

MINERAL EXPLORATION ON 'YR' CLAIMS



Mineral Claims YR 1-24 incl. (YA60133-YA60156 incl.)
and YR 45-48 incl. (YA60157-YA60160 incl.)

RED MOUNTAIN-BOSWELL RIVER AREA
YUKON TERRITORY
N.T.S. 105-C-13



by

Gary C. Lee, P.Eng.

Field work conducted in July 1982

090237

This report was prepared by
the [unclear] [unclear]
under the direction of [unclear]
Mr. [unclear] [unclear]
report [unclear] [unclear] amount
of \$ 7,200-

R. Watson

Mr. [unclear] [unclear] [unclear] and
General Service for Commissioner
[unclear] [unclear]

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 1970 SOIL GEOCHEM - MOLY

 - COPPER

 - SILVER

INTRODUCTION

GENERAL

Between June 30 and July 9, 1982 a two-man (myself and Larry Lebedoff, both of Whitehorse, Yukon) exploration crew flew by helicopter into the YR claim group in the Boswell River area of the Yukon Territory.

The purpose of this survey was to follow up on a geochemical soil survey completed in 1970 by Hudson Bay Oil & Gas Company Ltd. on claims which at that time were held by Northwest Explorers (1967) Ltd. Apparently, the follow-up was never conducted due to changes in laws governing the mining industry which had a negative effect on exploration during the early and middle 1970's.

Significant molybdenum, silver and/or copper values were encountered in the initial soil geochemistry on three different areas of the property. It is these areas which this survey follows up, with prospecting, soil geochemistry, magnetometer and geological mapping work.

It should be noted that the Amoco-Tintina Moly discovery on Red Mountain occurs only a few miles north of the YR claim group.

Yukon Revenue Mines Ltd. has an airstrip just northeast of Red Mountain; however, access to the YR property is by helicopter only.

CLAIM LOCATION

The YR claim group (YA60133-YA60160) is located approximately 45 to 50 air miles northeast/east of Whitehorse on and to the east of the headwaters of Slate Creek. The location of the claim group including the approximate area of the soil anomalies is enclosed on the Location Plan, page 7. The claims are in the Whitehorse Mining District and are owned by Yukon Revenue Mines Ltd., 117 Industrial Road, Whitehorse.

CAMP

A temporary camp was located on the base line (approximately 4+50E metres) at elevation 4750 feet on the south side of a small creek flowing northwest along the base line into the valley between the upper two lakes forming the headwaters of Slate Creek.

TOPOGRAPHY (see elevation contours, page 13)

The central portion of the property is occupied by a mountain ridge peaking at elevation 6000 feet. The valleys on either side are at the 4500-5000 foot elevation. The property is above the treeline. The valley

walls, although relatively steep, can be traversed by foot for the most part, and are covered by moss and low grassy-type vegetation except at high elevations where a considerable amount of talus is encountered.

On inspection of the contour map (page 13), the high mountain ridge drops and widens to a smooth "saddle" at the north end of the property. The west side of the mountain, although relatively steep, can be traversed by foot. The area south of the base line between lines 730E and 840E is composed of steep step-like terraces and must be traversed with care. Below L730E, south of the base line, the slopes are gentle and easily traversed.

PICKET LINES

The grid, being 12 years old, had completely disappeared and, hence, had to be re-picketed. The grid can be seen on any of the enclosed maps and was picketed with lath ($\frac{1}{2}$ metre long) at 50 metre stations with flagging tied to rocks at the intermediate 25 metre stations. The baseline was run in at Az. 132° with the lines at Az. 42° . The base line was re-picketed from between the lakes at the headwaters of Slate Creek to the top of the mountain ridge.

GEOLOGY

In the G.S.C. report by E. J. Lees, "Geology of the Teslin-Quiet Lake Area, Yukon" (1936), he describes the geology of the area covered by this report as belonging to two basic groups - these being the Yukon Group consisting of argillite, marble, quartzite, quartz-sericite schist, quartz-chlorite schist, hornblende schist, chloritic greenstone of which an area west of Slate Creek is occupied by igneous facies, and a group consisting of quartz diorite, diorite, gabbro and hornblendite. He also shows glacial striae occurring on the northeast portion of the property.

In the G.S.C. report by R. Mulligan, "Geology of the Teslin Map Area, Yukon Territory" (1963), one group consisting of schist, gneiss, quartzite, greenstone and limestone is listed as part of the Big Salmon complex in which he lists the remaining rock types as belonging to a general group mapped as quartz-hornblende and quartz-feldspar-hornblende gneiss and amphibolite; and diorite(?)

The following geological descriptions are enclosed in the assessment work report (1970) on Northwest Explorers (1967) Ltd. ground which is now the 'YR' group:

"From the brief observations made, it would appear that the area is underlain by metasediments and basic intrusives, in about equal proportions. The metasediments are largely fissile black

phyllites frequently containing pyrite. The intrusives consist of diorites metamorphosed in varying degrees especially in contact zones and are generally epidotized and serpentinized. Quartz-carbonate veins were noted in several places. Both the meta-sediments and the metadiorite contain bands and lenses of limestone and marble. In the southwestern portion of the property the metadiorite is in contact with a fine-grained granite which is also cut by quartz-carbonate veins (outside the area mapped in 1982)."

