

5169

82K/8W & 9W

A REPORT ON
GEOLOGICAL, SOIL SAMPLING & S.P. SURVEYS
REDMAC GROUP OF MINERAL CLAIMS
FOR
LONGBAR MINERALS LTD.

BY
K. Warren Geiger, (Ph.D., P.Eng.)

7 October, 1974

Department of Mines and Petroleum Resources ASSESSMENT REPORT	
NO. 5169	MAP

RWS

TABLE OF CONTENTS

	<u>Page</u>
Background	1
Property Location and Access	1
Personnel Employed and Dates of Employment	2
Cost of Program	2
Exploration of the Property	3
Soil Sampling Program	4
Self Potential Survey	4
Interpretation of Results	4
Conclusions	5
Recommendations	5
Statement of Qualifications	Rear
Appendix 'A' - Assay Certificates	Rear
#1-2 Figures 1 & 2 - Location Maps	Rear
#3 Figure 3 - Geochemical Survey Results	Pocket
#4 Figure 4 - Self-Potential Survey Results	Pocket

R.D.S.

REPORT ON THE REDMAC GROUP

BACKGROUND

The Redmac Group of Mineral Claims is owned by Val Winser, Walt Konkin and Vernon Bostock, all of Invermere, B. C. The present program was carried out as part of an option agreement between the owners and Longbar Minerals Ltd., of Edmonton, Alberta.

PROPERTY, LOCATION AND ACCESS

The property comprises the Redmac 1 to 4 claims record numbers 17147 to 17150 and the Redmac 5 to 16 claims, record numbers are as follows:

Claim #5	-	17252
Claim #6	-	17258
Claim #7	-	17253
Claim #8	-	17259
Claim #9	-	17254
Claim #10	-	17260
Claim #11	-	17255
Claim #12	-	17261
Claim #13	-	17256
Claim #14	-	17262
Claim #15	-	17257
Claim #16	-	17263

These claims are located in the vicinity of Red Line Creek near its confluence with McDonald Creek, a tributary of Horsethief Creek. They lie approximately 18 miles due west of Invermere, B. C. at latitude 50 30' and longitude 116 27' (Fig's 1 and 2).

Access to the claims is by logging road from Radium, B. C. up Horsethief and McDonald Creeks.

W.S.

REPORT ON THE REDMAC GROUP - Cont'd

/2

PERSONNEL EMPLOYED AND DATES OF EMPLOYMENT

<u>Name</u>	<u>Address</u>	<u>From</u>	<u>To and Including</u>
Jon A. Stewart	Box 11 Powell River, B.C.	July 2	July 23
Dave Lyons	Calgary, Alberta	July 2	July 23
Val Winser	Box 366 Invermere, B. C.	July 3 July 16	July 5 July 17
Vernon Bostock	Box 282 Invermere, B. C.	July 3 July 16	July 5 July 22
Darrel White	R.R. 1, Blackpoint Rd. Powell River, B. C.	July 9	July 22
April White	R.R. 1, Blackpoint Rd. Powell River, B. C.	July 9	July 22
W. M. Morrison (Chemist)	5976 Bow Cresc., N.W. Calgary, Alberta	July 14	July 18
K. Warren Geiger (Consulting Geologist)	#100-10975 - 124 St., Edmonton, Alberta.	July 14	July 19 (plus 3 days report time)

COST OF PROGRAMS

Contractors

Val Winser (bulldozer D-6 Cat.)
43 Hrs. @ 24.50/hr.

-----\$1,053.50

Wages & Salaries

Jon A. Stewart, Foreman-Supervisor
D. Lyons
V. Winser 4 days @ \$40/day
V. Bostock 6 days @ \$40/day
D. White 13 days @ \$15.38/day
A. White 13 days @ \$15.38/day

\$1,016.19	
\$ 406.35	
\$ 160.00	
\$ 240.00	
\$ 200.00	
\$ 200.00	\$2,222.54

Cont'd/3

R.W.S.

COST OF PROGRAMS - Cont'd

Fees & Expenses

W. M. Morrison (Chemist)	\$ 550.18	
K. Warren Geiger (P.Eng.)	<u>\$1,350.00</u>	\$1,900.18

Other Costs

Food and Accomodation for crew	\$738.44	
Vehicle & Transportation	\$723.43	
Misc. supplies & materials	\$249.09	
Assays	<u>\$ 57.50</u>	<u>\$1,768.46</u>

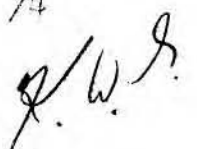
T O T A L----- \$6,944.68

EXPLORATION OF THE PROPERTY

High-grade lead mineralization carrying silver values was discovered by the owners in large chunks of float after logging had taken place in the area during 1972. By the size and angular nature of the float it was apparent that the pieces had not been transported far. Some stripping also exposed lead-silver mineralization in place. Grab samples from both float and trenches gave assays from 2% to 30% lead and from 0.5 to 10 ozs. of silver.

