

GEOCHEMICAL AND GEOPHYSICAL  
ASSESSMENT REPORT

on the

VIDLER PROPERTY

(ARKOSE, ARKOSE 2 to 4, VIDLER, VIDLER 2 Claims)

Harris Creek Area

Vernon Mining Division, B.C.

82L/2W

- Latitude : 50° 11' North
- Longitude : 118° 53' West
- Owners : K.L. Daughtry  
W.R. Gilmour  
V.F. Erickson
- Operator : Banqwest Resources Limited
- Consultant : K.L. Daughtry and Associates Ltd.
- Author : W.R. Gilmour
- Date : April 12, 1979

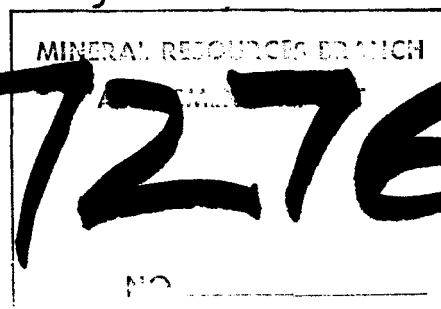
7276

TABLE OF CONTENTS

SUMMARY	Page 1
LOCATION, ACCESS, TOPOGRAPHY	Page 2
PROPERTY	Page 3
HISTORY	Page 3
SOIL SURVEY	Page 5
SPECTROMETER SURVEY	Page 6
DISCUSSION AND CONCLUSIONS	Page 7
RECOMMENDATIONS	Page 8
REFERENCES	Page 9
STATEMENT OF COSTS	Page 10
STATEMENT OF QUALIFICATIONS	Page 12

LIST OF ILLUSTRATIONS

Figure 1	Location Map	Following Page 2
Figure 2	Index Map 1:50,000	Following Page 2
Figure 3	Uranium in soils 1:10,000	In Pocket
Figure 4	Spectrometer Survey - Total Count 1:10,000	In Pocket
Figure 5	Spectrometer Survey (eU) 1:10,000	In Pocket
Figure 6	Spectrometer Survey (eTh) 1:10,000	In Pocket
Figure 7	Histogram: Uranium in soils	Following Page 5
Figure 8	Histogram: Spectrometer readings (T <sub>2</sub> )	Following Page 6
Figure 9	Histogram: Spectrometer readings (T <sub>3</sub> )	Following Page 6



## SUMMARY

The VIDLER property is located southeast of the town of Lumby in southern British Columbia. This report, prepared at the request of Mr. D.M. Mercier of Banqwest Resources Limited, describes grid establishment and soil sampling and spectrometer surveys carried out during 1978 on the property.

A soil survey, comprising 453 samples, and a spectrometer survey, of 453 station readings, were carried out over a 200 m x 50 m grid, totalling 24.4 line kilometres.

Geological, radiometric and geochemical surveys have indicated the presence of favourable environments for the deposition of uranium. Drilling by several operators has encountered anomalous radioactivity in places. The property exhibits exploration potential and a programme of exploration is definitely warranted.

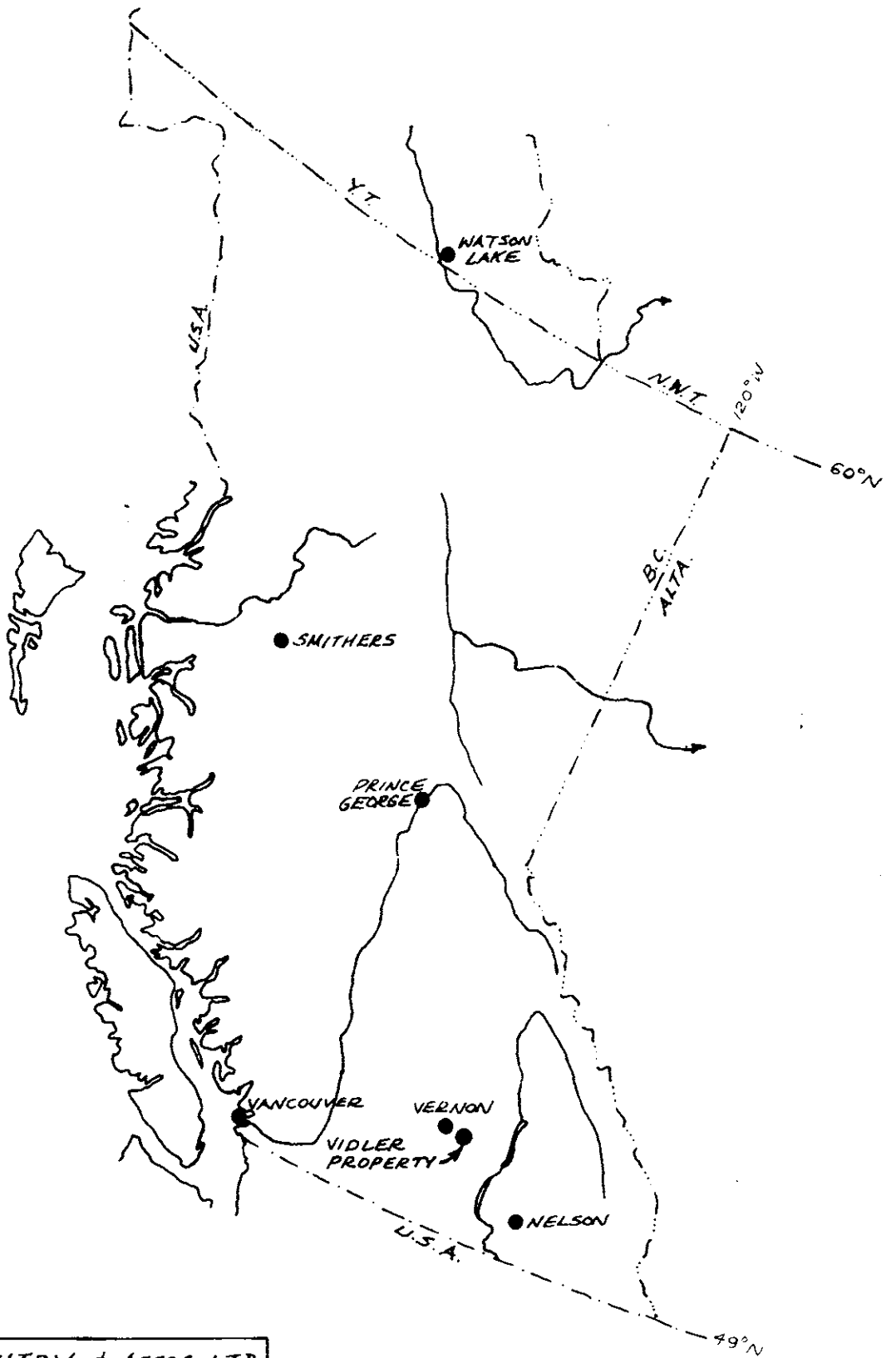
LOCATION, ACCESS, TOPOGRAPHY

The VIDLER property is on the ridge between Harris Creek and Creighton Creek, 27 km southeast of Vernon, British Columbia (Figures 1 and 2). Vidler Creek, a westerly-flowing tributary of Harris Creek, crosses the southern part of the claims. The town of Lumby is 8 km northwest of the property. The co-ordinates of the centre of the claim block are  $50^{\circ} 11'$  north and  $118^{\circ} 53'$  west, and the National Topographic System reference is 82L/2W.

