



TYPE OF REPORT/SURVEY(S) <i>Geochemical / Geophysical</i>	TOTAL COST <i>7329.66</i>
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AUTHOR(S) *C. E. Fipke* SIGNATURE(S) *C. E. Fipke*

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED *July 10 / 90* YEAR OF WORK *89-90*

PROPERTY NAME(S) *W. Albert River Group - Albert River W. Property*

COMMODITIES PRESENT *W-Cu-Au - Rare Earths & Y*

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN

MINING DIVISION *Golden B.C. Mining Division* NTS *82 J/12*

LATITUDE *50° 38' N* LONGITUDE *115° 35' W*

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that form the property [Examples: TAX 1-4, FIRE 2 (12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified Mining Lease ML 12 (claims involved)]:

Barbi 721 (18 units), Ash 720 (20 units), Zinem 1396 (5 units), Rachel 1757 (4 units)

OWNER(S)
(1) *Dia Met Minerals Intl* (2)

LOG NO: <i>10-18</i>	RD.
ACTION:	
FIRE NO:	

MAILING ADDRESS
1675 Powick Road Kelowna, B.C. V1X-4L1

OPERATOR(S) (that is, Company paying for the work)
(1) (2)

GEOLOGICAL BRANCH ASSESSMENT REPORT

MAILING ADDRESS
as above

20,369

SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size, and attitude):
A ± 3 km long zone of quartz veining & dyking in fills the axial cleavage zone of a folded sequence of Ordovician to Cambrian argillaceous limestones & shales. The zone accompanied by localized qtz-sensitized pyrite & propylitic alteration is associated with schistite-copper-gold-rare earth mineralization reflected by heavy mineral geochemistry. Ground magnetic survey indicates the presence of a buried cupola flanked by steam zones.

REFERENCES TO PREVIOUS WORK
K.E. Northcote 1983, Fipke 1985, Fipke & Suggitt 87, D.K Norris 87, etc. Blusson 1982

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	COST APPORTIONED
GEOLOGICAL (scale, area)	<p style="font-size: 2em; text-align: center;">2020</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">2020</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">2020</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">2020</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">2020</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">2020</p>		
Ground			
Photo			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for)			
Soil			
Silt			
Rock			
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralogic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY/PHYSICAL			
Legal surveys (scale, area)			
Topographic (scale, area)			
Photogrammetric (scale, area)			
Line/grid (kilometres)			
Road, local access (kilometres)			
Trench (metres)			
Underground (metres)			

NATIONAL ARCHIVES
 100-101
 BARBI 721

TOTAL COST 7329.66

FOR MINISTRY USE ONLY	NAME OF PAC ACCOUNT	DEBIT	CREDIT	REMARKS:
Value work done (from report)				
Value of work approved				
Value claimed (from statement)				
Value credited to PAC account				
Value debited to PAC account				
Accepted Date	Rept. No.			Information Class

INTRODUCTION

The W. Albert River group consists of 4 contiguous claims totalling 47 units. The four claims known as the Ash, Barbi, Rachel and Zircon occur in the Golden Mining Division and are 100% owned by Dia Met Minerals Ltd. Geologist C.E. Fipke contracted Norm's Manufacturing & Geoservices Ltd. of Kelowna, BC to complete a thorium scintilometer survey plus geochemical rock and heavy mineral sampling in the vicinity of previous high (to 50,000 ppb) Au and high rare earth (Ce-La-Th) heavy mineral anomalies.

It is possible that an alkaline intrusion containing high (Ce-La-Th) rare earths intruding the Palaeozoic marine carbonate host rocks outcropping on the claims may be producing an auriferous skarn zone. As a consequence rock sampling and follow up heavy mineral geochemical sampling as well as a (Th) scintilometer survey were completed to define the source of the gold detected in previous anomalous heavy mineral samples collected in the north part of the claim block.

Location, Access, Topography

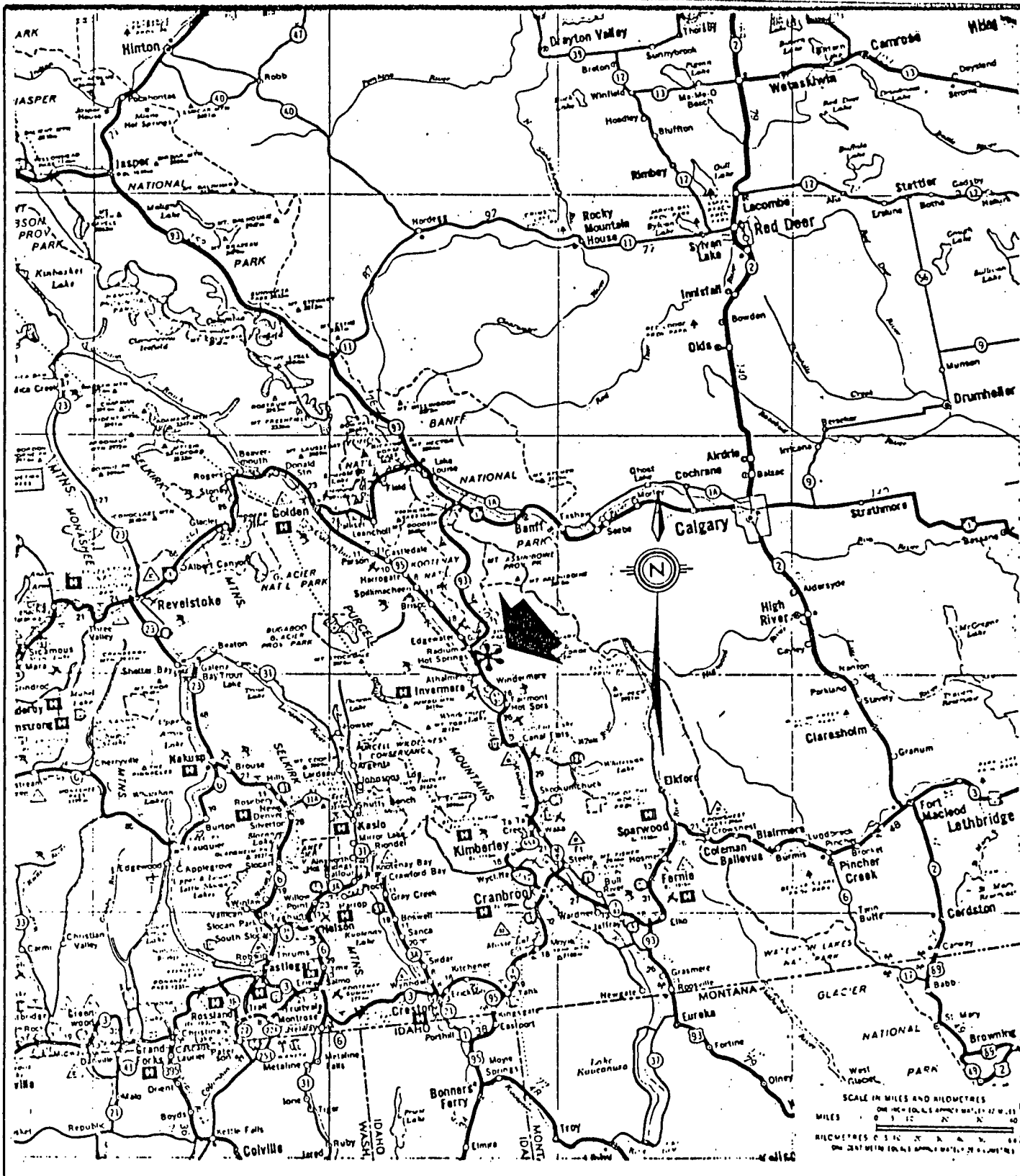
The BARBI, ASH, ZIRKON and RACHEL claims are all located Latitude 50 38' N, Longitude 115 35'W; NTS 82J/12E in the Golden Mining Division, approximately 75 kilometres east of Radium, BC. The claims lie near the west headwaters of Albert River between Tangle Peak and Albert River (Figures 1 & 2).