The rocks of the area consist of the Dutch Creek Formation of the Upper Purcell according to J. E. Reeson; Geol. Surv. Can. Map 12- 1957; Landeau (East Half). He describes the formation as "grey green and black angillite and slate, buff dolomitic slate; thin-bedded buff weathering dolomite, green, angillaceous quartzite."

The area of interest is almost entirely covered by overburden except along the creeks and therefore geophysical and geochemical techniques were chosen as the best possible way of acquiring useful information at this early stage of exploration. A grid was bushed-out, chained, picketed and flagged in the area where prospecting showed that mineralization had been concentrated. The baseline was run on a True North azimuth for 3,780 feet. Side lines were laid off at 100-foot intervals along, and at right angles to the baseline. The baseline was then used for control for the soil sampling and self-potential (S.P.) surveys that were carried out.



SOIL SAMPLING PROGRAM

The soil samples were taken at 100-foot intervals along the base and side lines. The samples were tagged and bagged in cloth sample bags in the field, and were subsequently dried and tested for total heavy metal content by the dithiazone method.

The results of the soil sampling program are shown on figure 3 in the back pocket of the report.

Interpretation of the results are given in a section called "Interpretation of Results".

SELF POTENTIAL SURVEY

A survey was conducted over the area of interest and the same grid control was used as for the soil sampling survey except that readings were taken every 25 feet.

The readings obtained are recorded on figure 4 in the back pocket and an analysis is given in the section "Interpretation of Results".

INTERPRETATION OF RESULTS

In the areas where the geochemical and self potential (S.P.) surveys overlap, anomalous areas #1, 2 and 3 were established by both surveys. The S.P. survey, however, appears to define the mineralized areas much more precisely. The geochemical results show a more scattered anomalous area in each case, which may be more of a halo effect around the main mineralized area (as defined by each S.P. Anomaly). This halo effect tends to be concentrated on the downhill side of the S.P. anomaly in all cases and may well be the result of the extreme surface and near-surface groundwater run-off which is active in this high mountain basin area.

As a result of the comparison of the results of both types of survey, the geochemical sampling was discontinued. The S.P. survey picked up another (#4 anomaly) and some other doubtful anomalies in the south-east portion of the survey area before the program was terminated.

R.W.S.

INTERPRETATION OF RESULTS - Cont'd

Stripping and trenching was attempted in four localities for purposes of sampling the S.P. anomalies. On the #2 anomaly two trenches were attempted and neither reached bedrock because of very shallow ground-water problems. On #1 anomaly the trench exposed the extreme 'nose' of the anomaly. Across 13 feet the assay results show only poor values of lead and silver (Appendix 'A'). On #4 anomaly which, at present, is only defined by one cross line, the trench exposed 10 feet of mineralized bedrock. In this case the assay values are more encouraging with a high of 4 feet showing 1.58% lead and 0.438 oz. silver per ton.

CONCLUSIONS

Based on the results of work to date, definite anomalous areas have been defined by the S.P. survey which, based on the follow-up trenching apparently conform exactly with the mineralized areas of the bedrock subcrop. It is interesting to note that the largest pieces of high-grade float found in the area were concentrated near station 0+00 on the baseline and are several hundred feet from either anomaly 1 or 2 from which they were probably derived.

The anomalies from present information are restricted in subcrop area. The assays derived from the trenching are not encouraging but were not taken from areas of highest anomaly.

Some exploratory drilling will be necessary to give a better idea of the mineral values in the areas of highest anomaly.