The G.S.C. reports listed above covered much larger areas than this report and, hence, some of their rock types are absent in the survey area. By examining the enclosed geology map (page 8), one can see the attitude of bedding is in roughly an east-west direction with a steep northerly dip ranging between 80 and 90 degrees. The greenstone (chloritic) at the north end of the survey area is soft, pale green and often contains wavy green chloritic bands (< 5 mm). A fine to medium grained limestone (strong reaction to 10% HCL) with the typical light brown sugary weathered texture occurs in outcrops most often in the north half of the survey area in wide bands (< 10 metres). Numerous narrow (< 3 metres) of limestone occur in both the phyllites and metadiorites (diorite) on the south-central portion. In the central portion of the survey area, the limestone is inter-banded with up to ½ metre bands of highly resilient quartzite. Rusty coloured weathered phyllites with their typical wavy light coloured micaeous schistosity occur frequently in the north-central portion of the survey area. Metadiorite and diorite are found in the north-central portion; however, they dominate the southern portion of the survey area.

MINERALIZATION

The most significant mineralization encountered was that taken from some angular float (one foot in diameter) approximately 1½ feet deep from the wall of an old prospect trench located on L900E at 5+70N. Molybdenum (Mo) values of 2200 ppm (0.22%), 1500 ppm (0.15%), 2500 ppm (0.25%) and 650 ppm (0.065%) were obtained from two separate pieces of float. The host material (float) is a relatively "fresh" looking (on a new break) grey fine to medium grained rhyolite tuff with definite carbonate bands (< 1 cm). Also, disseminated pyrite occurs in these samples. The Mo mineralization is very fine grained and can only be detected with a hand lens. On first impression, the sample looks like a typical rhyolite except for the distinct carbonate bands and the weathered surface has a dull brown and grey vuggy texture.

On line 730E at approximately 6+70N narrow (< 3 cm) rusty bands in the limestone were noted in which a sample of barren (py and pyrr) massive sulfides approximately 1 cm in diameter was plucked out.

The old exploration trench at approximately 8+00N between lines 730E and L840E has some "lively" looking float; however, assays proved to be negative. Some may contain barite, but the samples have not as yet been checked for that.

Numerous chunks of vuggy, rusty, "lively" looking quartz float were encountered throughout the property. Assays were negative.

Disseminated pyrite is often noted throughout the property in both phyllites and metadiorite or diorites. The geology map (page 8) shows some of the areas in the diorite with above background disseminated pyrite. This occurred on line 730E at 0+70S to 1+10S where a high silver soil geochem occurred. Grab samples proved to be negative when assayed for silver.

SOIL GEOCHEMISTRY

The 1970 soil geochemical survey results are included in the Appendix. Due to the complete destruction of the 1970 grid, a considerable amount of re-sampling (at 25 metre spacing) was undertaken in order to relocate these anomalies. Also, additional lines were established to the east in order to extend the anomalies. The samples were tested for moly, copper and silver. For the most part, soil development was poor and rarely was a "B" horizon encountered. Many samples contained a large percentage of black organics.

The moly maps on page 9 (1982) and in the Appendix (1970) both show roughly the same anomaly pattern. Two distinct moly anomalies occur, striking east-west on the north and central part of the survey area. These parallel the geology and are for the most part in the phyllites.

The copper maps (1982 and 1970) show a more dispersed anomaly pattern, of which some are coincident with the moly pattern. Only a couple should be considered significant.

As in the previous survey, a few "kicks" in silver geochem correspond to both moly and copper anomalies in the north and central portion of the survey area. On line 730E, 0+80S, a significant silver reading (7 ppm) corresponds with some moderate copper readings. The 1970 survey shows a silver value in the soil of 18 ppm on line 730E, 1+00S.

MAGNETOMETER SURVEY

The magnetometer survey is shown on page 12. Readings were taken at 25 metre spacings north of the base line except where closer spacing was necessary over anomalies. Ten-metre spacing was

employed south of the base line where the silver geochem (soil) was high.

On the north end of the property (7+00N to 12+00N) magnetic anomalies correspond to linear trends along the bedrock strike.

In the central portion (3+50N to 6+50N) several intense local anomalies occur and seem to occur in a linear pattern as well. They are significant in that they seem to be closely related to anomalous soil and rock geochem.

In the area south of the base line, there are magnetic anomalies on or near to soil sample locations which yielded higher than background silver values.

CONCLUSIONS (see soil geochem and mag. maps)

A most significant association of anomalous soil (and rock) geochem and intense magnetics occur between 3+50N and 6+50N. These could be closely related (hanging and/or footwall) and this should be borne in mind. Since both soil geochem and angular float are anomalous in moly, this area should receive intense prospecting in conjunction with additional trenching. The area northeast from the old prospect trench on L900E, 5+70N to approximately 6+25N, is important in regard to moly. In general, since one has a better idea of what to look for (i.e. sample number G37A, B, C and D - "Rhyolite Tuff"), both sides of the mountain as regards bedrock strike are important.

Also, the high copper value (1195 ppm - soil) on line 840E at 5+50N is probably related to the above moly since it is only 60 metres to the northwest. There is some minor silver geochem associated with the above.

The north end of the property is anomalous in soil geochem with close linear association of moly, copper and silver; an intense high in these occurs on line 900E at 11+00N. This is the best place to "zero in" on a specific location for trenching. General prospecting would certainly be warranted throughout the anomalous area.

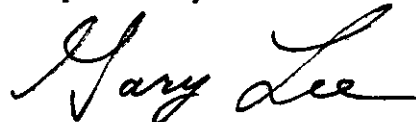
An attempt was made to find the source of the silver anomaly (soil 18 ppm - 1970) south of the base line; however, this was unsuccessful. Not much time was spent northwest (down slope) from L730E 0+50S to 1+50S and hence this area should receive more attention. From this area and to the northeast (along strike) there seems to be a linear trend in the copper geochem.