The claims are accessible by car on 40 kilometres of good logging access road leaving the east side of Sinclair Canyon Highway #93 at a point 4 kilometres north of Swede Creek. The logging system leads southeasterly, crossing the Kootenay River at Yearling Creek, to Palliser River, a distance of about 20 kilometers. The road leads easterly about 8 kilometers to the Albert River and then northerly along the river 12 kilometers to the W. Albert River Group property.

There is also a poorly maintained logging road that branches up Cochran Creek about 4 kilometers south of where the main logging road crosses the Kootenay River. Difficult four wheel drive access is possible for 11 kilometers up Cochran Creek to a point about 2 kilometers west of the Zircon claim. The said point is about 29 kilometers from Highway #93 and about 15 kilometers from hydro power lines.

The northern claims was accessed by driving from the Kootenay River junction 12 kilometers northwesterly up the good gravel Cross River road. One then proceeds southwesterly for 12 kilometers over a poorly maintained logging road. Once over Miller Pass one proceeds southerly for an additional two kilometers over another poorly maintained logging road to the central part of the Barbi claim.

The east side of the claim block is on the west side of Albert River at an elevation of 1300 metres and rises steeply to the west to over 2600 meters. The central portion of the property is difficult to traverse because of steep topography and dense bush.



**DIA MET MINERALS LTD
INDEX MAP
W. ALBERT RIVER CLAIM GROUP**

82J/12E

50° 37' N 115° 35' W

GOWER, THOMPSON & ASSOCIATES
Drawn J.F.B.

K.E. NORTHCOTE AND ASSOCIATES LTD
April 30 1983

Figure 1

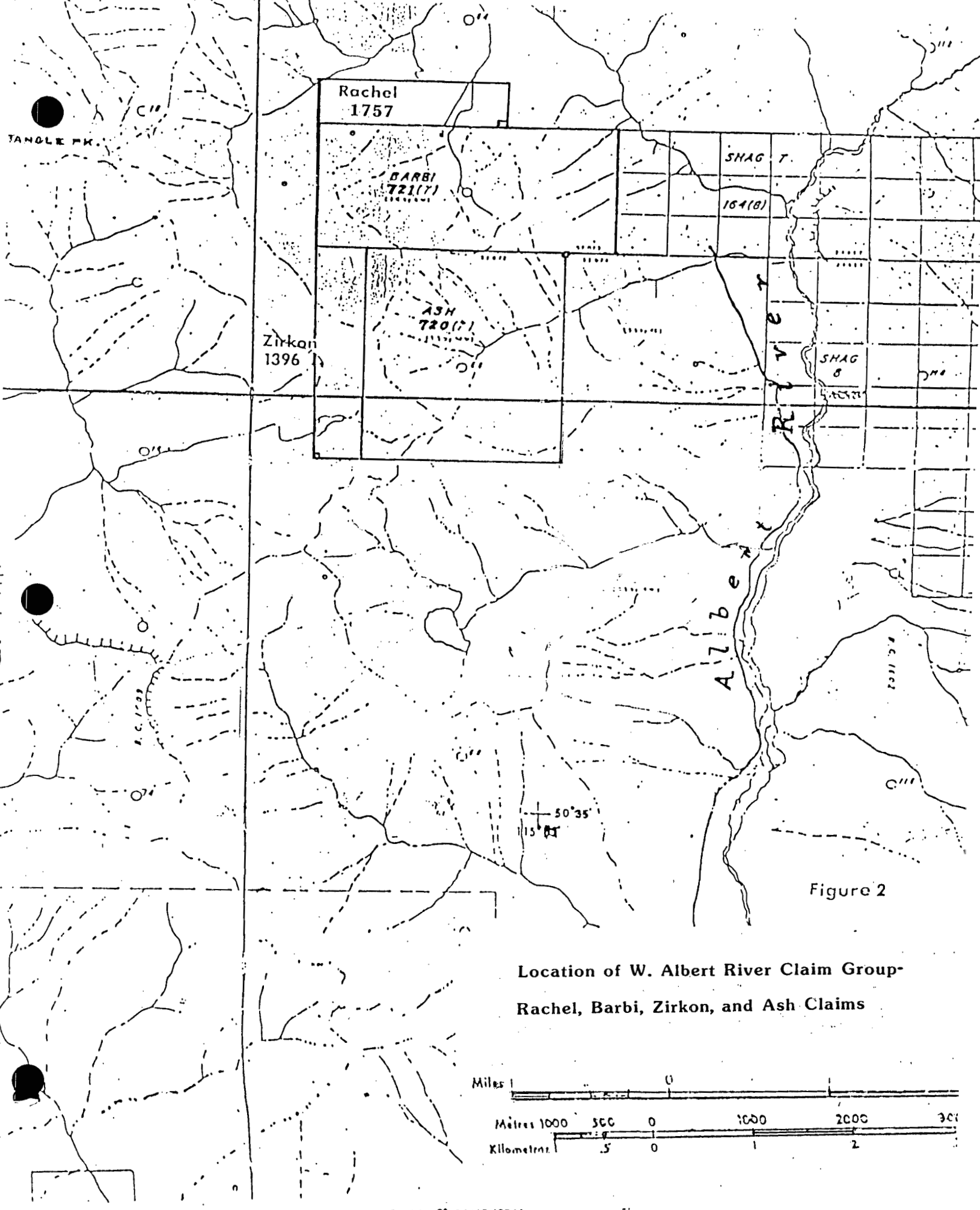
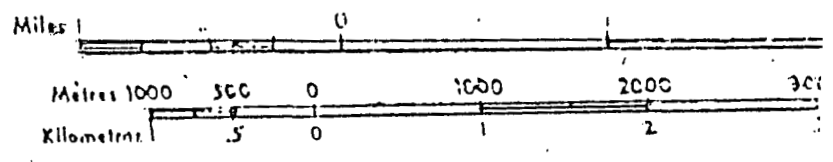