RECOMMENDATIONS

1. Further geophysical work should be done to expand the area covered and to define all anomalous areas of lead-silver mineralization. This work can be a continuation of the S.P. survey. However, it is recommended that an E.M. survey be tried which may give comparable results more quickly and more economically.
2. A minimum of six exploratory diamond drill holes should be drilled on the highest anomalous areas defined by the present and future

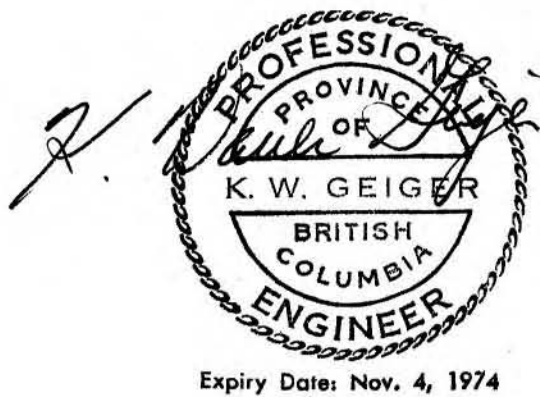
Cont'd /6

2/2/5

RECOMMENDATIONS - Cont'd

geophysical surveys. These holes should be designed not only to give information on the grade of mineralization but also on the size and shape of the mineralized bodies.

*Edmonton, Alberta
Oct 7, 1974*



STATEMENT OF QUALIFICATIONS

1. I, K. Warren Geiger, am a consulting geologist with head office at: Suite #100 - 10975 - 124th Street, Edmonton, Alberta.
2. I have a B.Sc. in Mining Engineering from the University of Alberta at Edmonton and M.S. and Ph.D. degrees in Geology from Cornell University, Ithaca, New York.
3. I am a Professional Geologist registered with the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
4. I am a Professional Engineer registered by non-resident license with the Association of Professional Engineers of the Province of British Columbia.
5. I possess eighteen years of experience in the fields of mineral exploration, mining and groundwater geology.

Within the scope of this submission, all information and conclusions are believed to be accurate.

October 7, 1974

A circular seal for a Professional Engineer in the Province of British Columbia. The seal contains the text "PROFESSIONAL ENGINEER OF THE PROVINCE OF BRITISH COLUMBIA". A signature is written across the seal.

K. Warren Geiger, P. Eng., P. Geol.
Consulting Geologist
Suite #100, 10975 - 124th Street,
Edmonton, Alberta

Expiry Date: Nov. 4, 1974



VANGEOCHEM LAB LTD.
 1521 PEMBERTON AVE.,
 NORTH VANCOUVER, B.C.,
 CANADA V7P 2S3

TELEPHONE: 988-2172
 AREA CODE: 604

Certificate of Analyses

• Specialising in Trace Elements Analyses •

-IN ACCOUNT WITH-
 Longbar Minerals, Ltd.,
 #100 - 10975 124th Street,
 Edmonton, Alberta.
 Attention:

Report No: 74-05-002 Page 1 of 1
 Samples Arrived: August 7, 1974.
 Report Completed: August 22, 1974.
 For Project:
 Analyst:
 Invoice # 3048

Sample Marking	Cu %	Pb %	Ag oz/ton	Au oz/ton		
385	-----	0.070	0.088	-----	0 to 4'	Trench on No 1 Anomaly reading from West to East
386	-----	0.070	0.292	-----	4' to 10'	
387	0.014	0.035	0.263	trace	10' to 13'	
388	-----	0.200	0.146	-----	0 to 6'	Trench on No 4 Anomaly reading from West to East
389	-----	1.580	0.438	trace	6' to 10'	

7/10/74

REMARKS:

Signed: *[Signature]*
 Certified B.C. Assayer

% Mo x 1.6683 = % MoS₂ 1 Troy oz./ton = 34.28 ppm 1 ppm = 0.0001% nd = none detected ppm = parts per million
 All values are believed to be correct to the best knowledge of the analyst based on the method and instruments used.