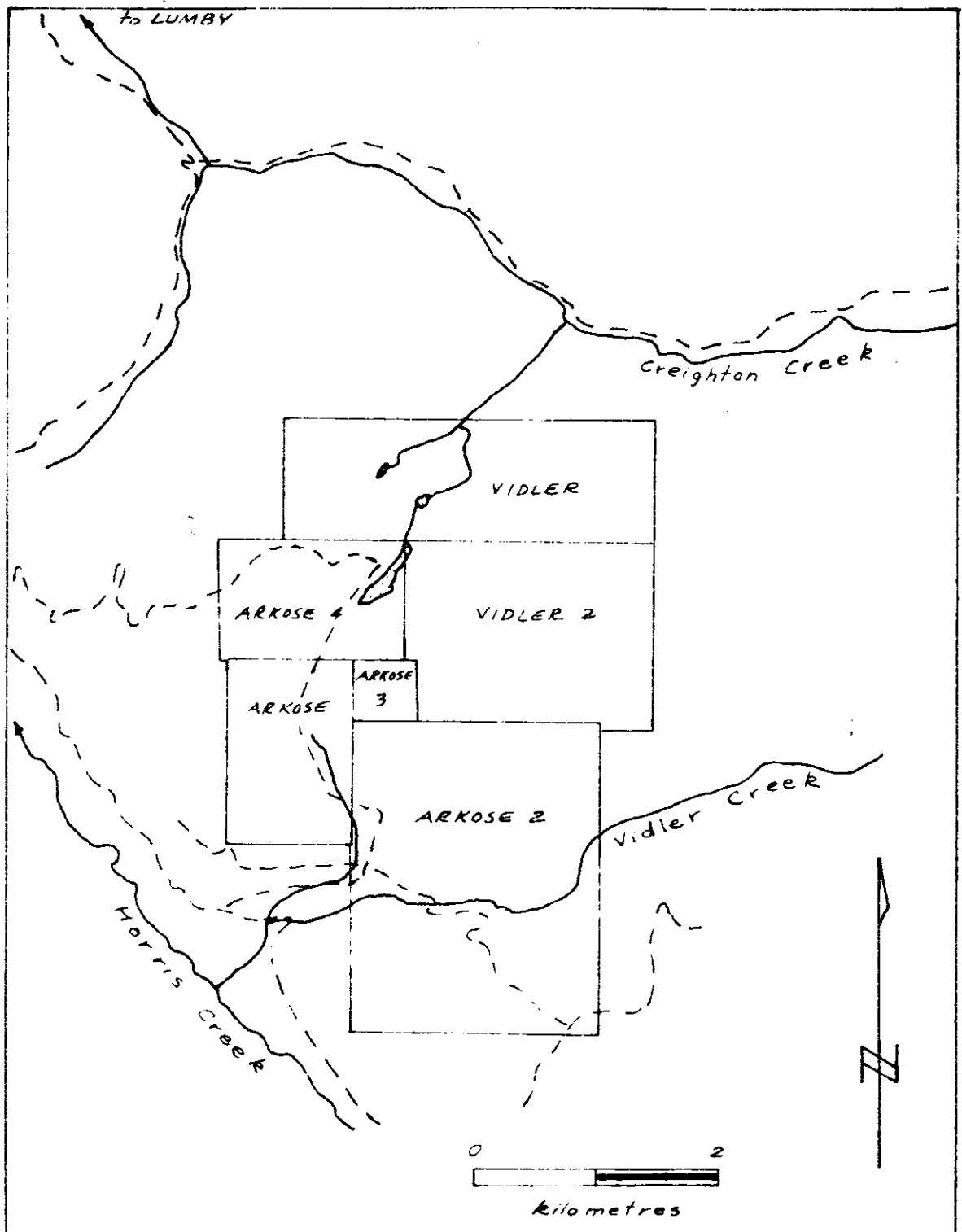
Good road access is available to all parts of the property. The main Harris Creek logging road from Lumby passes close to the southwestern corner of the claim block, and old logging roads extend from the main road to all claims. In dry weather most of these roads are passable to two-wheel drive vehicles.

The area covered by the claims is part of the dissected Okanagan Highlands. Elevations vary from about 900 m above sea level on lower Vidler Creek to over 1500 m at the top of the ridge on the eastern boundary of the claims. The central part of the property is gently to moderately rolling with numerous small lakes, ponds, and swamps occurring in depressions. Tributaries of Harris, Creighton and Vidler Creeks have cut steep gulleys and canyons in the northern and southern parts of the claims, and precipitous cliffs are common along the north boundary.

The area of the property is generally free of snow from mid-April to mid-November.



K.L. DAUGHTRY & ASSOC. LTD	
BANQWEST RESOURCES LTD	
LOCATION MAP	
VIDLER PROPERTY	
FEB./79	FIG. NO. 1



K. L. DAUGHTRY & ASSOC. LTD.		
BANQWEST RESOURCES LTD		
INDEX MAP VIDLER PROPERTY		
VERNON M.D.	B.C.	B2L/2W
SCALE: 1:50,000	DATE: FEB, '79	
DWN. BY: WEG	PROJ. N°: 087	FIG. N°: 2

PROPERTY

The Vidler Creek property presently consists of the ARKOSE, ARKOSE 2 to 4, VIDLER and VIDLER 2 contiguous mineral claims, totalling 57 units (Figure 2). The status of the claims at the date of writing is as follows:

<u>Claim Units</u>	<u>Record Number</u>	<u>Owner of Record</u>	<u>Record Date</u>	<u>Expiry Date</u>
ARKOSE	6	W.R.Gilmour	May 27, 1976	May 27, 1979
ARKOSE 2	<i>X 20</i>	W.R.Gilmour	May 27, 1976	May 27, 1979
ARKOSE 3	1	K.L.Daughtry	June 28, 1976	June 28, 1979
ARKOSE 4	6	K.L.Daughtry	June 28, 1976	June 28, 1979
VIDLER	12	K.L.Daughtry	July 14, 1976	July 14, 1979
VIDLER 2	12	K.L.Daughtry	July 14, 1976	July 14, 1979

This report describes work done on all of the above claims with the exception of VIDLER 2.