Figure 2

Location of W. Albert River Claim Group
 Rachel, Barbi, Zirkon, and Ash Claims



SUMMARY OF PREVIOUS ECONOMIC GEOLOGY AND RESULTS

The Albert River claims contain a + 3 km zone of intense quartz veining and dyking mostly along N \bar{N} W trending axial plane cleavages crosscutting a sequence of folded Cambrian to Ordovician marine limestones and shales. The zone is geographically located at the eastern edge of Cordilleran intrusive activity within a belt of gold bearing alkalic monzonite intrusives that trend S S E into Montana. Geologic mapping within the claims area has been completed by S. Blusson (1982), C. Fipke (1984), and D.K. Norris (1987).

The 3 km zone of silicification is associated with a central area of intensely anomalous scheelite and moderately anomalous Cu +/- Au & Pb heavy mineral geochemistry surrounded by strongly anomalous Cu & Pb, moderately anomalous Au-As & Zn and weakly anomalous Mo. The area of intensely anomalous scheelite is coincident with two base station corrected magnetic highs postulated by geophysist P. Nielsen to represent possible skarn deposits near the contact of +/- 550 m diameter buried intrusive cupola. This area contains localized quartz - sericite +/- andalusite alteration. A large block of intensely scheelite mineralized marble was located by prospecting directly downslope from one of the ground magnetic highs.

Diamond drilling of the central magnetic anomalies was postponed by Dia Met when even more intense scheelite heavy mineral geochemical values from 6 to 12 % W accompanied by some strong gold values were identified within and downslope from the northern portions of the +/- 3 km zone of intense silicification.

The north anomalous area has been covered by two base station corrected ground magnetic surveys plus some localised stream and talus heavy mineral sampling but no strong magnetic drill target areas have been identified. The heavy mineral sampling has indicated that the northernmost part of the northern anomaly is strongly anomalous in Ce - La rare earths accompanied by weak to moderate Au, Y and Th with weak or unanomalous W. Progressing southward gold values increase to 50,000 ppb and then abruptly decrease with increasing W (scheelite) mineralization.

Present Work

1. Introduction

The foregoing geochemical zonation suggests that a rare earth anomalous alkaline intrusion could be in contact with a zone of Au and W skarn mineralization along the northern zone of silicification. In view of the previous undefinitive ground magnetic surveys, a ground Th survey was tested as a method of possibly defining a rare earth and Th bearing intrusive contact. In addition, heavy mineral sampling was completed along the drainage containing 50,000 ppb Au with the objective of defining the source area of anomalous gold values.

Prospector B. Carr located three areas with common quartz and pyrite mineralization in the vicinity of the highly gold anomalous

area of the northern zone of silicification. B. Carr collected ten mineralized rock talus float samples from the creek previously analyzing 50,000 ppb Au and five mineralized rock outcrop samples as well as a heavy mineral talus sample, all for gold analysis from the three locales. (Figure 4)

Methodology

2. Th - Scintolometer Geophysical Survey

Geotechnicians B. Carr and D. Tomelin constructed E N E trending lines at 100 metre spacings in the vicinity of the previous ground magnetic survey within the northern anomalous area. These lines trend in the vicinity and up slope from the areas of geochem high Ce-La-Th and Au.

Readings were recorded every 25 meters using the T3 x 10 (total Thorium) scale of a portable TV-1A Scintolometer. The instrument was periodically tested utilizing a high Th artificial source to test correct operation status.

3. Rock Sample Geochemistry

Ten rock float-talus samples labeled MP 01 (1 to 10) were collected in the small creek previously yielding the highest 50,000 ppb Au heavy mineral geochemical value. An additional five outcrop samples (labelled line 7 + 75W 200S) were collected from an outcrop located on line 200S on the ridge upslope from the high Au anomalous creek (Figures 3 & 4). The foregoing quartz and pyrite mineralized samples were sawn in half. One half of each sample was then submitted to Bondar-Clegg laboratories in Vancouver where the samples were pulverized to -150 mesh. A \pm 10 gram sample of each pulverized rock was geochem analyzed for Au + 33 using delayed INAA neutron activation techniques.

4. Heavy Mineral Follow-up Sampling

Five \pm 10 kg samples of -20 mesh talus (labelled AR 1-5) were collected by technicians B. Carr and M. Fipke at 100 meter intervals (uncorrected for slope) along the creek previously yielding the highest 50,00 ppb Au geochem response. An additional \pm 10 kg -20 mesh talus sample was collected on line 200S at station 150W. (See Figures 3 & 4.)