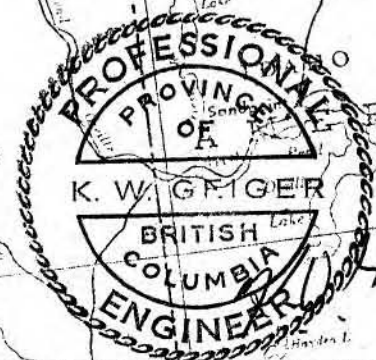
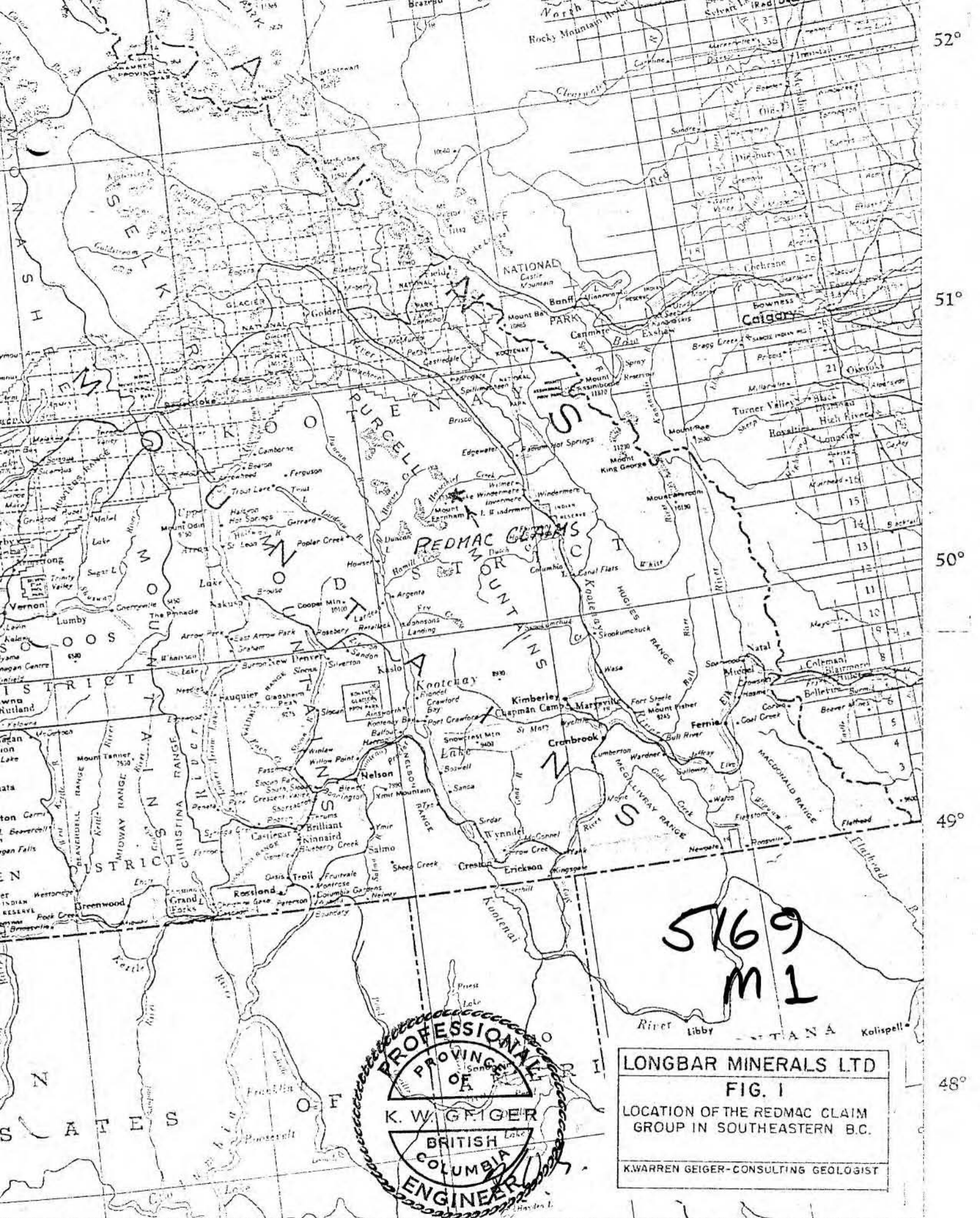
MASTER PRINTING LTD

REPORT ON THE REDMAC GROUP

APPENDIX 'A'

ASSAY CERTIFICATES

R.D.H.



5169 ML
LONGBAR MINERALS LTD
FIG. 1
LOCATION OF THE REDMAC CLAIM GROUP IN SOUTHEASTERN B.C.
 K. WARREN GEIGER - CONSULTING GEOLOGIST

