84-1424-13312

GEOCHEMICAL and GEOLOGICAL

ASSESSMENT REPORT

ON THE

BEST PROPERTY (Best 1-4 claims)

LEMIEUX CREEK AREA

KAMLOOPS MINING DIVISION, B.C.

# GEOLOGICAL BRANCH ASSESSMENT REPORT

3,312

NTS: 92P/9

Latitude: 51 °33 'North

Longitude: 120°13' West

Owners: Brican Resources Ltd.

Consultant: K.L. Daughtry and Associates Ltd.

Author: W.R. Gilmour

Date: February 18, 1985

## TABLE OF CONTENTS

SUMMARY	Page 1
LOCATION, ACCESS, TOPOGRAPHY	Page 2
PROPERTY	
HISTORY	Page 3
GEOLOGY and MINERALIZATION	•Page 4
GEOCHEMICAL SOIL SURVEY	Page 6
DISCUSSIONS and CONCLUSIONS	Page 8
RECOMMENDATIONS	Page 9
REFERENCES	Page 10
STATEMENT OF COSTS	Page 11
STATEMENT OF QUALIFICATIONS	Page 12

# LIST OF ILLUSTRATIONS

C

Figure 1	Location Map	Following Page 1
Figure 2	Index Map 1:100,000	Following Page 2
Figure 3	Geology 1:5,000	In Pocket
Figure 4	Rock Sampling 1:5,000	In Pocket
Figure 5	Sketch Section 1:250	In Pocket
Figure 6	Sketch Section 1:250	In Pocket
Figure 7	Sketch Section 1:250	In Pocket
Figure 8	Gold in Soils 1:5,000	In Pocket
Figure 9	Arsenic in Soils 1:5,000	In Pocket
Figure 10	Antimony in Soils 1:5,000	In Pocket

#### SUMMARY

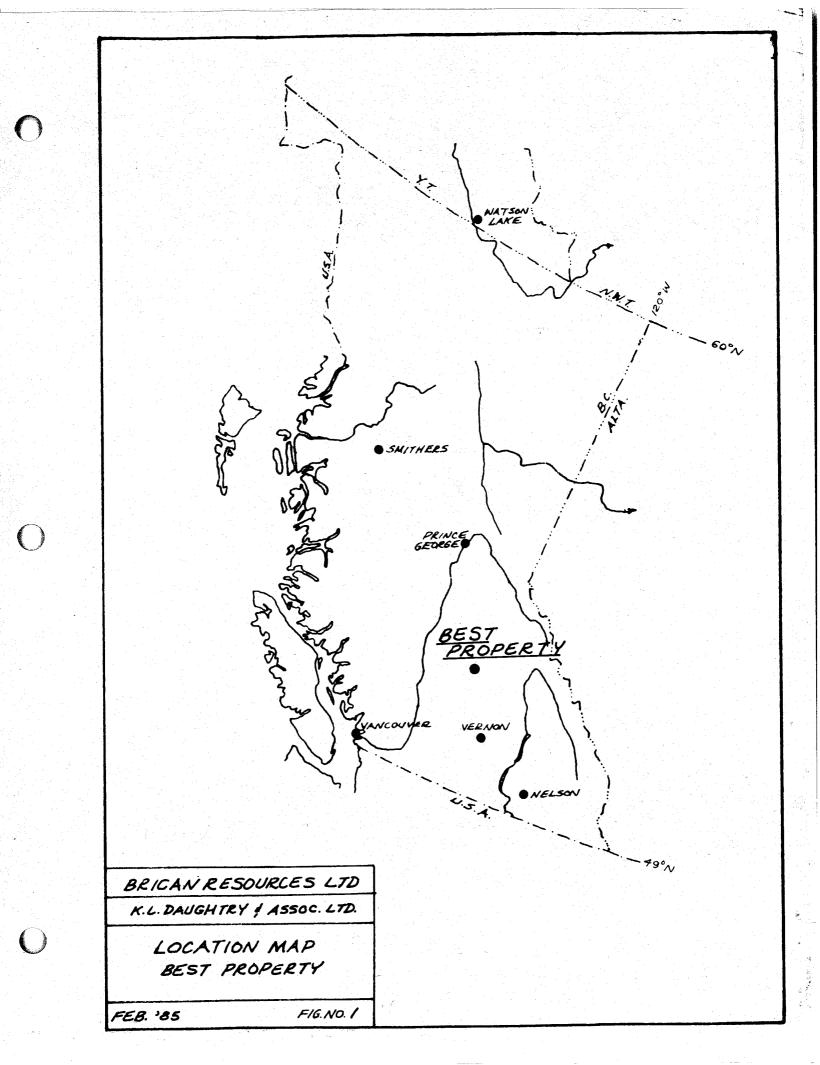
1

The BEST property, owned 100% by Brican Resources Ltd., is located 17 km southwest of Clearwater, B.C. This report presents the results of exploration work carried out in 1984.