The foregoing six samples were washed , wet sieved, jigged and submitted to TBE and M.I. heavy liquid separations at the C.F.M. Research lab in Kelowna, B.C. Here the heaviest fractions were submitted to magnetic - paramagnetic and non magnetic electromagnetic separations and the resultant heavy non magnetic concentrates submitted to Bondar-Clegg laboratories in Vancouver for encapsulation and geochem analysis for Au +33 using delayed neutron activation (INAA) techniques.

RESULTS

1. Geophysical

Figure 3 indicates that no Th values above the 100 background value were detected by the TV-1A portable scintilometer.

2. Rock Geochemistry

The geochem results listed on pages 10-12 indicate that no substantially anomalous Au - W nor rare earths were detected in any of the 15 talus and outcrop samples analyzed. There appears to be weak 9 and 13 ppb Au in rock talus samples of recrystallized argillaceous limestone (MP1 and MP4) collected in the stream containing the highest anomalous Au geochemistry.

3. Heavy Mineral Geochemistry

The geochem results of pages 13-15 indicate that two of the six bulk concentrated samples are highly anomalous ($>10,000$ ppb) in gold. The remaining four samples yielded moderate (50 to 255)x geochemical contrast to the estimated regional threshold for Au for the area based on 554 analogous heavy non magnetic concentrate results. These Au analyses are plotted with previous gold analyses on Figure 5.

Pages 13-15 illustrate that the highly anomalous gold results are in general accompanied by moderate to high rare earth (Ce & La) values and low to moderate Th responses. Results of W are unanomalous to weakly anomalous (to 2.4 x the regional threshold of 220 ppm W based on 610 analogous results).

CONCLUSIONS

- 1) A more sensitive geophysical method with lower detection levels is necessary to detect the low to moderate levels of Thorium present in heavy mineral concentrates from the area.
- 2) It is possible that a recrystallized argillaceous limestone unit outcropping upstream from sample site MP 01 may contain gold values detected in highly Au anomalous heavy mineral concentrates.
- 3) The high $>10,000$ ppb gold values appear to be originating from stratigraphy in the upper portion of the high gold anomalous drainage. (Figure 5)

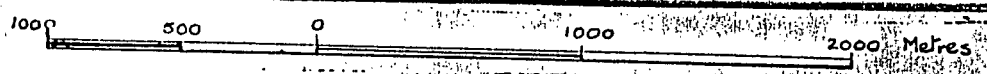
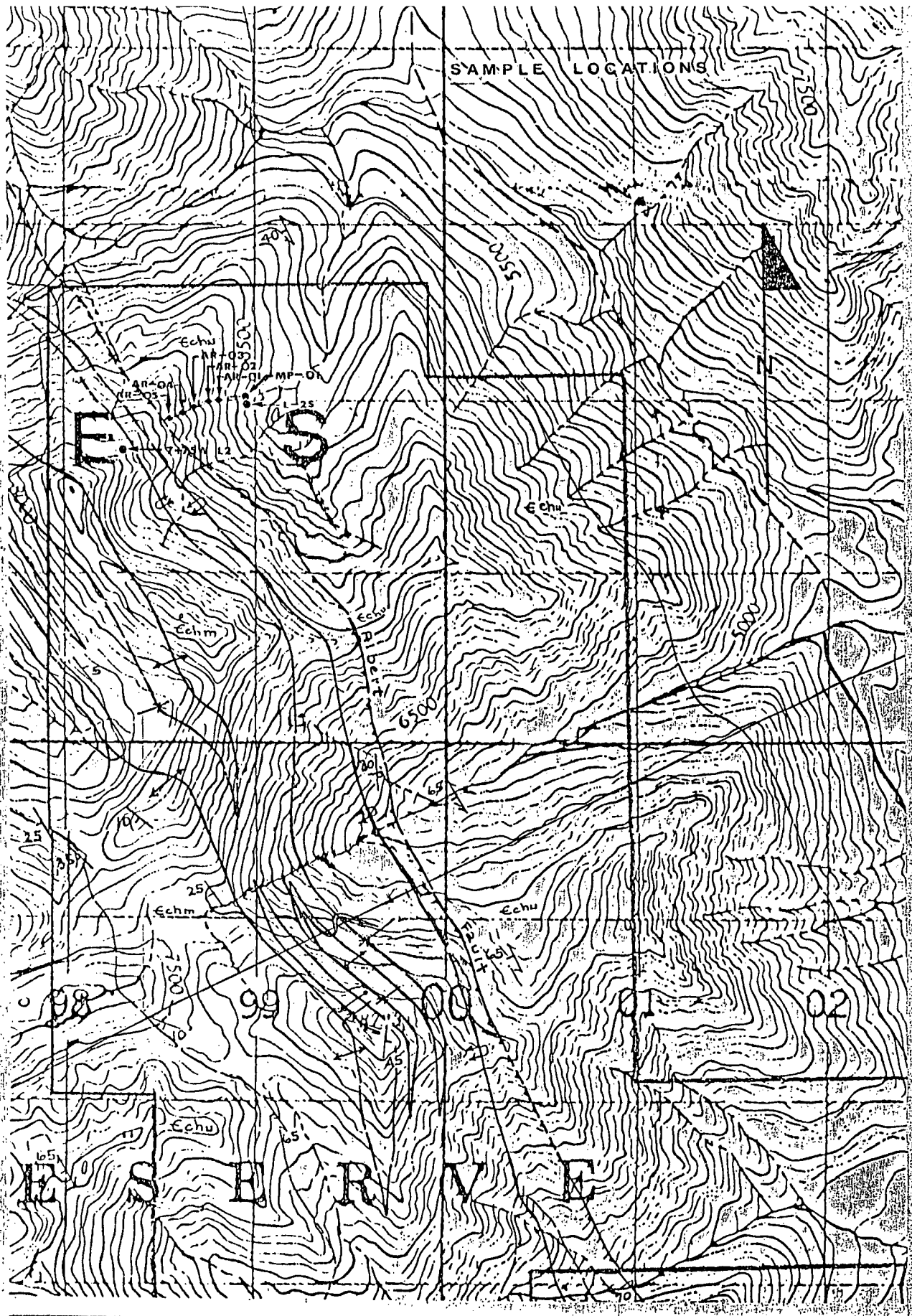
RECOMMENDATIONS

Rock chip sampling outcrop areas for Au and heavy mineral talus sampling and subsequent trenching in covered areas are tools that should be utilized to detect the sources of the outstandingly high heavy mineral gold anomalies.