Expiry Date: Nov. 4, 1974

119°

118°

117°

116°

115°

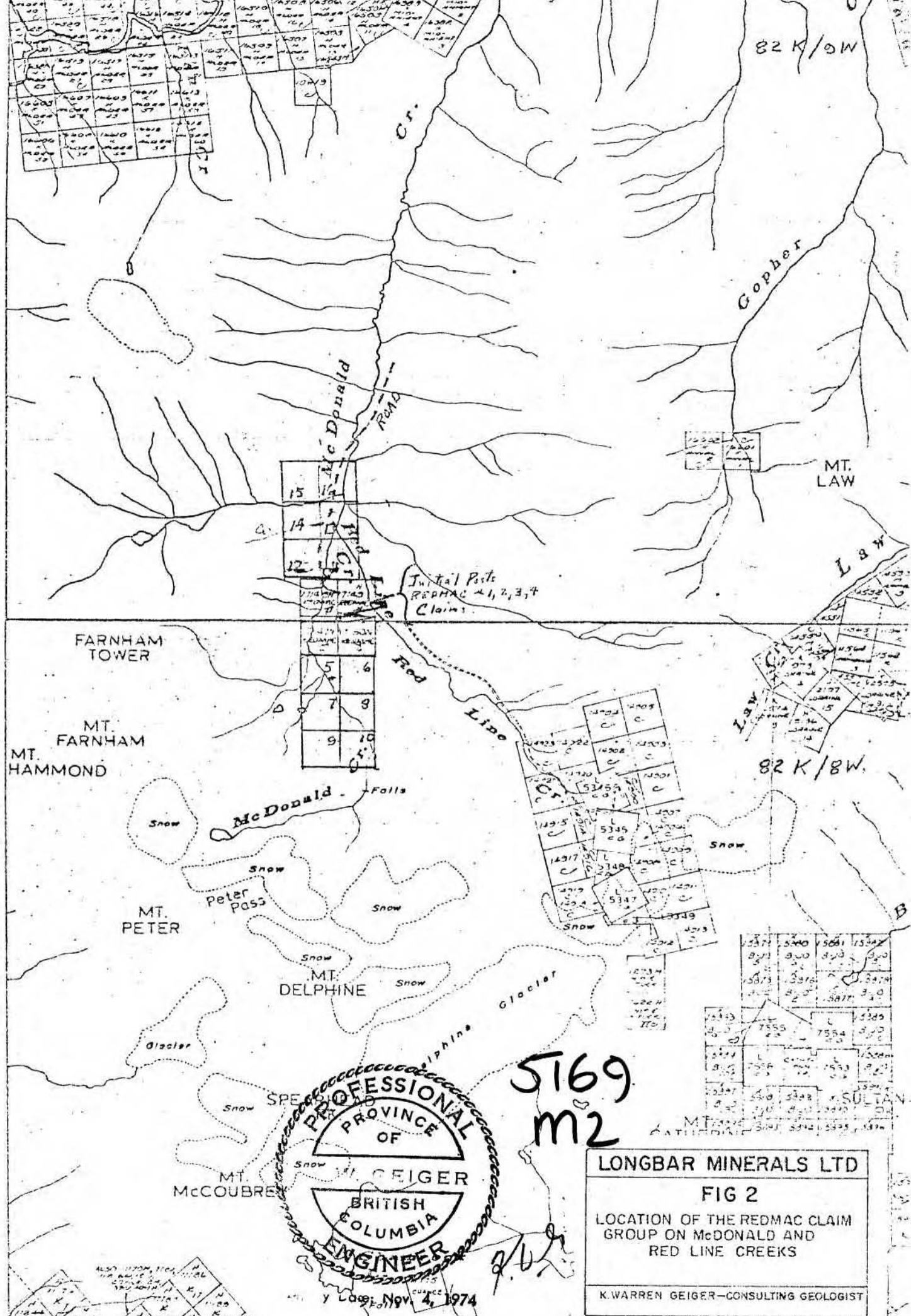
52°

51°

50°

49°

48°



82 K/0W

Gopher

MT. LAW

Cr.

McDonald ROAD

15	16
14	17
13	18
12	19
11	20
10	21
9	22
8	23
7	24
6	25
5	26

Initial Posts
REPMAC 1, 2, 3, 4
Claims

FARNHAM TOWER

MT. FARNHAM
MT. HAMMOND

Red Line

82 K/8W

McDonald Falls

MT. PETER

MT. DELPHINE

Glacier



5169
m²

5377	5400	5081	7502
871	300	303	300
5375	3376	3377	3378
3379	3380	3381	3382
3383	3384	3385	3386
3387	3388	3389	3390
3391	3392	3393	3394
3395	3396	3397	3398
3399	3400	3401	3402
3403	3404	3405	3406
3407	3408	3409	3410
3411	3412	3413	3414
3415	3416	3417	3418
3419	3420	3421	3422
3423	3424	3425	3426
3427	3428	3429	3430
3431	3432	3433	3434
3435	3436	3437	3438
3439	3440	3441	3442
3443	3444	3445	3446
3447	3448	3449	3450
3451	3452	3453	3454
3455	3456	3457	3458
3459	3460	3461	3462
3463	3464	3465	3466
3467	3468	3469	3470
3471	3472	3473	3474
3475	3476	3477	3478
3479	3480	3481	3482
3483	3484	3485	3486
3487	3488	3489	3490
3491	3492	3493	3494
3495	3496	3497	3498
3499	3500	3501	3502

LONGBAR MINERALS LTD

FIG 2

LOCATION OF THE REDMAC CLAIM GROUP ON McDONALD AND RED LINE CREEKS

K. WARREN GEIGER—CONSULTING GEOLOGIST

Mr. E. J. Bowles
 Chief Gold Commissioner
 Department of Mines & Petroleum Resources
 Victoria, B. C.