During 1984, a total of 360 soil samples and 90 rock samples were collected, and geological mapping was carried out.

Although anomalous values of gold, arsenic and antimony occur, no mineralization of economic grade was discovered.

No further exploration work is warranted at present.



## LOCATION, ACCESS, TOPOGRAPHY

The BEST property is located astride Lemieux Creek 17 km southwest of Clearwater and 12 km north of Little Fort (Figures 1,2).

The National Topographic reference is 92P/9E and 9W and the coordinates of the centre of the claims are 51°33' north and 120°13' west. The Universal Transverse Mercator grid references are from 5711500 to 5714100 north and from 690400 to 694400 east. The Legal Corner Post, common to the BEST 1, BEST 2, BEST 3 and BEST 4 is located 1000 m southwest of the southwest corner of Lemieux Lake on the Transmountain Pipe Line and B.C. Hydro right-of-way at an elevation of 730 metres (2400 feet).

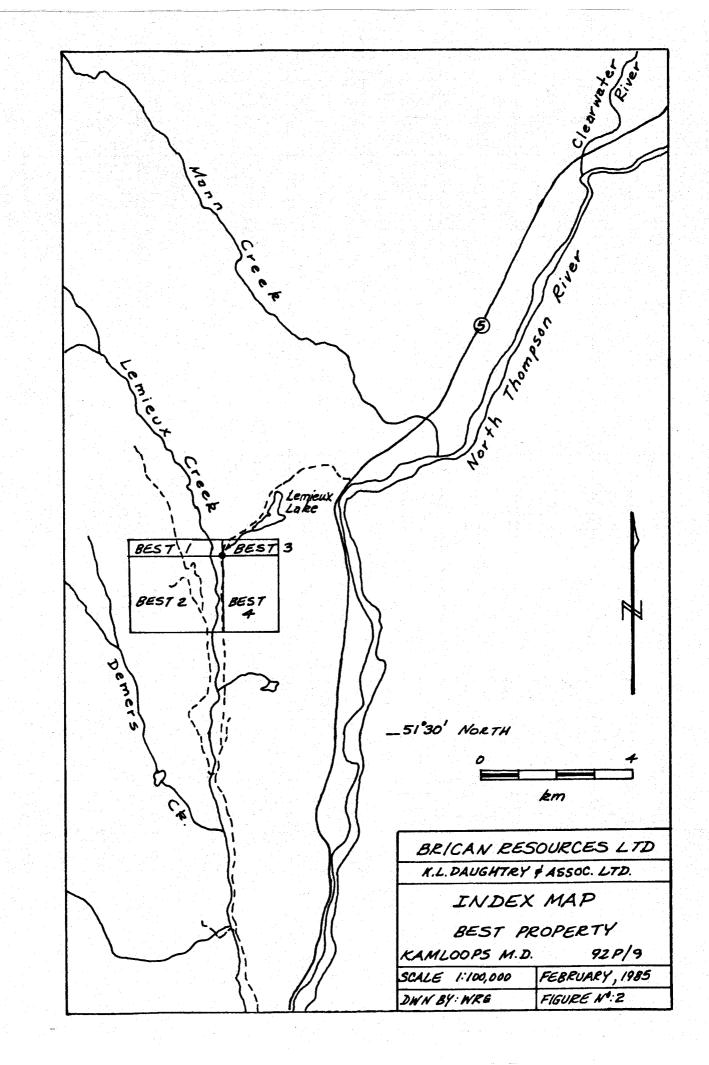
Access is provided by travelling north from Little Fort for 8.5 km and thence by four-wheel drive vehicle along the Transmountain Pipe Line and B.C. Hydro access road for 6 km. Access from Clearwater is provided by travelling south on Highway 5 for 14 km then southwest for 7 km via the Lemieux Lake Transmountain/B.C. Hydro access road. The nearest major centre is Kamloops, 96 km south of Little Fort on Highway 5.