HISTORY

Small lode-gold showings have been known in the area southwest of the VIDLER property for many years and the lower part of Harris Creek has been a minor producer of placer gold.

In 1968 Silver Standard Mines Ltd. discovered anomalous radioactivity during a regional airborne survey. They carried out detailed geological mapping, and radiometric surveys in 1969-70 on the western part of the property, then staked as the VAL 1-14 claims. The results of this work suggested to them that uranium mineralization occurred in sedimentary units along the main north-south valley on the western part of the property. They drilled three percussion holes, totalling 280 m, in an attempt to intersect

.....4

the basal part of the sedimentary sequence, but the drill was unable to reach the necessary depth. Anomalous radioactivity was noted in one hole.

The property was staked by the vendors in 1976. In 1976 Chatham Resources Ltd. carried out a programme of soil sampling, scintillometer and Induced Polarization surveys, and drilling. The option was dropped and subsequently optioned to Kerr Addison Mines Ltd. in 1977. Geological mapping of the area east of the valley resulted in an interpretation of a basin of sedimentary deposition lying between rhyolite vents. Kerr Addison drilled several holes to test an area of high radiometric values at the north end of the valley. The results of this drilling suggest the source of the high radioactivity is probably a high content of uranium in primary resistate minerals in the rhyolites and tuffs. Kerr Addison also drilled one deep hole to test the basal sedimentary units, but this hole failed to reach the required depth.

In 1978 the property was optioned to Charter Oil Company Limited who subsequently assigned their option to Banqwest Resources Limited. Grid establishment, soil sampling and a spectrometer survey were carried out. Some water and silt sampling and geological mapping were also done.

.....5



SOIL SURVEY

A 200 m x 50 m grid, totalling 24.4 line km, was established over the west part of the VIDLER property. During follow-up work, a 100 m x 50 m grid was established in one small area.

Soil samples (453) were collected in brown kraft bags and shipped to Bondar-Clegg and Co. Ltd., North Vancouver, for analysis. Samples were analysed for uranium by fluorimetric techniques following hot  $\text{HNO}_3$  extraction (U normal). The soil in much of the area is poorly developed but the "B" horizon was sampled wherever possible.

Most values were less than 1 ppm U, with 31 ppm the highest value obtained (Figure 7). Anomalous areas are shown by values contoured at 2 and 5 ppm (Figure 3). The anomalous area on lines 2N to 2S is possibly related to a spring located just east of the end of the line 2N. The value of 17 ppm on line 20N is possibly related to swampy ground.

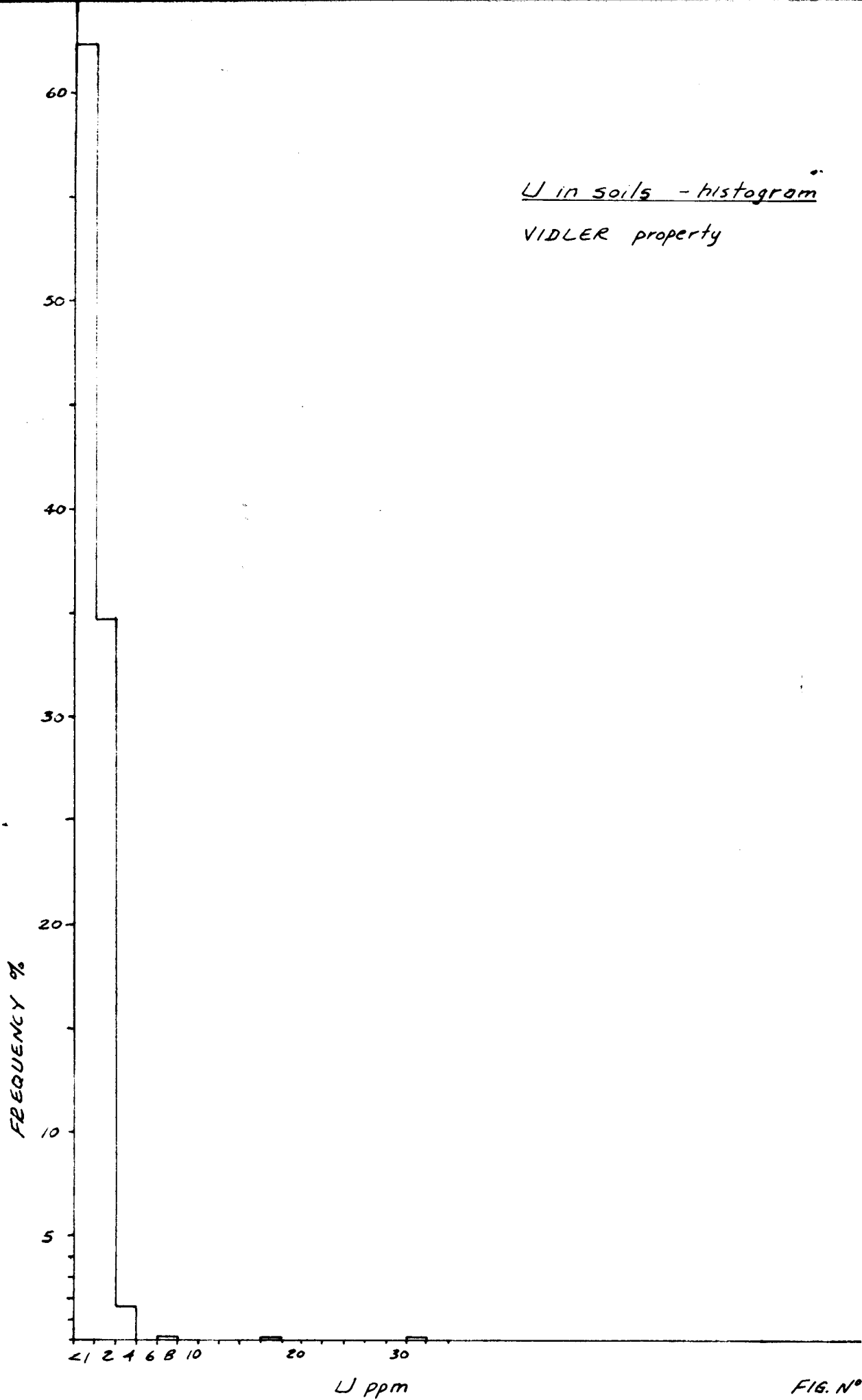


FIG. N°: 7  
FEB. 1979

SPECTROMETER SURVEY

A McPhar TVIA spectrometer survey was carried out over the grid for a total of 20.8 line km (453 stations). Readings were taken at the soil sample sites. The same instrument was used for the complete survey due to problems in correlating results of different instruments of the same model.