#100, 10975 - 124 Street
 Edmonton, Alberta
 November 26, 1974

REFERRED TO	DATE	INITIAL
D.M.		
W.M.		
G.S.C.		✓
C.P.R.		
D.C.C.		
ACPR		
G.C.		
ACCTS.		
Geol.		
INSP.		
M. REV.		
EC. & P.		
FILE NO.		
FILING CLERK		

Re: REDMAC Mineral Claims
 Geochemical-Line-cutting-
 Geophysical Report #5169
 File #166-Golden

Dear Mr. Bowles:

The S.P. anomalies shown in Figure 4 of the report are negative anomalies as you point out in your letter of November 12. The results were noted in the field in a reverse order for convenience, and this reversal carried through to Figure 4. Unfortunately I did not state this clearly on the map.

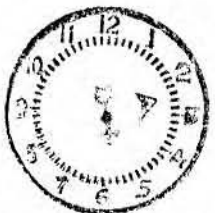
The instrument used is internally built and is the type of instrument that brings the voltmeter needle back to zero by generating a potential equal and opposite to the potential between the two stations (points on the ground where the porous pots are installed) and then measures the potential that has been so generated, thus compensating in the readings for the voltage drop caused by ground resistance. The meter used is an R.C.A. 20,000 ohms/voltmeter with a 500 millivolt full scale reading.

Yours truly,

12711

NOV 28 '74

K. Warren Geiger



K. Warren Geiger, Ph.D:P. Eng
 Consulting Geologist

DEPT OF MINES
 PETROLEUM RESOURCES

#100, 10975 - 124 Street
Edmonton, Alberta
December 9, 1974

Mr. E. J. Bowles
Chief Gold Commissioner
Department of Mines & Petroleum
Victoria, B. C.

Re: REDMAC Mineral Claims
Geochemical-Line-cutting-
Geophysical Report #5169

Dear Mr. Bowles:

This is to confirm as per your letter of November 29, 1974.

1) The compensating voltages are shown on Figure 4 and should be multiplied by -1 to get the true potential difference.

2) The developer of the S.P. instrument from the R.C.A. voltmeter is Edwin T. Johanson of General Delivery, Vananda, B. C. His telephone number is 486-7528. Should you wish an actual demonstration, he would be happy to accomodate your engineer on Texada Island at any time.

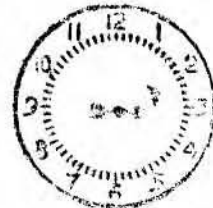
REFERRED TO	DATE	INITIAL
D.M.		
ADM (M)		
ADM (P)		
C.G.C.	✓	
C.P.R.		
DOGC		
ACPR		
G.C.		
ACCTS.		
GEOL.		
INSP.		
M. REV.		
EC. & P.		
FILE NO.		
FILING CLERK		