With regard to the "geological environment" of the 'YR' property, it is unknown whether it favours small local lens type accumulations, possibly near contacts of uneconomic mineralization, or whether the geology is favourable to much larger accumulations which would stand a better chance of being economic.

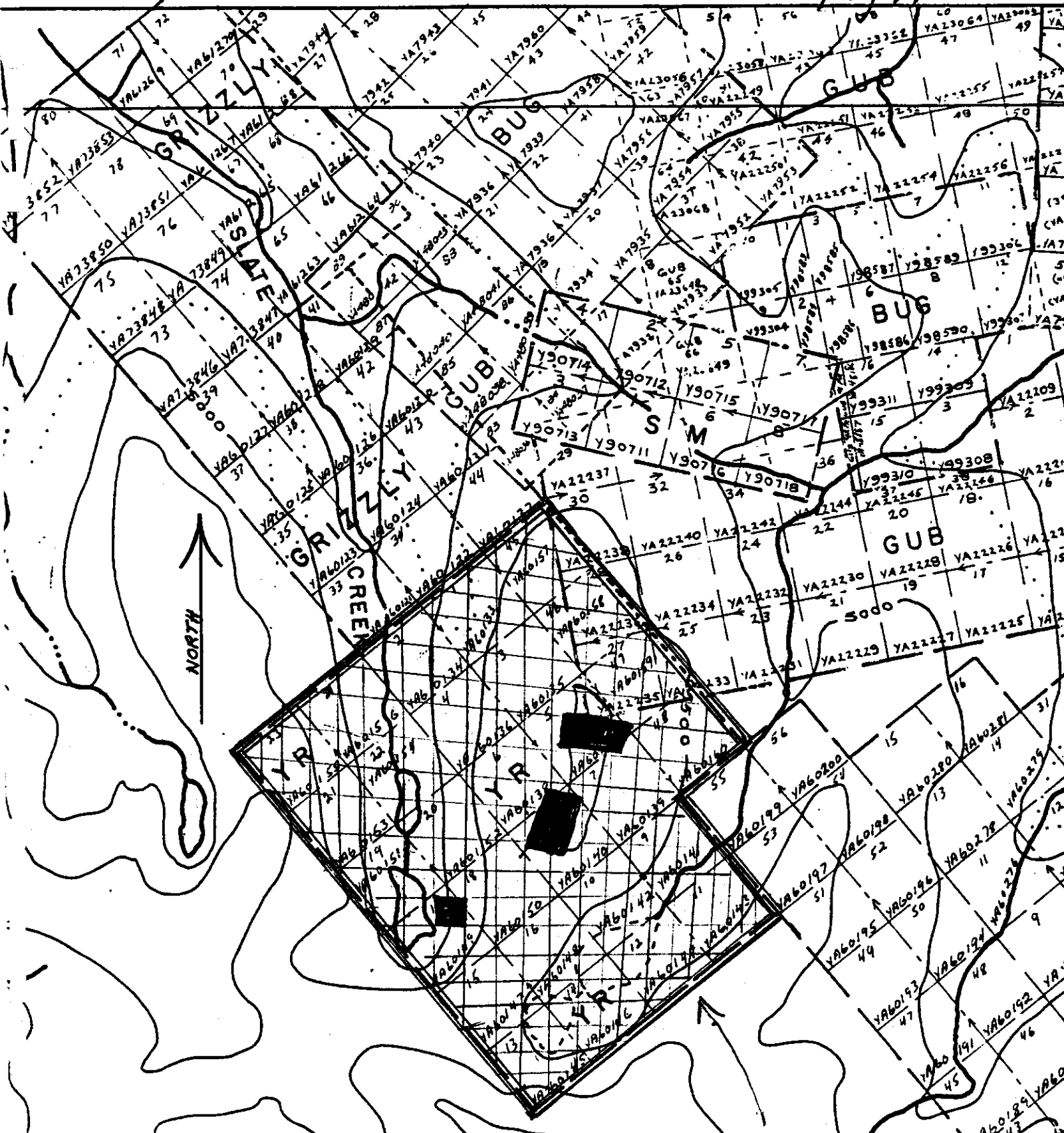
RECOMMENDATIONS

- (1) Re-assay sample G37 (L900E, 5+70N) in order to confirm moly results.
- (2) Possibly some petrographic analysis would be warranted on the above and the host rocks in order to gain possible clues as to whether the geological environment is favourable for large accumulations of economic mineralization.
- (3) Depending on the foregoing, extend the prospect trench on line 900E from 5+70N to at least 6+10N.
- (4) Excavate a trench on L840E from 5+40N to 6+00N.
- (5) In conjunction with the above, the area between 3+50N and 6+50N on both sides of the mountain should receive some intense prospecting.
- (6) Excavate a trench on and parallel to L900E centred at station 11+00N. Also, intense prospecting up-slope and on strike is warranted.
- (7) Some prospecting is still warranted northwest and down-slope of line 730E between 0+50S and 1+50S since the source of the silver anomaly has not, as of yet, been located.
- (8) To the northeast along strike from the foregoing (#7), there is a high copper soil geochem (1268 ppm) on L840E at 1+00N which should be prospected.
- (9) If any of the above recommendations are successful in encountering possible economic mineralization, the magnetometer should be tried as a possible exploration tool (i.e. direct or indirect magnetic association).

Respectfully submitted:



Gary C. Lee, P.Eng.