Total count readings on channel 1 ( $T_1$ ) ranged from 2,500 to 21,000 c.p.m. (counts per minute). Values contoured at 7,500 and 10,000 c.p.m. outline an arcuate shape (Figure 4) corresponding to rhyolite, fragmental and tuffaceous rock and tuffaceous and carbonaceous sediments. This area was also found to be anomalous by Silver Standard, and is the source of a strong airborne radiometric anomaly. Traverses from basement, basaltic or some sedimentary rocks to the radioactive rocks encountered sudden, sharp increases in total count readings.

Channel 2 ( $T_2$ ) and channel 3 ( $T_3$ ) readings were used in calculating eU (equivalent uranium) and eTh (equivalent thorium) values. Background levels for  $T_2$  and  $T_3$  were obtained from frequency distribution histograms (Figures 8 and 9).

eU values range up to 15 ppm and correspond with medium to fine-grained fragmental, tuffaceous and carbonaceous rocks. Values contoured at 2 and 10 ppm outline anomalous areas (Figure 5). There is a general correlation between eU and U in soil values.

Contoured eTh values (Figure 6) more closely corresponded to the total count anomaly.

channel 2 (T<sub>2</sub>) readings - histogram  
readings at soil sample sites  
McPhar TVIA spectrometer (176-101)  
VIDLER property

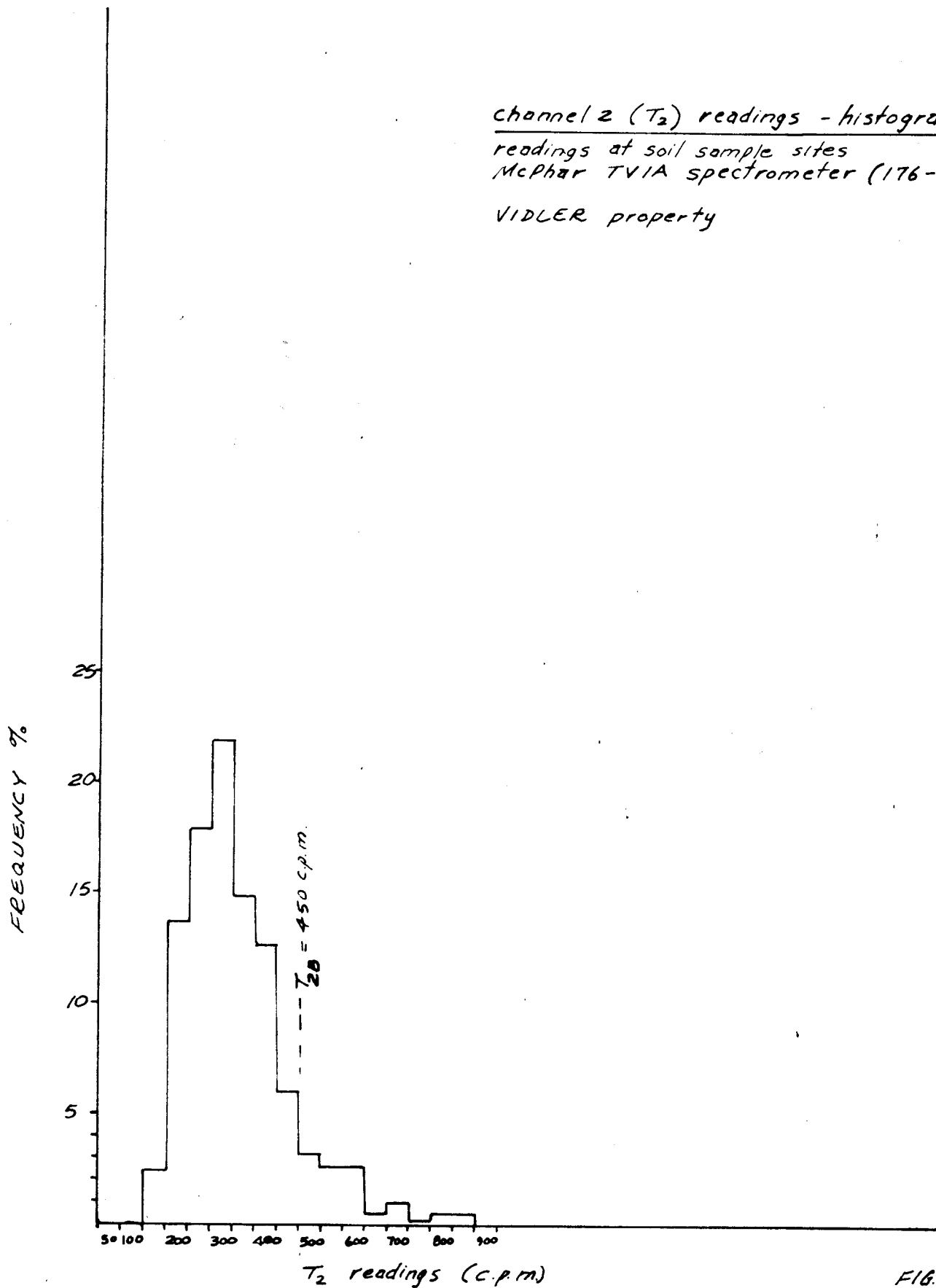


FIG. N<sup>o</sup>. 8  
FEB./79

channel 3 ( $T_3$ ) readings - histogram  
readings at soil sample sites  
McPhar TVIA spectrometer (176-101)  
VIDLER property