The gold contents of concentrates yielding >10,000 ppb results should be analyzed more accurately so that values in excess of 10,000 ppb are determined.

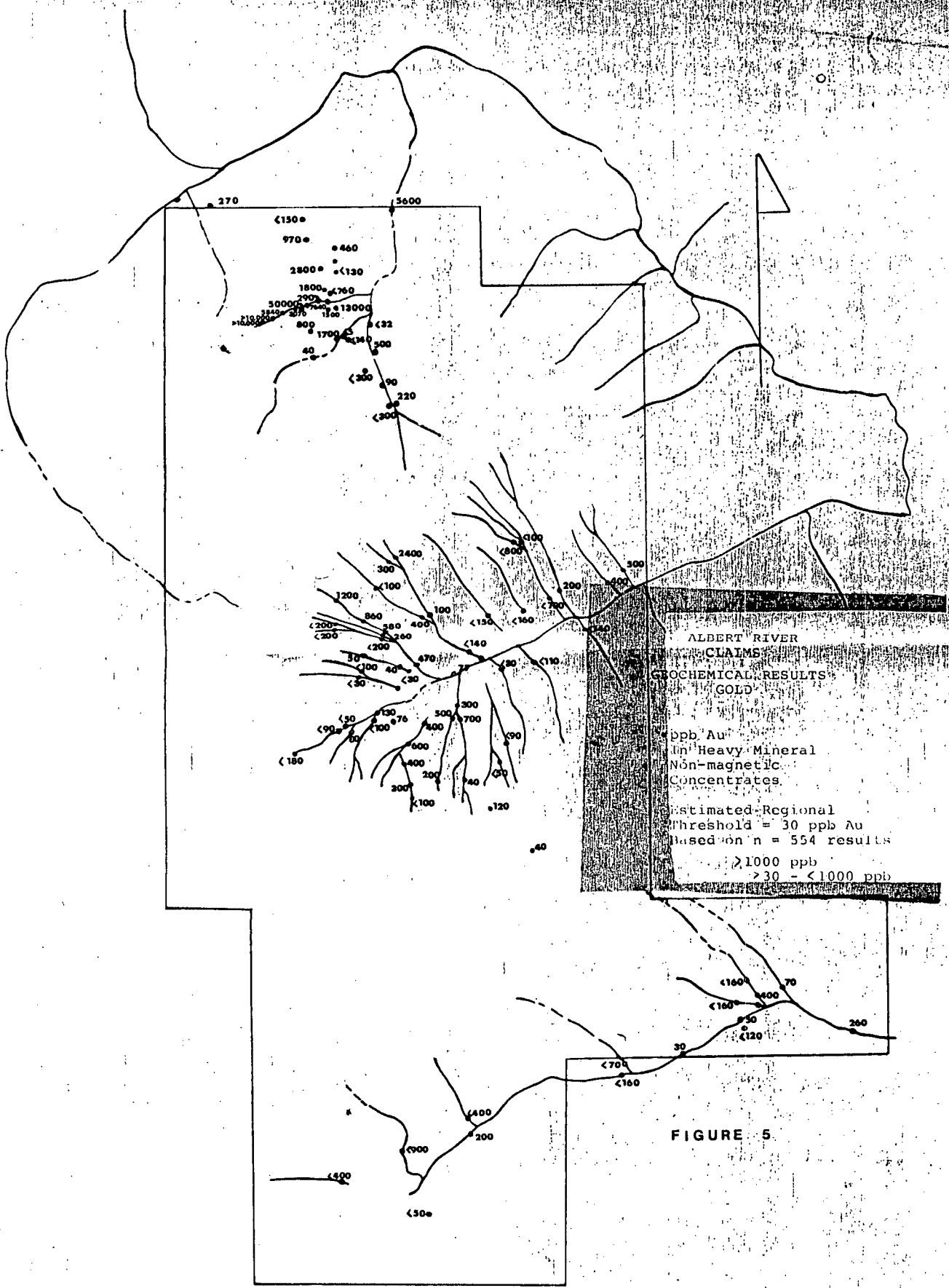
Once the source of the gold anomalies (which could perhaps be recrystallized argillaceous limestone) is discovered, geologic mapping and rock sampling will probably be needed to establish the significance of the gold mineralized zone.

If warranted, this gold anomalous zone could be drilled at the same time as the two drill targets within the central anomalous zone of the claims.



ALBERT RIVER CLAIMS

FIGURE 4



ALBERT RIVER
CLAIMS
GEOCHEMICAL RESULTS
GOLD

• ppb Au
• In Heavy Mineral
Non-magnetic
Concentrates

Estimated Regional
Threshold = 30 ppb Au
Based on n = 554 results

> 1000 ppb
> 30 - < 1000 ppb

FIGURE 5

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 27-AUG-90

REPORT: V90-01561.0

PROJECT: NONE GIVEN

PAGE 1A

SAMPLE NUMBER	FI FMENT UNITS	Au PPB	Tr PPB	Ag PPM	Zn PPM	Mo PPM	Ni PPM	Co PPM	Cd PPM	As PPM	Sb PPM	Fe PCT	Se PPM
R2 MP-01-1		9	<100	<5	<200	<2	<50	<10	<10	86	0.5	1.0	<10
R2 MP-01-2		<5	<100	<5	<200	<2	<50	24	<10	20	0.4	4.2	<10
R2 MP-01-3		<5	<100	<5	<200	<2	<50	<10	<10	5	0.2	0.8	<10
R2 MP-01-4		13	<100	<5	<200	<2	<50	<10	<10	80	<0.2	<0.5	<10
R2 MP-01-5		<5	<100	<5	<200	<2	<50	<10	<10	7	<0.2	0.9	<10
R2 MP-01-6		<5	<100	<5	<200	<2	<50	13	<10	7	0.5	1.2	<10
R2 MP-01-7		<5	<100	<5	<200	<2	<50	<10	<10	5	<0.2	<0.5	<10
R2 MP-01-8		<5	<100	<5	<200	<2	<50	21	<10	11	0.5	2.0	<10
R2 MP-01-9		<5	<100	<5	<200	2	<50	<10	<10	7	0.3	1.0	<10
R2 MP-01-10		<5	<100	<5	<200	<2	<50	<10	<10	4	<0.2	<0.5	<10
R2 MP-01-11		<5	<100	<5	<200	<2	<50	<10	<10	3	<0.2	<0.5	<10
R2 7+75W L2-R-1		<5	<100	<5	<200	<2	<50	<10	<10	3	<0.2	0.6	<10
R2 7+75W L2-R-2		<5	<100	<5	<200	11	<50	17	<10	7	0.7	1.6	<10
R2 7+75W L2-R-3		<5	<100	<5	<200	<2	<50	<10	<10	4	0.4	1.3	<10
R2 7+75W L2-R-4		<5	<100	<5	<200	5	<50	<10	<10	5	0.4	0.9	<10