Topography is typical of the Thompson plateau with gently rolling uplands cut by streams with moderate valley slopes. Elevations vary from a maximum of 1250 metres (4100 feet) above sea level to 610 metres (2000 feet) a.s.l. in the valley of Lemieux Creek.

Vegetation consists of dense forest of spruce, fir and cedar with patches of poplar and alder.

2

2



 $\bigcirc$ 

#### PROPERTY

3

The BEST property consists of 4 located metric grid claims, comprising a total of 40 units, in the Kamloops Mining Division (Figure 2). The claims were located between December 6 and 9, 1983, for Brican Resources Ltd. and recorded on December 14, 1983.

The following table lists the pertinent information on the claims.

and the second			
Claim Name	Record Number	No. of Units	Expiry Date
BEST 1	5212	5	Dec. 14, 1987
BEST 2	5213	20	Dec. 14, 1987
BEST 3	5214	3	Dec. 14, 1987
BEST 4	5215	12	Dec. 14, 1987

The expiry dates are based on acceptance of this assessment report.

### HISTORY

In the 1920's there was some placer activity on Lemieux Creek, which bisects the property. The source of the gold was not determined. No other activity has been recorded in the area of the BEST property.

#### GEOLOGY and MINERALIZATION

4

The eastern third of the BEST property is underlain by the Fennell Formation and the western portion by the Nicola Group (Figure 3). The major north-south strike-slip(?) Louis Creek Fault zone juxtaposes these major rock units. Minor Tertiary(?) felsic dykes cut the older rocks.

The Fennell Formation of Devonian(?) to Permian age is an allochthonous, oceanic terrane of metabasalt(2). The basalts are aphanitic, grey-green in colour and characteristically brecciated(1). The Nicola Group of Upper Triassic age consists of interlayed limestone, shale and siliceous argillite. The grey to black limestone beds generally range from 10 to 50 cm thick, although thicker beds do occur. The shales are generally black and fissile. The Nicola rocks trend north-northwest with a moderately westerly dip. Cleavage and minor folds were noted.

Orange-brown, usually well-altered and weathered dykes of limited extent cut the older rocks. Feldspar phenocyrsts and flow(?) banding occur in these felsic rocks.

In the area of the BEST property the Louis Creek Fault is represented by en echelon faults creating an irregular contact. All rock units have been brecciated to some extent.

Rock samples were analysed for one or more of gold, arsenic and antimony (see Soil Geochemistry for analytical methods). A total of 90 rock samples gave values up to 0.072 oz/ton gold, >1000 ppm arsenic and 23 ppm antimony. Reconnaissance grab sampling (Figure 4) showed 2 of 32 rocks sampled were anomalous in gold; a feldspar porphyry dyke ran 135 ppb Au and a black limestone ran 100 ppb Au. In the area of the main gold and arsenic soil anomaly more detailed sampling was carried out (Figures 5,6,7). Road-cut exposures were sampled in 2-metre chip samples.

5

The best mineralization encountered coincided with the soil anomaly although values in the soils and weathered rocks appear to be gold-enriched. High gold and arsenic values are associated with dark rusty, calcite and quartz-filled fractures in altered felsic dykes. The rusty fractures are vertical and strike east-west. The best zone (Figure 5), 18 m of 0.007 oz/ton gold, straddles a pyritic, altered, partially brecciated dyke filling a fault zone separating brecciated Fennell and Nicola rocks.

#### GEOCHEMICAL SOIL SURVEY

A soil sampling program was carried out along roads, topographic contours and flagged lines (Figures 8,9,10). The survey was confined to the east side of Lemieux Creek, straddling the Fennell/Nicola fault-controlled contact.

Samples, totalling 360, were collected in numbered Kraft paper bags and sent to Kamloops Research and Assay Laboratory Ltd. for analysis. Whenever possible the samples were collected from the B horizon, at approximately 15 cm depth. The -80 mesh fraction was subjected to hot aqua regia digestion and analysed by combined fire assay-atomic absorption (Au), by colorimetric (As) and by hydride generation (Sb) methods.

#### Table I

Table I summarizes the statistical distribution of the geochemical values.