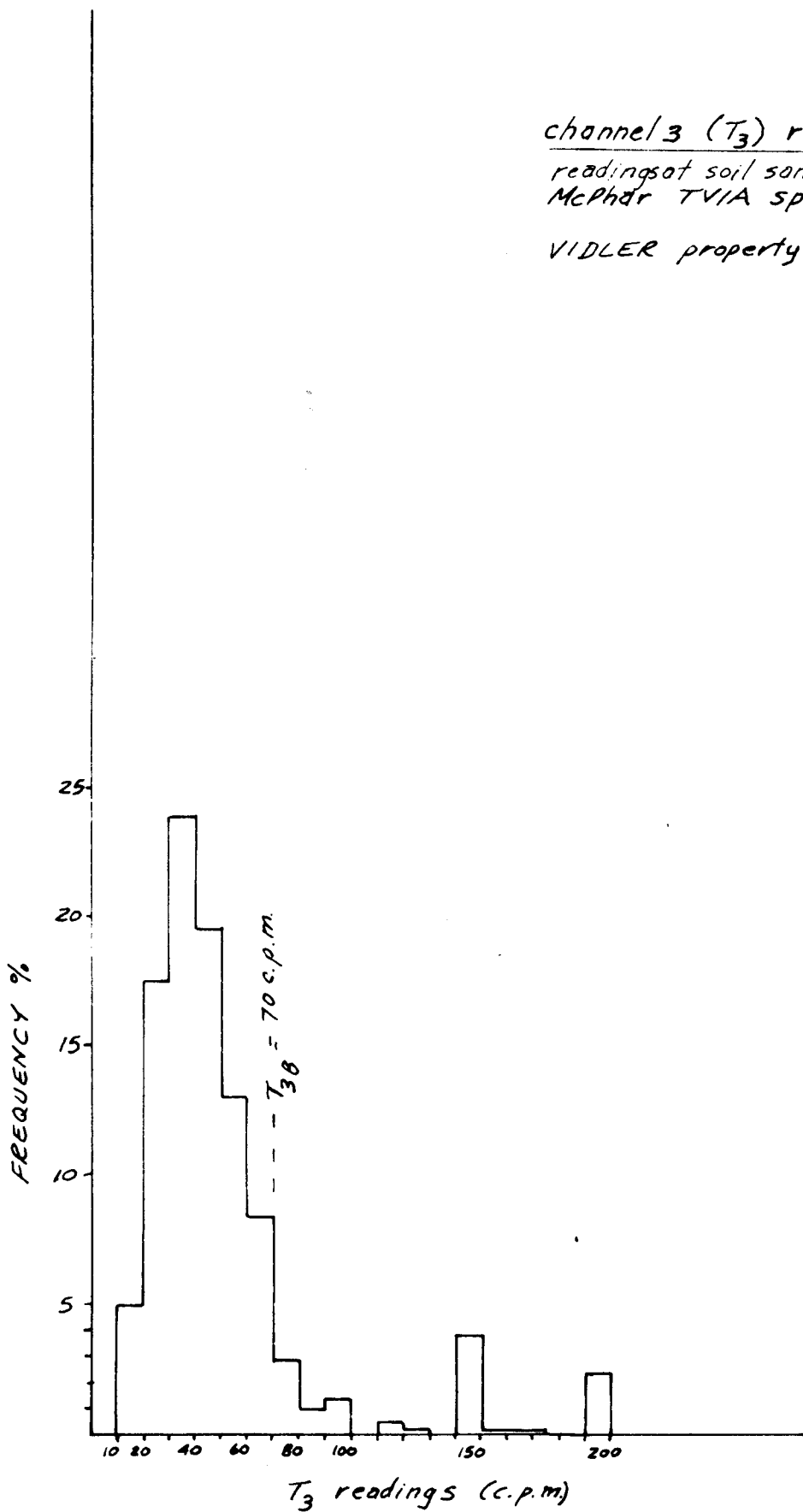


FIG. N<sup>o</sup>. 9  
FEB./79

DISCUSSION AND CONCLUSIONS

The VIDLER property has a geological environment typical of two types of uranium deposits.

The radioactive rhyolite, tuff and sediments on the property provide both a source and a depositional environment for uranium concentrations. Strong anomalous uranium values have been obtained from Eocene ash and carbonaceous volcanic grits and conglomerates in the Penticton area.<sup>1</sup> In Juab County, Utah, uranium deposits occur in similar Tertiary rhyolitic tuffs and tuffaceous sandstone,<sup>2,3</sup> and rhyolites and tuffs containing anomalous uranium values are believed to be the source of secondary uranium deposits.

Basal sediments overlying granitic and metamorphic rocks fit the model of Okanagan-type uranium deposits. Due to cover and faulting, definite basal sediments are not exposed on the VIDLER property but they seem to occur along strike to the south.

No uranium deposits in known Eocene rocks have been found to date in British Columbia. However, the Sherwood Mine in Washington State is in Upper Cretaceous-Lower Tertiary sediments. It appears that rock type and geological setting is more important than age and all Tertiary basal sediments should be evaluated.

The present grid spacing is too broad to allow for detailed delineation and correlation of zones of anomalous radiometrics and geochemical U values.

Total count spectrometer readings were useful as an aid to geological mapping.

eU and eTh values should only be used as an exploration guide, not as a quantitative measurement of U and Th. Disequilibrium problems probably exist.

RECOMMENDATIONS

The following exploration programme is recommended:

- 1.) Testing for uranium in favourable areas of Tertiary rhyolitic, tuffaceous, fragmental rocks and carbonaceous, tuffaceous sediments by drilling.
- 2.) Prospecting of basal Tertiary sediments by drilling.

Respectfully submitted,



W.R. Gilmour

REFERENCES

1. Church, B.N. "Tertiary Stratigraphy and Resource Potential in South-Central British Columbia" in Geological Fieldwork 1978, Ministry of Energy, Mines and Petroleum Resources.
2. Staats, M.H. and Bauer, H.L. Jr "Preliminary Examination of the Uranium Prospect at the Spide No. 1 Claim, Honeycomb Hills, Juab County, Utah," U.S.G.S. preliminary report TEM-165, 1950.
3. Leedom, S.H. and Mitchell, T.P. "Preliminary Study of Favourability for Uranium Resources in Juab County, Utah," Bendix Field Engineering Corporation, February 1973.



STATEMENT OF COSTS

1.) LABOUR

J. Shirley		
13 days @ \$80/day	\$1040.00	
July 21, 24-28, 30-31		
August 1-4, 7		
R. Klansjcek		
1 day @ \$75/day	75.00	
July 21		
B. Blanchard		
10 days @ \$75/day	750.00	
July 26-28, 30-31		
August 1-4, 7		
A. Spiller		
6 days @ \$65/day	390.00	
July 31		
August 1-4, 7		
F. Johnston		
2 days @ \$75/day	<u>150.00</u>	
August 3,4	\$2405.00	\$2405.00

2.) PROFESSIONAL SERVICES

P.P. Nielsen, Geophysicist		
13 days @ \$175/day	2275.00	
July 24-28, 31		
August 1-4, 7		
W.R. Gilmour, Geologist		
7.5 days @ \$150/day	1125.00	
Supervision and report writing		

.....11

K.L.Daughtry, P.Eng. 2 days @ \$200/day	\$ 400.00		
Supervision	<u>          </u>		
	\$3800.00		\$3800.00

3.) TRANSPORTATION

4 x 4 truck

13 days @ \$20/day	\$ 260.00		
1300 km @ 12¢/km	156.00		
Gas & Oil	<u>91.00</u>		

July 21, 24-28, 30-31 August 1-4, 7	\$ 507.00	\$507.00	
--	-----------	----------	--

pickup truck

5 days @ \$15/day	\$ 75.00		
500 km @ 9¢/km	45.00		
Gas & Oil	<u>25.00</u>		

\$ 145.00	<u>\$145.00</u>		
	\$652.00	\$ 652.00	

4.) GEOCHEMICAL ANALYSIS

453 soil samples - analysed for U @ \$3.25/sample			\$1472.25
--	--	--	-----------

5.) EQUIPMENT RENTAL

McPhar TVIA spectrometers			\$ 200.00
---------------------------	--	--	-----------