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PAGE 1C

SAMPLE NUMBER	FI MFNT UNITS	Lu PPM	Sc PPM	Hf PPM	Ta PPM	Th PPM	U PPM	Na PCT	Br PPM	Rb PPM	Zr PPM
R2 MP-01-1		<0.5	0.6	<2	<1	1.0	0.7	0.16	<1	<10	<500
R2 MP-01-2		<0.5	4.3	<2	<1	2.9	1.2	0.13	<1	51	<500
R2 MP-01-3		<0.5	2.5	<2	<1	3.8	1.1	0.56	<1	38	<500
R2 MP-01-4		<0.5	1.5	<2	<1	1.4	1.1	0.21	<1	18	<500
R2 MP-01-5		<0.5	1.7	<2	<1	2.8	0.8	0.27	<1	27	<500
R2 MP-01-6		0.5	7.1	5	1	16.0	2.7	0.59	<1	100	<500
R2 MP-01-7		<0.5	4.7	<2	<1	<0.5	<0.5	0.09	<1	<10	<500
R2 MP-01-8		<0.5	7.3	<2	<1	6.5	1.8	0.29	<1	85	<500
R2 MP-01-9		<0.5	<0.5	<2	<1	<0.5	<0.5	0.07	<1	<10	<500
R2 MP-01-10		<0.5	0.6	<2	<1	<0.5	<0.5	0.16	<1	<10	<500
R2 MP-01-11		<0.5	2.1	<2	<1	<0.5	<0.5	0.10	<1	<10	<500
R2 7+75W L2-R-1		<0.5	1.2	<2	<1	0.5	<0.5	0.09	<1	<10	<500
R2 7+75W L2-R-2		<0.5	2.5	<2	<1	3.2	1.7	0.21	<1	29	<500
R2 7+75W L2-R-3		<0.5	2.0	<2	<1	2.1	1.6	0.07	<1	17	<500
R2 7+75W L2-R-4		<0.5	0.8	<2	<1	1.0	1.5	0.06	<1	<10	<500

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PAGE 1B

SAMPLE NUMBER	FLUORINE UNITS	Te PPM	Ba PPM	Cr PPM	Sn PPM	W PPM	Ca PPM	La PPM	Ce PPM	Sm PPM	Fu PPM	Tb PPM	Yb PPM
R2 MP-01-1		<20	<1000	<50	<200	<2	<1	6	<10	1.2	<2	<1	<5
R2 MP-01-2		<20	300	95	<200	<2	2	12	<10	3.1	<2	<1	<5
R2 MP-01-3		<20	180	<50	<200	<2	<1	14	29	2.8	<2	<1	<5
R2 MP-01-4		<20	100	56	<200	<2	<1	10	22	2.2	<2	<1	<5
R2 MP-01-5		<20	120	<50	<200	<2	<1	23	41	3.6	<2	<1	<5
R2 MP-01-6		<20	710	120	<200	<2	3	26	65	5.2	<2	1	<5
R2 MP-01-7		<20	<100	220	<200	<2	<1	14	33	10.0	<2	2	<5
R2 MP-01-8		<20	370	75	<200	<2	2	15	37	2.9	<2	<1	<5
R2 MP-01-9		<20	<100	1700	<200	<2	<1	<5	<10	0.2	<2	<1	<5
R2 MP-01-10		<20	<100	110	<200	<2	<1	13	33	2.1	<2	<1	<5
R2 MP-01-11		<20	<100	370	<200	<2	<1	6	<10	4.1	<2	<1	<5
R2 7+75W L2-R-1		<20	<100	230	<200	<2	<1	15	40	4.9	<2	<1	<5
R2 7+75W L2-R-2		<20	280	100	<200	<2	<1	17	41	4.1	<2	1	<5
R2 7+75W L2-R-3		<20	160	<50	<200	<2	<1	21	49	4.5	<2	1	<5
R2 7+75W L2-R-4		<20	<100	50	<200	<2	<1	9	15	2.5	<2	<1	<5

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**Geochemical
 Lab Report**

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

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PROJECT: NONE GIVEN

PAGE 1A

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ir PPB	Ag PPM	Zn PPM	Mo PPM	Ni PPM	Co PPM	Cd PPM	As PPM	Sb PPM	Fe PCT	Se PPM
P4 AR-01		7640	<2300	=	<9400	<53	<1200	<260	<270	83	7.6	>10.0	<350
P4 AR-02		3070	<1000	>50	<3700	<25	<530	<140	<120	38	7.9	>10.0	180
P4 AR-03		5840	<2900	=	<13000	<63	<1400	630	<330	130	6.5	>10.0	<350
P4 AR-04		>10000	<3700	=	<15000	<82	<1900	<420	<430	<32	5.3	=	<460
P4 AR-05		>10000	<1800	=	<9200	<40	<820	<240	<210	76	29.0	=	<260

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**Geochemical
 Lab Report**

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

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PROJECT: NONE GIVEN

PAGE 1A

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ir PPB	Ag PPM	Zn PPM	Mo PPM	Ni PPM	Co PPM	Cd PPM	As PPM	Sb PPM	Fe PCT	Se PPM
P4 MPL 2+00S 1+50W-60HN		1500	<1700	=	<9900	<79	2100	<290	<200	<37	11.0	>10.0	<190