Yours truly,



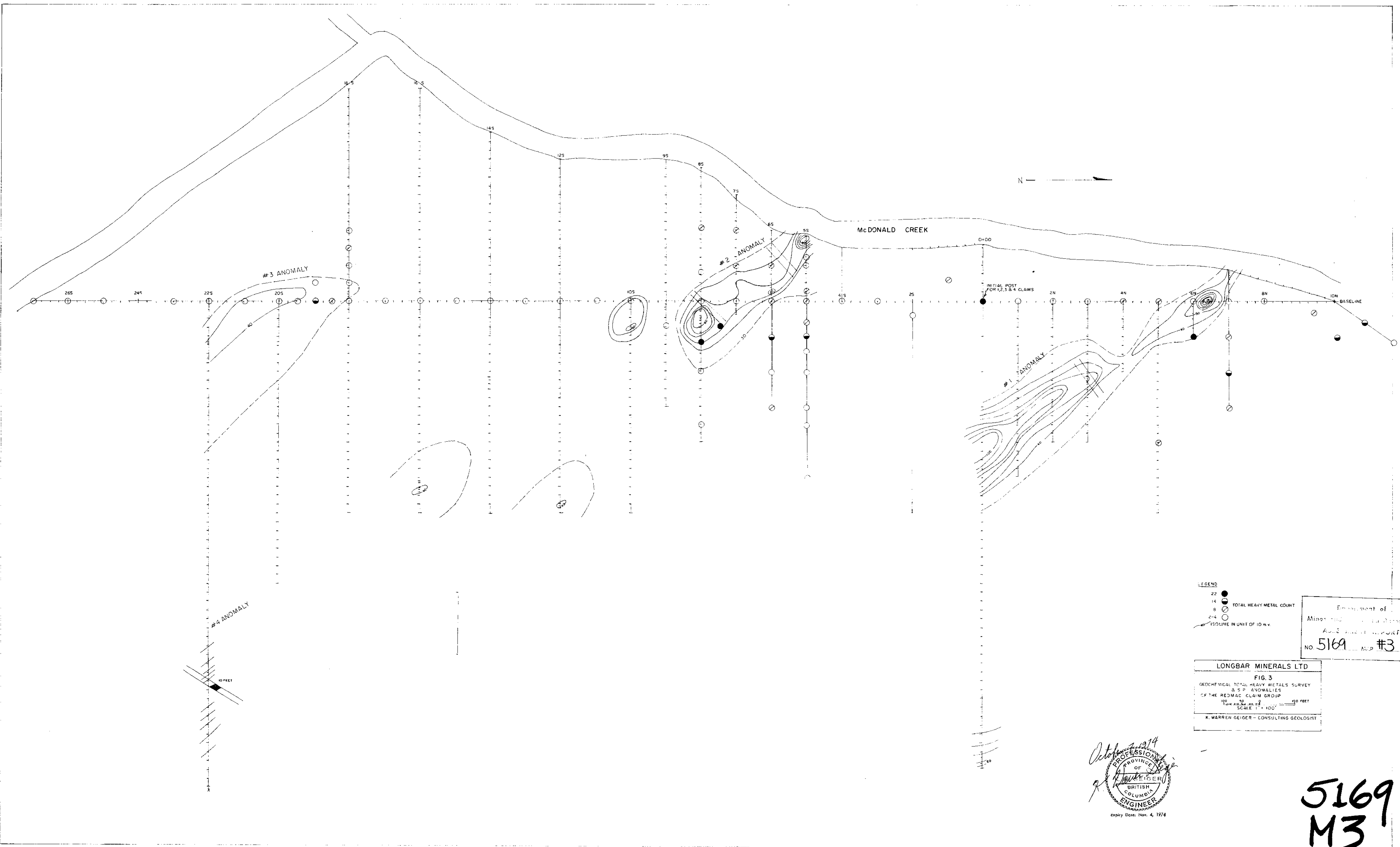
K. Warren Geiger, Ph.D;P.Eng
Consulting Geologist