6.) FIELD SUPPLIES

			\$ 171.53
--	--	--	-----------

7.) OFFICE, PRINTING, SHIPPING

			<u>\$ 256.93</u>
--	--	--	------------------

		TOTAL	<u><u>\$8957.71</u></u>
--	--	-------	-------------------------

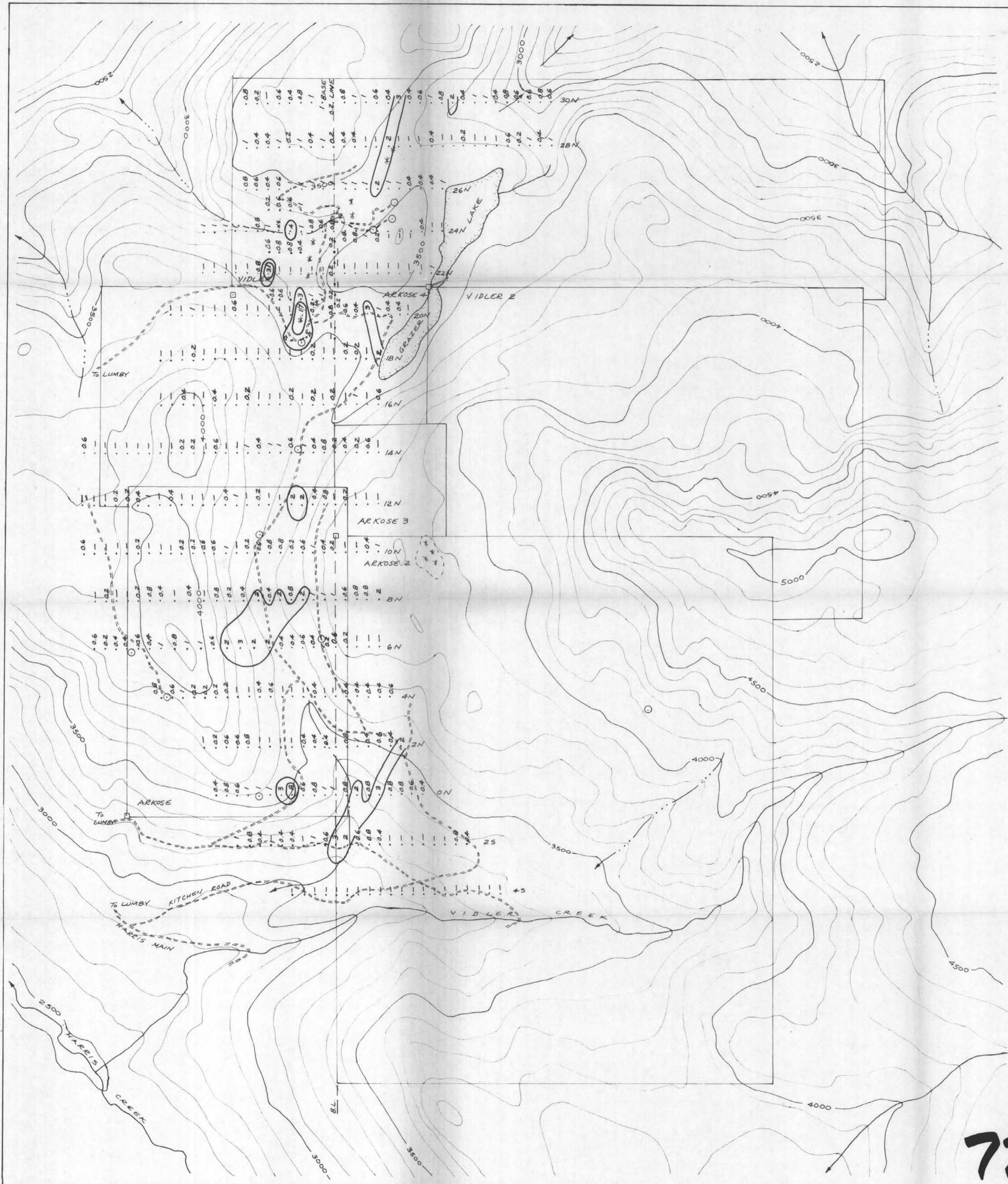
.....12

STATEMENT OF QUALIFICATIONS

I, William R. Gilmour, of 5300 Pleasant Valley Road, Vernon, B.C.  
VIT 4E7, do hereby certify that:

1. 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 and the  
Yukon Territory for 10 years.
3. 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.
5. This report is based upon knowledge of the VIDLER property gained  
during exploration programmes during 1977 and 1978.
6. I hold a beneficial interest in the VIDLER property.

  
W.R. Gilmour

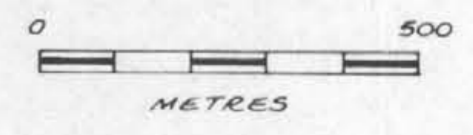


**LEGEND**

- .2 Uppm
- U < 0.2ppm

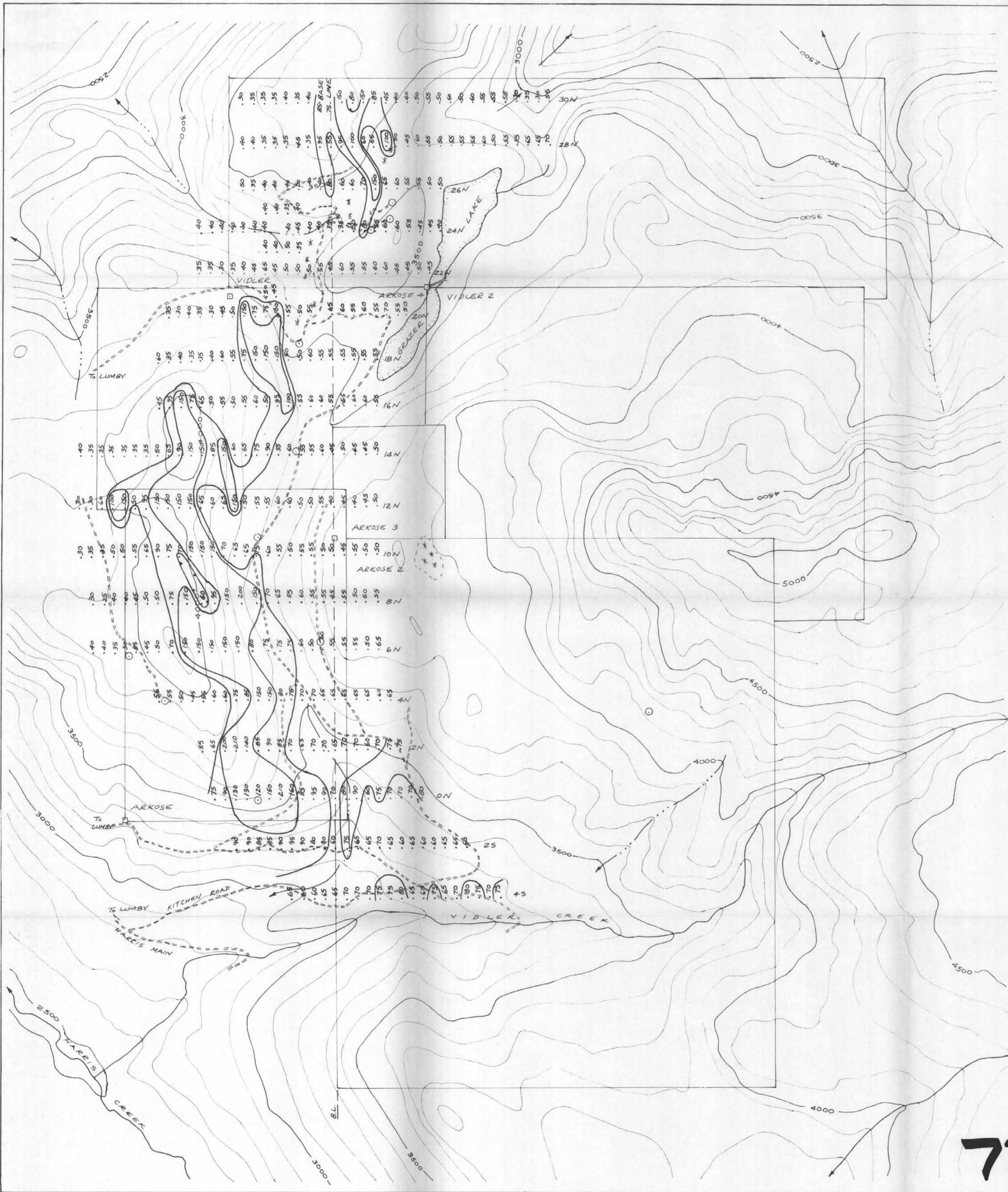
contoured at 2.5 ppm U  
 analysis: fluorimetric  
 extraction: hot HNO<sub>3</sub>