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**Geochemical
 Lab Report**

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

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PROJECT: NONE GIVEN

PAGE 18

SAMPLE NUMBER	ELEMENT UNITS	Te PPM	Ba PPM	Cr PPM	Sn PPM	W PPM	Cs PPM	La PPM	Ce PPM	Sm PPM	Eu PPM	Tb PPM	Yb PPM
P4 AR-01		<680	<3800	3400	<8800	380	<30	>10000	>10000	1010.0	<110	42	<61
P4 AR-02		<300	<1800	<990	<3900	180	<14	8450	>10000	521.0	<52	20	39
P4 AR-03		<810	<4600	5300	<10000	170	<36	>10000	>10000	1070.0	<140	<27	<61
P4 AR-04		<1100	<6200	3400	<14000	530	<49	>10000	>10000	1420.0	<190	<36	<100
P4 AR-05		<560	<2800	2800	<7300	250	<22	5710	8950	365.0	92	27	<53

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PAGE 18

SAMPLE NUMBER	ELEMENT UNITS	Te PPM	Ba PPM	Cr PPM	Sn PPM	W PPM	Cs PPM	La PPM	Ce PPM	Sm PPM	Eu PPM	Tb PPM	Yb PPM
P4 MPL 2+00S 1+50W-60HN		<630	<3400	4300	<4700	440	<36	>10000	>10000	1090.0	<130	49	<67

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PROJECT: NONE GIVEN

PAGE 1C

SAMPLE NUMBER	ELEMENT UNITS	Lu PPM	Sc PPM	Hf PPM	Ta PPM	Th PPM	U PPM	Na PCT	Br PPM	Rb PPM	Zr PPM
P4 AR-01		<8.3	<14.0	170	56	652.0	49.0	<0.25	700	<810	=
P4 AR-02		6.9	17.0	180	<17	420.0	52.0	0.65	370	<380	=
P4 AR-03		12.0	<18.0	210	<47	819.0	41.0	<0.53	480	<1100	=
P4 AR-04		<14.0	24.0	520	<62	1170.0	110.0	<0.72	678	<1400	=
P4 AR-05		<7.8	28.0	230	<28	378.0	64.0	0.43	300	<650	=

Bondar-Clegg & Company Ltd.
 130 Pemberton Ave.
 North Vancouver, B.C.
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**Geochemical
 Lab Report**

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 22-AUG-90

REPORT: V90-01490.0

PROJECT: NONE GIVEN

PAGE 1C

SAMPLE NUMBER	ELEMENT UNITS	Lu PPM	Sc PPM	Hf PPM	Ta PPM	Th PPM	U PPM	Na PCT	Br PPM	Rb PPM	Zr PPM
P4 MPL 2+00S 1+50W-60HN		<11.0	30.0	270	<29	652.0	88.0	1.30	170	<710	=

DIA  MET
MINERALS

STATEMENT OF EXPLORATION EXPENDITURES

ALBERT RIVER CLAIMS

1.	June 30, 1990 invoice from Norm's Manufacturing & Geoservices	
	15 MAN DAYS @ \$165.00 per man day (Mark Fipke, Brent Carr & Dan Tomlin) purchasing supplies, travelling to property, repairing access road, mob/demob camp, complete geophysical & heavy mineral & rock prospecting survey.	\$2475.00
	Expenses of above personnel including meals, accommodations, rental of camp gear, chain saws, communication radio phone, 4 wheel drive truck and gas	\$1536.41
	Rental of scintilometer for 5 days	\$ 225.00
2.	August 31, 1990 invoice from Norm's Manufacturing & Geoservices	
	Heavy Mineral processing of samples including rock sawing (C.F. Minerals \$167.15, & \$839.50 = \$1006.65) plus handling and sawing \$93.35	\$1100.00
	2.5 MAN Days @ \$350.00 per day for geologist services planning & organizing survey, compiling results, completing assessment report.	\$ 875.00
	drafting and copying supplies	\$ 128.25
3.	Direct Dia Met expenditures	
	telephone long distance, plastic sample bags, toposil, aluminum tags, freight of samples to labs, miscellaneous	\$ 230.00
	secretarial typing, proof reading, maps for drafting, copying report, accounting, office supplies	\$ 300.00
4.	Bondar-Clegg Au +33 analysis invoices	\$ 460.00
	TOTAL EXPENDITURES	\$7329.66