DEC 10 1974 PM



DEPT. OF MINES
AND PETROLEUM RESOURCES

/jh



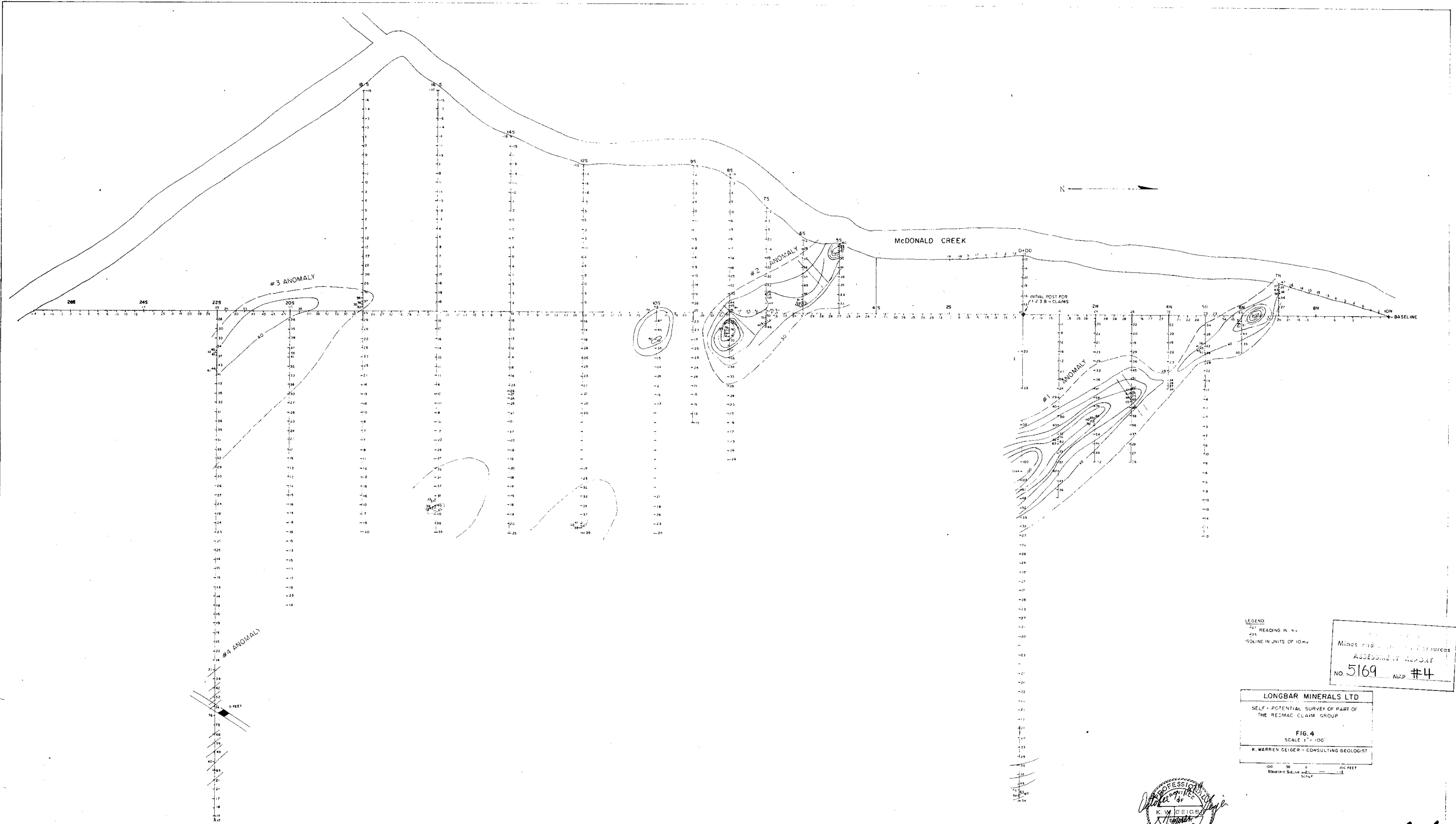
LEGEND
 22 ● TOTAL HEAVY METAL COUNT
 14 ○
 8 ○
 2-4 ○
 ISOLINE IN UNIT OF 10 m.v.

Environment of
 Mineral Resources
 Assessment Report
 No. 5169 M.P. #3

LONGBAR MINERALS LTD
 FIG. 3
 GEOCHEMICAL TOTAL HEAVY METALS SURVEY
 & SP ANOMALIES
 OF THE REDMAG CLAIM GROUP
 SCALE 1" = 100'
 K. WARREN GEIGER - CONSULTING GEOLOGIST

October 2, 1974
 PROFESSIONAL
 OF
 K. WARREN GEIGER
 BRITISH
 COLUMBIA
 ENGINEER
 Expiry Date: Nov. 4, 1974

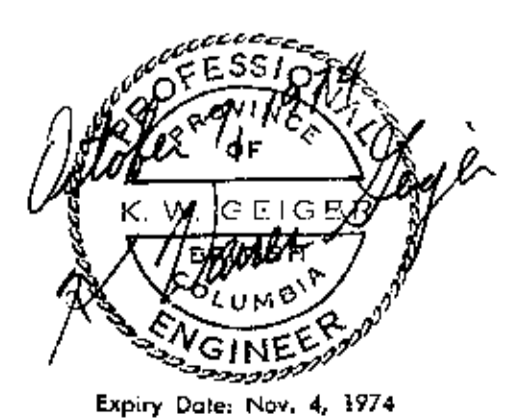
5169
 M3



LEGEND
 247 READING IN mV
 235
 SOLINE IN UNITS OF 10mV

Mines and Resources
 ASSESSMENT REPORT
 NO. 5169 MAP #4

LONGBAR MINERALS LTD
 SELF-POTENTIAL SURVEY OF PART OF
 THE REDMAC CLAIM GROUP
 FIG. 4
 SCALE 1" = 100'
 K. WARREN GEIGER - CONSULTING GEOLOGIST



5169
 M4