N.B. BASE MAP AFTER GOV'T 1:50,000 MAP  
 TOPOGRAPHIC CONTOURS IN FEET A.S.L.



K. L. DAUGHTRY & ASSOC. LTD.		
BANQWEST RESOURCES LTD		
GEOCHEMICAL SURVEY URANIUM IN SOILS VIDLER PROPERTY VERNON M.D. B.C.		
SCALE: 1:10,000	DATE: FEB/79	
DWN. BY: WRG	PROJ. N°: 087	FIGURE N°: 3

**7276**



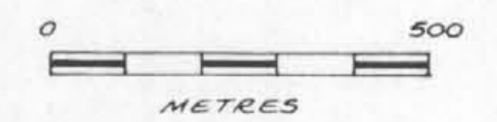
**LEGEND**

.70 7000 c.p.m.  
T<sub>i</sub> readings in hundreds

Contoured at 7500, 10000 c.p.m.

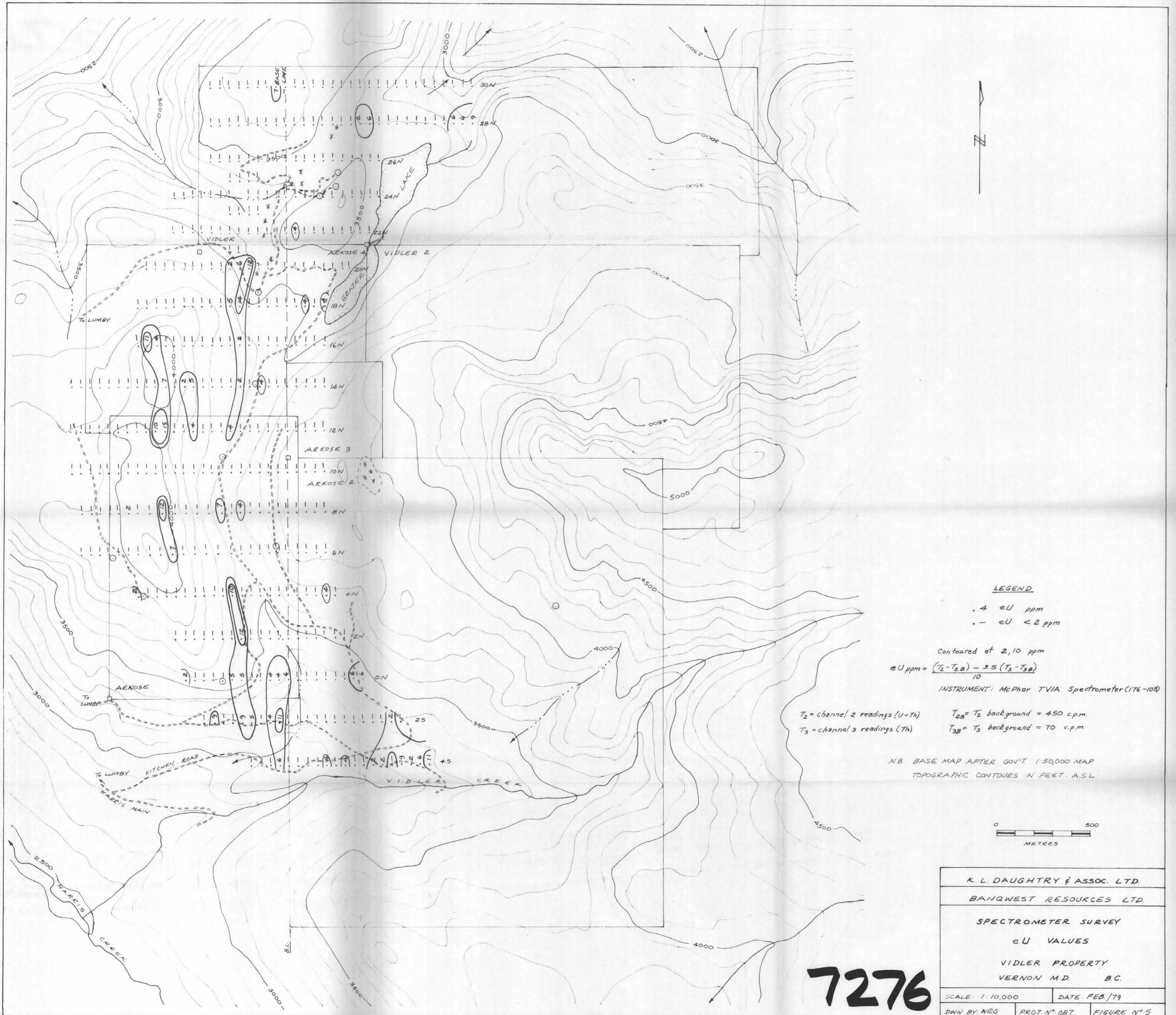
INSTRUMENT: McPhar TVIA Spectrometer (176-103)

N.B. BASE MAP AFTER GOV'T 1:50,000 MAP  
TOPOGRAPHIC CONTOURS IN FEET A.S.L.