RESUME OF CHARLES FIPKE

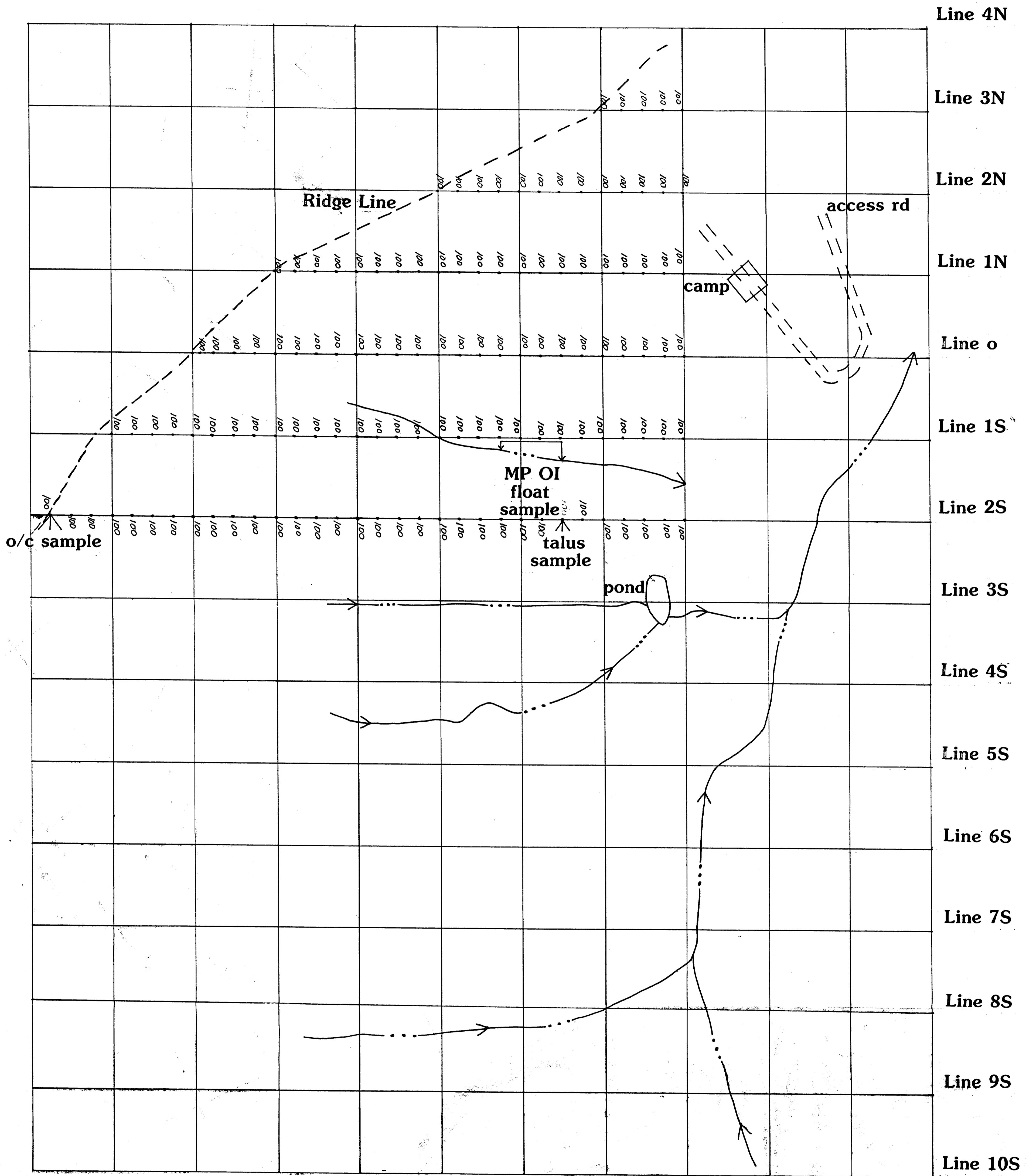
- 1966 Graduated from Kelowna Secondary School. Was a Queens Scout with Bushmans Thong & Gold Chord.
- 1966 - 70 Completed undergraduate and graduate work at the University of British Columbia which resulted in graduation with a BSc. in Honors Geology. Worked summers on geochemistry and as a geologist's assistant for Amax Exploration (Smithers area, BC), Atlas Exploration (Yukon) and the Geological Survey of Canada (N.W.T.).
- 1970 - 72. Worked as a geologist in New Guinea and Irian Barat for Kennecott Copper on porphyry copper exploration using heavy mineral approaches. Mapped the geology of limonite leach capping and the alteration of the OK Tedi porphyry copper, Papua, New Guinea.
- 1973 Worked as a mineral geologist for Samedan Oil in North Queensland, Australia completing regional mapping and detailed geophysics - geochemistry and diamond drilling of a Mo-W deposit area. Completed some heavy mineral exploration work for scheelite.
- 1974 Worked as a geologist, in charge of the Barberton Division (staff of 60), for Johannesburg Consolidated Investments, South Africa. Completed geological heavy mineral exploration and geological mapping and diamond drilling for Sb & massive Cu-Ni and Cu-Zn sulfides in Barberton, South African Southwest Africa, Rhodesia and Botswana. Completed heavy mineral development and orientation research in all of the foregoing areas. Visited the underground and open pit operations of DeBeers at the Finch Diamond Mine and the Kimberley diamond mines.
- 1975 Worked as a geologist for Cominco involving management and logging of diamond drilling of Mo and Cu-Mo deposits in British Columbia. Worked for Cominco Research as a research geologist on heavy mineral orientation and heavy mineral research and was responsible for setting up Cominco's heavy laboratory and procedures. The report based on Fipke's heavy mineral results was distributed world wide.
- From 1977 Worked as a geologist for Cominco in Brazil in charge of exploration for Pb-Zn in carbonate rocks. Used stratigraphic and heavy mineral exploration and Orientation techniques to discover Pb-Zn deposits in the Proterozoic Bambui of Minas Gerais.
- 1977 - 86 Founded C.F. Mineral Research Ltd. Obtained patents for heavy mineral processing techniques in Canada, the United States, Australia, and South Africa. Completed

RESUME OF CHARLES FIPKE
Page Two

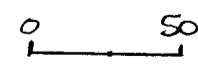
other research projects funded by the National Research Council. Step program which led to obtaining a patent in Canada for an acid leach process. Coordinated and assisted in the design of a heavy mineral and conodont laboratory unique to the Western world. Managed and coordinated a 1.4 million dollar exploration program for Superior Oil which led to the discovery of 34 kimberlite and lamproite diatremes, 18 gold deposits, two massive sulfide target areas and a new scheelite discovery in the Rocky Mountains of British Columbia and the Mackenzie Mountains, NWT. Managed many other diamond exploration field and laboratory programs in Arkansas, Colorado, Wyoming, Utah, Kansas, Idaho, Montana and California with a staff of up to 36 persons. The Fipke methods of heavy mineral geochemistry are taught in an advanced geochemistry course at U.B.C. Fipke has given many heavy mineral talks to geologists of major corporations and universities. Fipke and other CFM staff operate Canada's first commercial (windowless) scanning electron microscope that is set-up using South African standards to completed diamond indicator mineral chemistry, unique microdiamond scans and a trace element enhancement techniques for gold exploration.

1986 - 89 Completed gold, platinum and diamond heavy mineral consulting assignments for the United Nations in Peru, for Sigma Resources in New Zealand, the Geological Survey of Canada, in Sweden, in France, for Westmont Mines in Mexico and Dia Met Minerals Ltd. in British Columbia, and Northern Canada. Coordinated a recently completed \$300,000 diamond exploration technology program to enable exploration companies to utilize the most advanced technology available to successfully explore for diamondiferous kimberlites and lamproites. The later (+1,300 page) project funded by the Geological Survey of Canada involved world leading diamond experts such as Dr. John Gurney, Dr. Rory Moore, Dr. Malcolm MacCallum, Dr. Barbara Smith etc.

8W 7W 6W 5W 4W 3W 2W 1W B/L 1E 2E 3E



SCALE 1:2500



Scintolometer Survey
Thorium Results
in counts per minute

FIGURE 3
GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,369