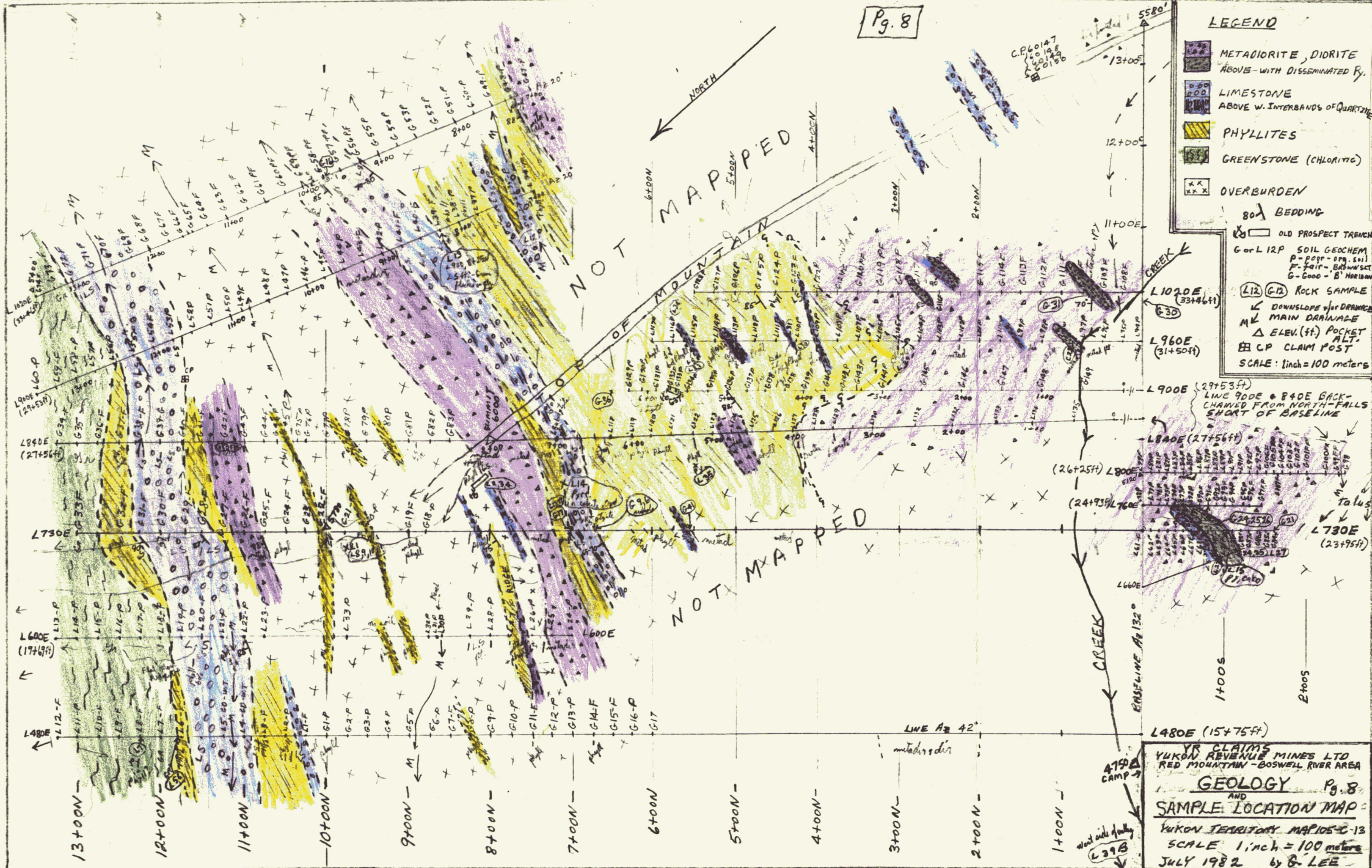
YR CLAIMS B.7
LOCATION PLAN
 MAP 105-C-13
 SCALE 1 inch = 1/2 mile
 ■ - ANOMALY(SOU) LOCATION

LEGEND

- METAIGORITE, DIORITE
ABOVE - WITH DISSEMINATED Py.
- LIMESTONE
ABOVE W. INTERBANDS OF QUARTZITE
- PHYLLITES
- GREENSTONE (CHLORITIC)
- OVERBURDEN
- 80' BEDDING
- OLD PROSPECT TRENCH