K. L. DAUGHTRY & ASSOC. LTD.	
BANQWEST RESOURCES LTD.	
SPECTROMETER SURVEY	
TOTAL COUNT READINGS	
VIDLER PROPERTY	
VERNON M.D. B.C.	
SCALE: 1:10,000	DATE: FEB/79
DWN. BY: WRG	PROJ. N°: 087
FIGURE N°: 4	

**7276**



**LEGEND**

- .4 eU ppm
- eU < 2 ppm

Contoured at 2,10 ppm

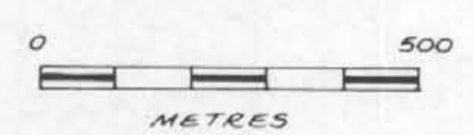
$$eU \text{ ppm} = \frac{(T_2 - T_{20}) - 3.5(T_3 - T_{30})}{10}$$

INSTRUMENT: McPhar TVIA Spectrometer (176-103)

$T_2$  = channel 2 readings (U+Th)  
 $T_3$  = channel 3 readings (Th)

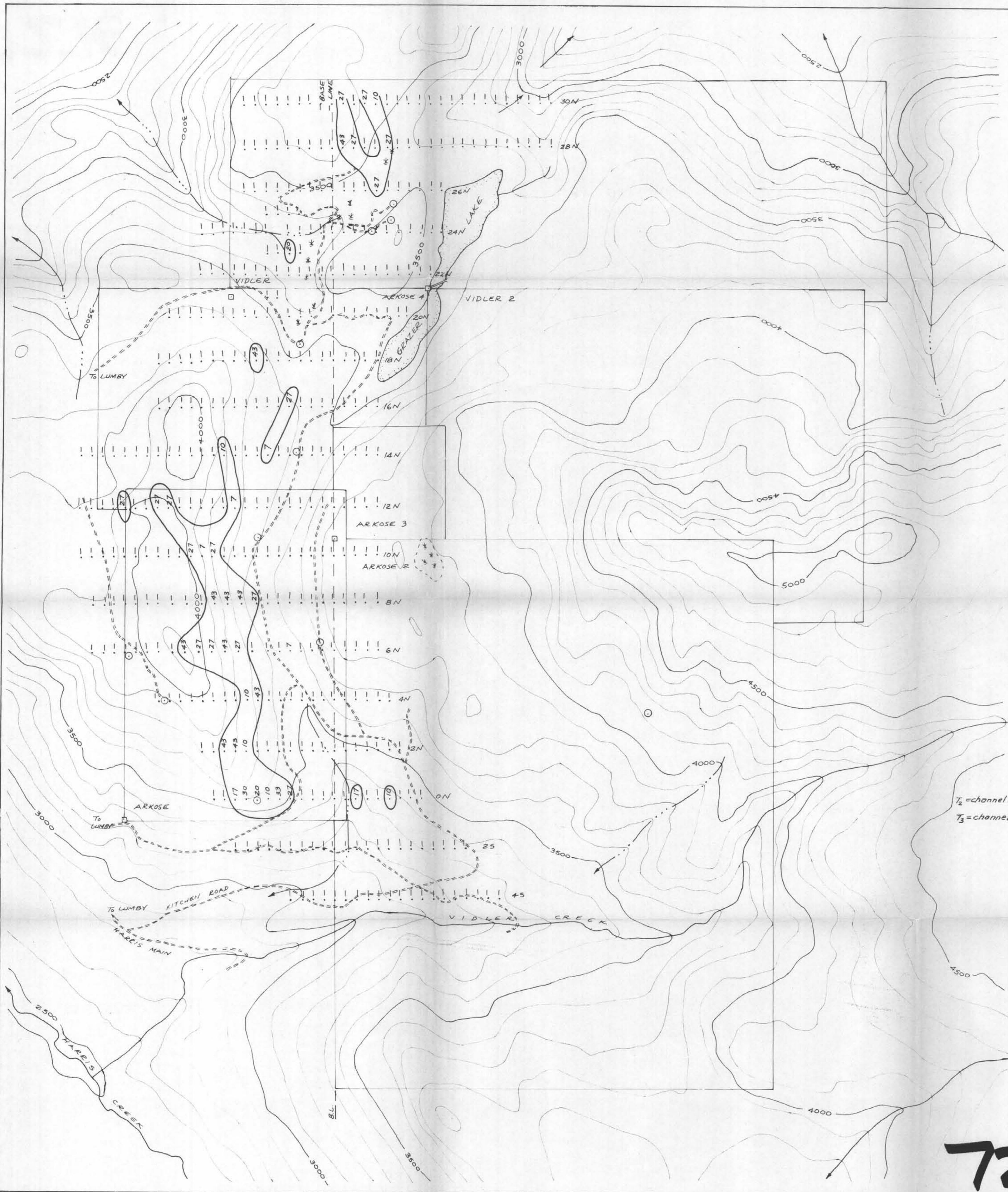
$T_{20}$  =  $T_2$  background = 450 c.p.m.  
 $T_{30}$  =  $T_3$  background = 70 c.p.m.

N.B. BASE MAP AFTER GOV'T 1:50,000 MAP  
 TOPOGRAPHIC CONTOURS IN FEET. A.S.L.



K. L. DAUGHTRY & ASSOC. LTD.		
BANQWEST RESOURCES LTD.		
SPECTROMETER SURVEY		
eU VALUES		
VIDLER PROPERTY		
VERNON M.D. B.C.		
SCALE: 1:10,000	DATE FEB/79	
DWN BY NRG	PROJ. N° 087	FIGURE N° 5

**7276**



**LEGEND**

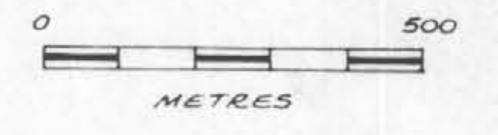
- .27 eTh ppm
- eTh < 4 ppm

INSTRUMENT: McPhar TVIA Spectrometer (176-103)

$T_2$  = channel 2 readings (U+Th)       $T_{2B}$  =  $T_2$  background = 450 c.p.m.  
 $T_3$  = channel 3 readings (Th)       $T_{3B}$  =  $T_3$  background = 70 c.p.m.

$$eTh \text{ ppm} = \frac{T_3 - T_{3B}}{3}$$

N.B. BASE MAP AFTER GOV'T. 1:50,000 MAP  
 TOPOGRAPHIC CONTOURS IN FEET A.S.L.



K. L. DAUGHTRY & ASSOC. LTD.		
BANQUEST RESOURCES LTD.		
SPECTROMETER SURVEY		
eTh VALUES		
VIDLER PROPERTY		
VERNON M.D. B.C.		
SCALE: 1:10,000	DATE FEB/79	
DWN BY: WRG	PROJ. N°: 087	FIGURE N°: 6

**7276**