	Number Detection		Range	anomalous	
	· · · · · ·	limit		weak	strong
Au ppb	360	5	<5-5100	30-75	>75
As ppm	360	2	<2->1000	130-400	> 400
Sb ppm	357	4	<4-29	6-20	> 20

A strong gold-arsenic anomaly straddles the transmission line and pipeline right-of-way and covers an area of about 200 m x 150 m. Values up to 5100 ppb Au occur in this area. The anomalous antimony values are concentrated about 400 m to the south between Lemieux Creek and the right-of-way.

Anomalous gold (390, 570 ppb) and arsenic values occur at the north end of the most easterly geochem line. The soil is talus-like, shedding from small

6

cliffs of greenstone breccia. No gold and only slightly anomalous arsenic values were obtained from these rocks.

7

A value of 855 ppb gold, from the southern portion of the claims, is probably related to slightly gold-bearing till and fluvial sands and gravels.

#### DISCUSSIONS and CONCLUSIONS

8

Anomalous gold, arsenic and minor antimony values occur in soils and rocks just east of Lemieux Creek, straddling the transmission line and pipe line right-of-way. The areal extent of the anomalous zone is approximately 200 m x 150 m. In places the soils appear to be enriched in gold and some apparent soil anomalies appear to be due to sampling of enriched talus.

Auriferous calcite-pyrite-quartz filled fractures occur in altered dykes and brecciated limestone, argillite and greenstone associated with major strike-slip faulting.

The tenor of mineralization and its location near Lemieux Creek appears to be sufficient to explain the anomalous gold, arsenic and antimony geochemistry in the heavy mineral fractions of the creek sediments.

Mineralization discovered to date is not of economic grade.

# RECOMMENDATIONS .

It is recommended that no further work be done on the BEST property at this time.

Respectfully submitted

Ullilmon

W.R. Gilmour

Vernon, B.C.

February 18, 1985.

## REFERENCES

1. Campbell, R.B. &

Tipper, H.W. 1971 Geological Survey of Canada Memoir 363, Geology of Bonaparte Lake Map-Area, B.C.

1983

**2.** Schiarizza et al

B.C.M.E.M.P.R. Preliminary Map No. 53, Geology of the Barriere River-Clearwater Area. STATEMENT OF COSTS

1.)	Professional Services W.R. Gilmour 15 days @ \$250/day Field Work- July 3-6, Sept. 23-25 plus supervision, report writing	\$3750.00	
	K.L. Daughtry 3 days @ \$300/day supervision	900.00	\$4650.00
2.)	Labour C. Lynes 11 days @ \$125/day July 3-6, 20-23 Sept. 23-25	1375.00	
	J. Graham 4 days @ \$175/day July 20-23	700.00	
	J. Osterhagen 8 days @ \$150/day July 3-6, 20-23	1200.00	3275.00
3.)	Transportation 4 x 4 Jimmy 11 days @ \$40/day July 3-6, 20-23 Sept. 23-25	440.00	
	2235 km @ \$.20/km gas, oil	447.00 158.00	1045.00
4.)	Accommodation, meals		485.00
5.)	Geochemical analysis		
	Soil- 360 samples for Au,As,Sb, @ \$11.90 360 samples preparations @ \$.80	4284.00 288.00	
	Rock 38 samples fo Au,As,Sb @ \$11.90 5 samples for Au, As @ \$10.00 47 samples for Au assay @ \$7.50 90 sample preparation @ \$2.75	452.00 50.00 352.00 247.00	5673.00
6.)	Maps, prints, secretarial		450.00
7.)	Field supplies		100.00

Total

\$15,678.00

#### Statement of Qualifications

I, W.R. GILMOUR of 13511 Sumac Lane, Vernon, B.C. V1B 1A1, DO HEREBY CERTIFY THAT:

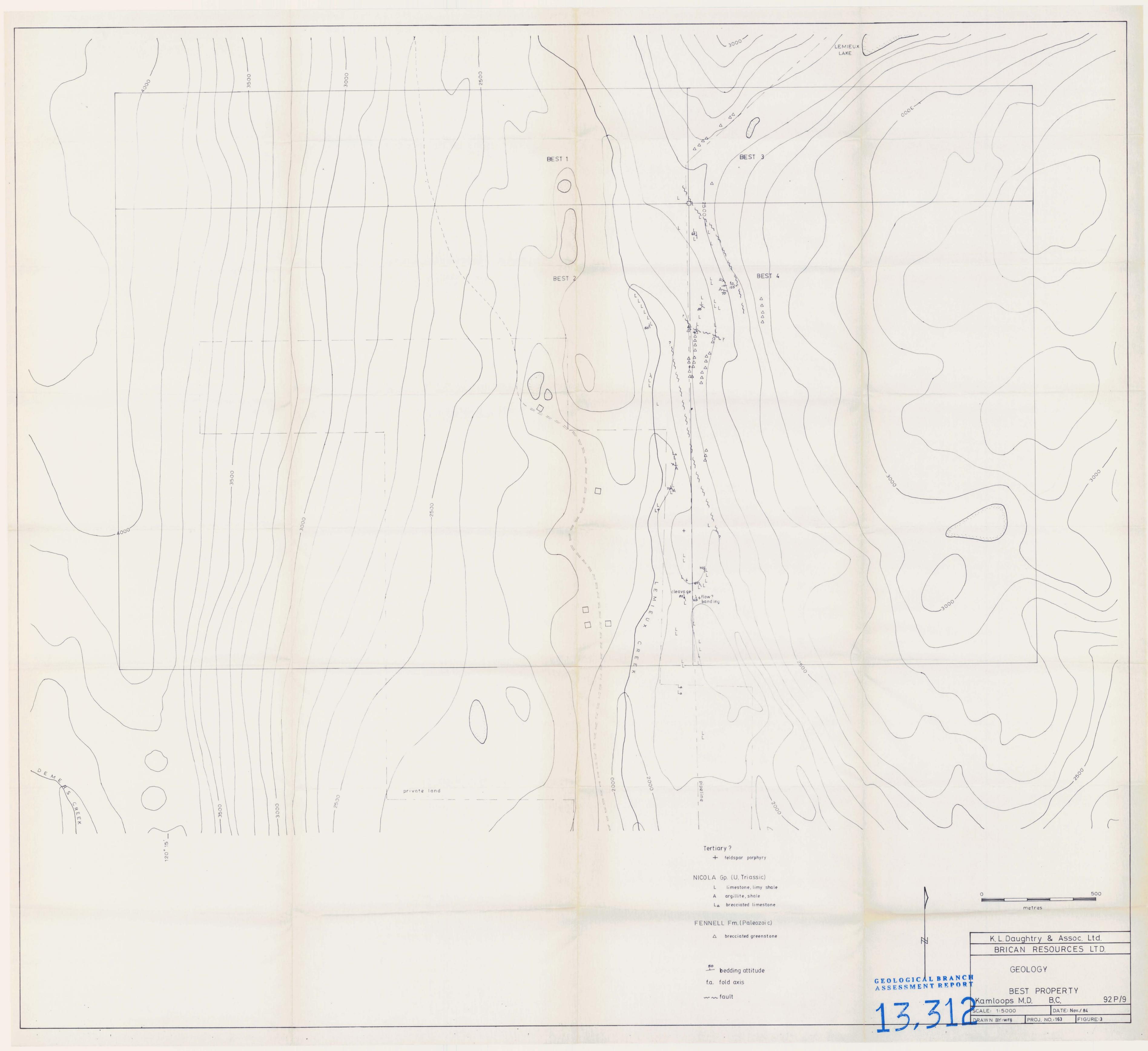
- I am a Consulting Geologist in mineral exploration employed by W.R. Gilmour & Associates Ltd., Vernon.
- 2. I have been practising my profession in British Columbia, the Yukon Territory, and Nevada for 15 years.
- I am a graduate of the University of British Columbia with a Bachelor of Science degree in geology.
- 4. I am a Fellow of the Geological Association of Canada and a member of the Society of Mining Engineers of the American Institute of Mining, Metallurgical and Petroleum Engineers.
- 5. This report is based upon knowledge of the BEST property gained from exploration work on the property.
- 6. I am a Director of Brican Resources Ltd., which owns the property.