G or L 12P SOIL GEOCHEM
 P - POPP - ORG. SOIL
 F - FAIR - BROWN/SET
 G - GOOD - B' HORIZON

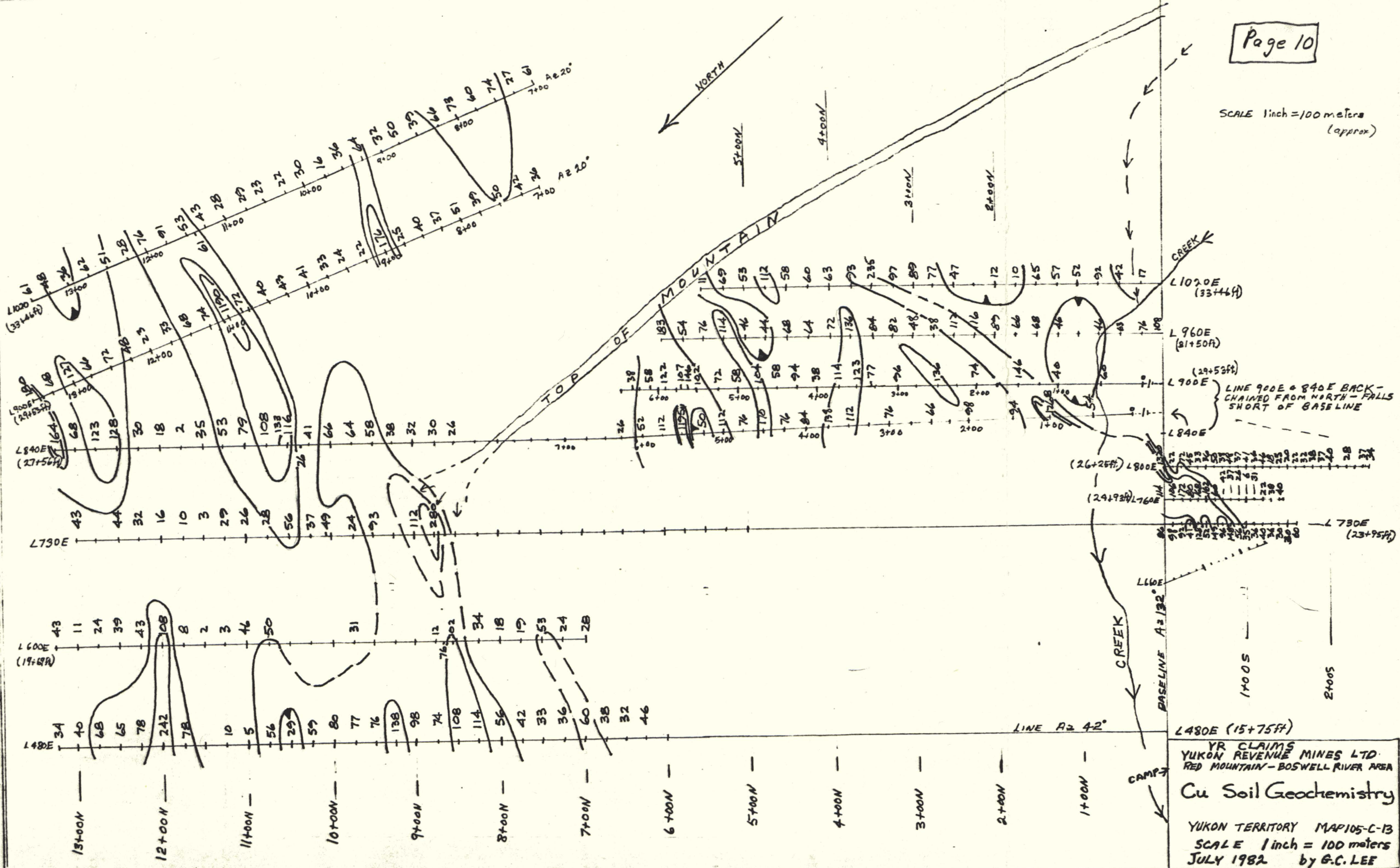
(L12) (G12) ROCK SAMPLE
 ↙ DOWNSLOPE OF DRAINAGE
 M ↘ MAIN DRAINAGE
 Δ ELEV. (ft) POCKET ALT.
 ⊠ CP CLAIM POST
 SCALE: 1 inch = 100 meters



YR CLAIMS
 YUKON REVENUE MINES LTD
 RED MOUNTAIN - BOSWELL RIVER AREA

GEOLOGY Pg. 8
 AND
SAMPLE LOCATION MAP
 YUKON TERRITORY MAP 105-C-13
 SCALE 1 inch = 100 meters
 JULY 1982 by G. LEE

SCALE 1 inch = 100 meters (approx)

