||| adit
  - XXX trench
  - TTT canyon edge

**LYNX**

by N. Gass April '89  
PROSPECTING / GEOLOGY



**18,790**