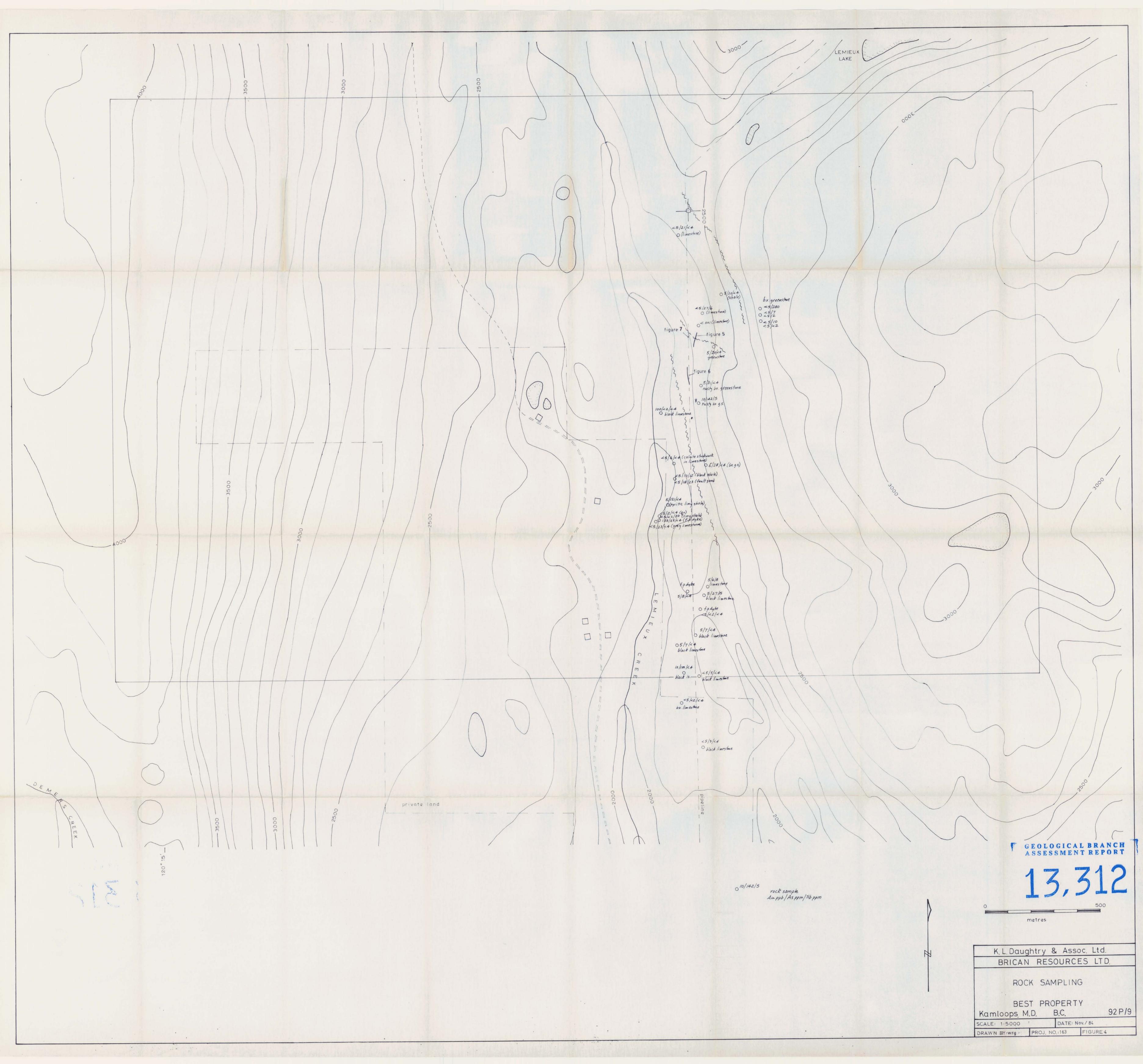
WR Ilino

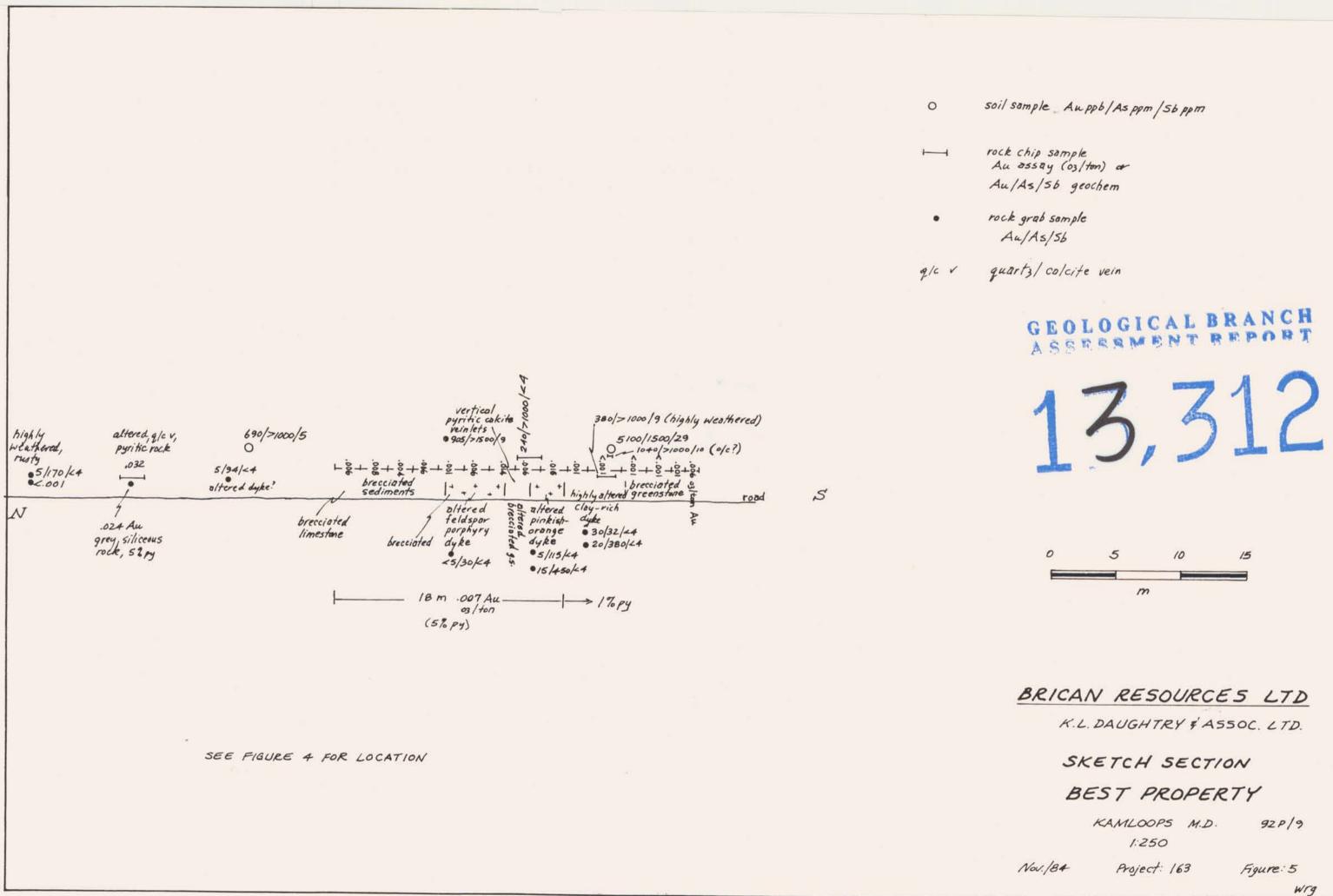
W.R. Gilmour

Vernon, B.C.

February 18, 1985







breccioted greenstone 870/71000/8 highly altered, bleached, weathered, rusty type:-30/565/4 0 brecciated greensto bleacher · 2.001 weathered, altered ?) 450/71000/4 <.001 brecciated greenstone of 45 ppb Au 612 ppm As 24 ppm Sb gle V 0.072 rusty zone 8. v. 160/15 E € <.001 g.V. 2.001 -81 strongly weathered 1170 ppb Am 21000 ppm As 24 ppm Sb N oglev 2.001

soil sample Auppb/Asppm/Sbppm

Hock chip somple Au assay (03/ton)

· rock grob sample

SEE FIGURE 4 FOR LOCATION

- glev quarty 1

0

quarty/calcite vein

- LULUGICAL BRANCH ASSESSMENT REPORT \$ road 15 10 0 5 m BRICAN RESOURCES LTD K.L. DAUGHTRY & ASSOC. LTD. SKETCH SECTION BEST PROPERTY KAMLOOPS M.D. 92P/9 1:250 Project: 163 Figure: 6 Nov./84 wrg