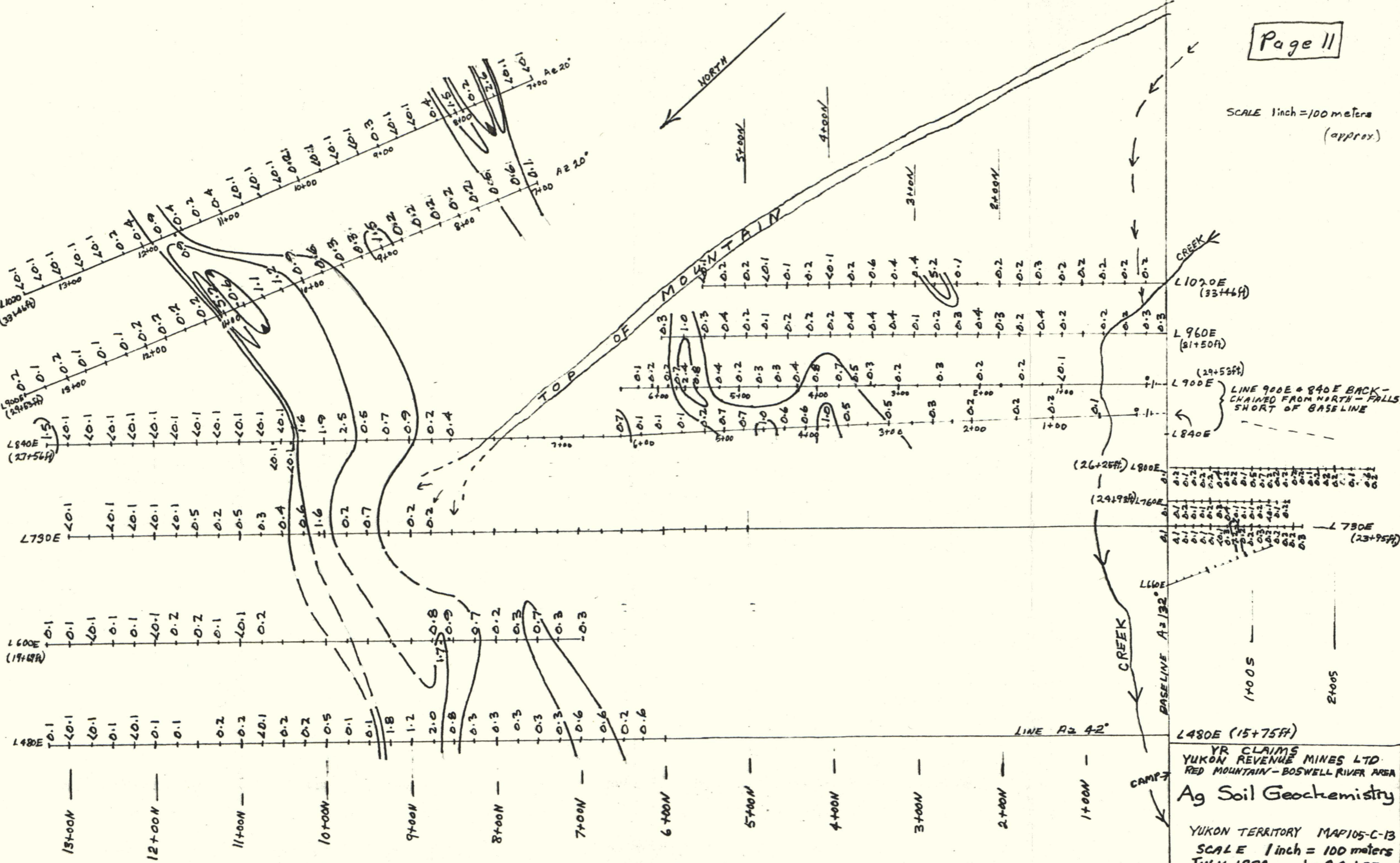


YR CLAIMS
YUKON REVENUE MINES LTD.
RED MOUNTAIN - BOSWELL RIVER AREA

Cu Soil Geochemistry

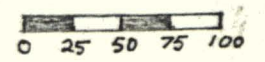
YUKON TERRITORY MAP 105-C-13
SCALE 1 inch = 100 meters
JULY 1982 by G.C. LEE

SCALE 1 inch = 100 meters (approx)

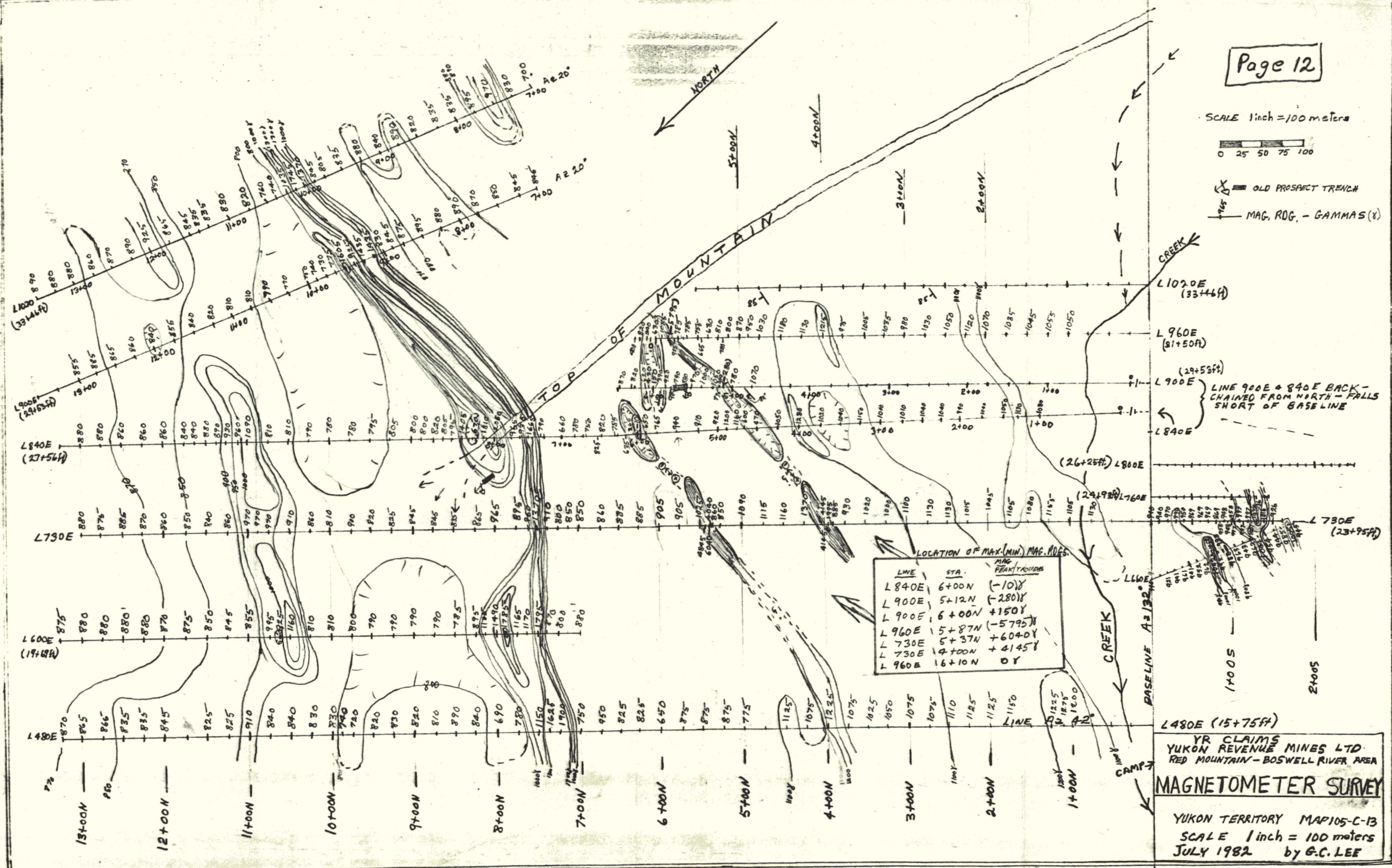


YR CLAIMS
 YUKON REVENUE MINES LTD
 RED MOUNTAIN - BOSWELL RIVER AREA
Ag Soil Geochemistry
 YUKON TERRITORY MAPI05-C-13
 SCALE 1 inch = 100 meters
 JULY 1982 by G.C. LEE

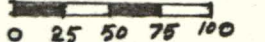
SCALE 1 inch = 100 meters



OLD PROSPECT TRENCH
 MAG. ROG. - GAMMAS (γ)



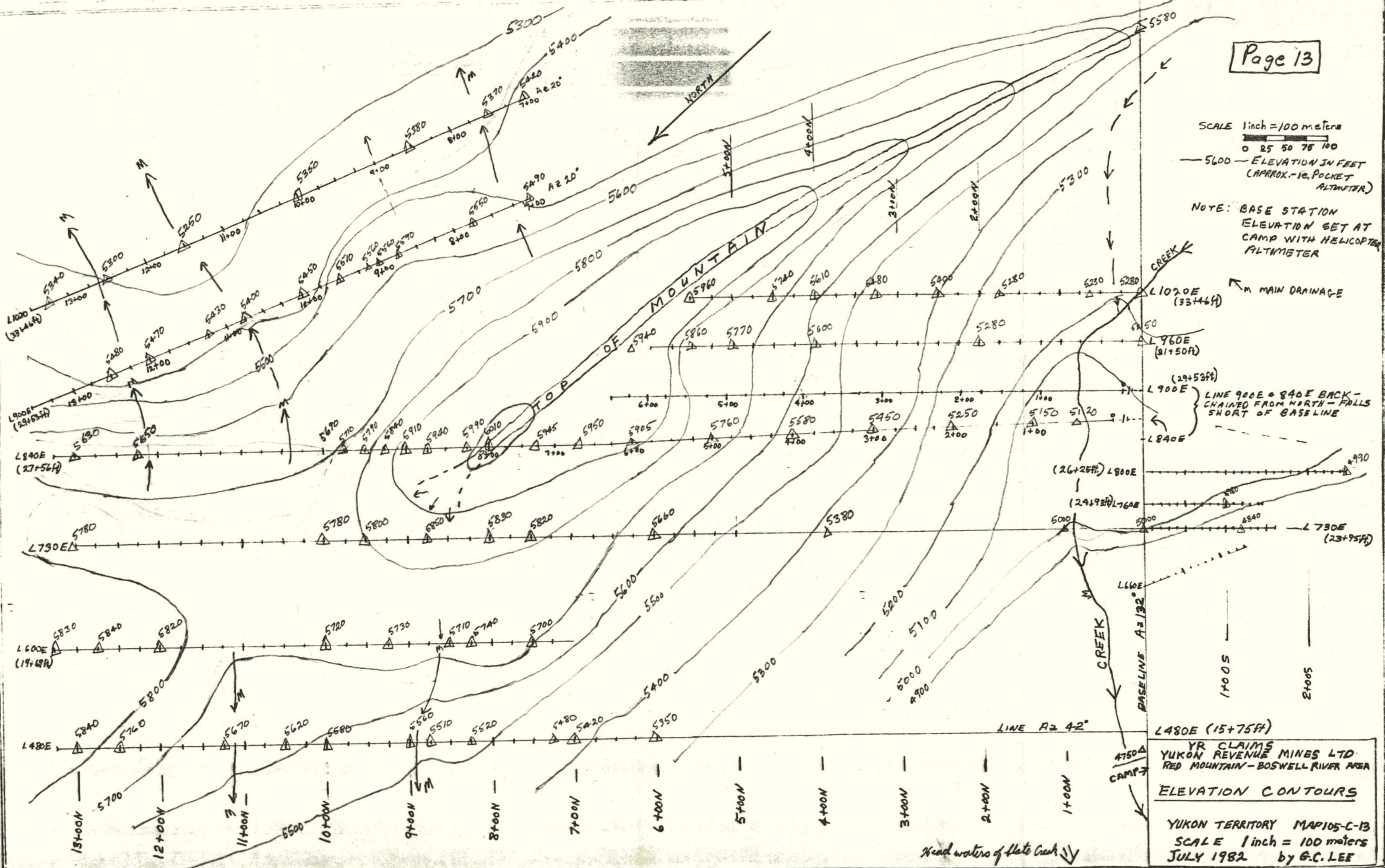
SCALE 1 inch = 100 meters



5600 - ELEVATION IN FEET (APPROX. - 10. POCKET ALTIMETER)

NOTE: BASE STATION ELEVATION SET AT CAMP WITH HELICOPTER ALTIMETER

M MAIN DRAINAGE



L1020E (33+46ft)

L960E (31+50ft)

L900E (29+53ft)

L840E

(26+25ft) L800E

(24+93ft) L760E

L730E (23+95ft)

BASELINE A=132°

L480E (15+75ft)

YR CLAIMS MINES LTD. YUKON REVENUE MINES LTD. RED MOUNTAIN - BOSWELL RIVER AREA

ELEVATION CONTOURS

YUKON TERRITORY MAP105-C-13 SCALE 1 inch = 100 meters JULY 1982 by G.C. LEE

Head waters of Slate Creek

APPENDIX



Government of Canada

Gouvernement du Canada

ACTION REQUEST

FICHE DE SERVICE

TO - A

Pat

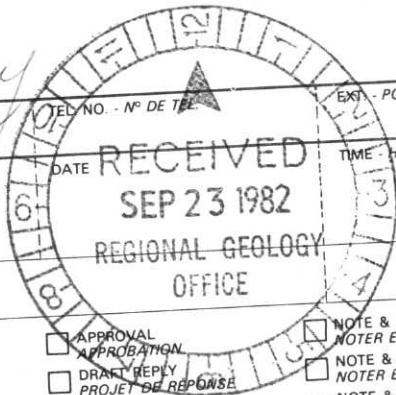
FILE NO. — DOSSIER N°

DATE

22 Sep 82

FROM - DE

Shirley



PLEASE CALL
PRIÈRE D'APPELER

WANTS TO SEE YOU
DÉSIRE VOUS VOIR

WILL CALL AGAIN
DOIT RAPPELER

CALL RECEIVED BY
MESSAGE REÇU PAR

ACTION
DONNER SUITE

COMMENTS
COMMENTAIRES

MAKE
FAIRE COPIES

APPROVAL
APPROBATION

DRAFT REPLY
PROJET DE RÉPONSE

SIGNATURE

NOTE & RETURN
NOTER ET RETOURNER

NOTE & FORWARD
NOTER ET FAIRE SUIVRE

NOTE & FILE
NOTER ET CLASSER

Invoiced on YR elms

Revenue Mines

Report by Gary Lee



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

YUKON REVENUE MINES
117 INDUSTRIAL ROAD
WHITEHORSE, YUKON

INVOICE: **F 04576**

DATE: **July 27/82**

REPORT NO: **G42-207**

PROJECT:

283 analysis of copper, silver, & molybdenum	@3.60	\$1018.80
283 analysis soil sample preparations	@ .70	<u>198.10</u>
TOTAL		<u><u>\$1216.90</u></u>



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-4455

INVOICE: **F 04604**

DATE: **July 29/82**

REPORT NO: **G42-204**

PROJECT:

**YUKON REVENUE MINES
117 INDUSTRIAL
WHITEHORSE, YUKON**

36 analysis of copper, lead, silver, & molybdenum	@5.50	\$198.00
7 analysis of gold	@6.50	45.50
36 rock sample preparations	@2.75	<u>99.00</u>
TOTAL		<u><u>\$342.50</u></u>

Keystone Helicopters Ltd.

INVOICE

Nº 0863

Tel: (604) 651-7569
P.O. Box 178
Atlin, B.C. V0W 1A0

DATE July 7, 1982

P.O. NO.

CHARGE TO

Yukon Revenue
117 Industrial Rd.
Whitehorse, Y.T.

FLIGHT TICKET / INVOICE

AIRCRAFT		CG-RFZ		AREA		Whitehorse	
PILOT		Karl Zeihe		RATE PER HOUR		\$ 600.00	
DATE		FLIGHT TICKET NO.		HOURS		AMOUNT	
June 30/82		4255		1.3		\$ 780.00	

RECEIVED
JUL 12 1982
GENERAL ENTERPRISES

*Pd July 15
1399*

SUB TOTAL	\$780.00
FUEL CHARGES	75.25
MISC.	
INVOICE TOTAL	\$ 855.25

TERMS

A SERVICE CHARGE OF 1½% PER MONTH, (18% PER ANNUM)
CHARGED ON OVERDUE ACCOUNTS.

PLEASE PAY FROM THIS INVOICE

DUE AND PAYABLE WITHIN 30 DAYS



Keystone Helicopters Ltd.

No 0872

Tel: (604) 651-7569
P.O. Box 178
Atlin, B.C. V0W 1A0

DATE July 12, 1982

P.O. NO.

CHARGE TO

Yukon Revenue Mines
117 Industrial Rd.
Whitehorse, Y.T.

AIRCRAFT		CG-RFZ		AREA	Whitehorse
PILOT		Karl Zeihe		RATE PER HOUR	\$ 600.00
DATE	FLIGHT TICKET NO.	HOURS	AMOUNT		
July 9/82	003289	.8	\$ 480.00		

RECEIVED

JUL 15 1982

GENERAL ENTERPRISES

1399

SUB TOTAL	\$ 480.00
FUEL CHARGES	51.60
MISC.	
INVOICE TOTAL	\$ 531.60

TERMS

A SERVICE CHARGE OF 1½% PER MONTH, (18% PER ANNUM)
CHARGED ON OVERDUE ACCOUNTS.

PLEASE PAY FROM THIS INVOICE

DUE AND PAYABLE WITHIN 30 DAYS

Ⓐ

INVOICE

FROM: GARY LEE
Box 5348
WHITEHORSE, Y.T.

058505

DATE Sept 17 1982

ORDER NUMBER ▶

REPRESENTATIVE

TERMS ▶

F.O.B.

SOLD TO

Jukon Revenue Mines Ltd
117 Industrial Rd., Whitehorse

SHIP TO

ADDRESS

VIA

QUANTITY	DESCRIPTION	PRICE	AMOUNT
	Time & materials regarding writing of report including all geochemical geological and geophysical maps on "R" claim group - Red Mountain - Boswell River area	375 00	
	Typing and copying (6 reports)	82 50	
	Total		457 50
	Note: reports submitted to Mining Recorder (Whitehorse District) on Sept 17/82 by G.L.		

180060

Ag

3280.84
65.6
3346.4



1970 SOIL GEOCHEM.
SILVER

Scale 1 inch = 1000ft.
(approx.)

