Report on

Richore Gold Mines Limited

Conger Township Property

Ontario

Airborne Radiometric Survey

Introduction:

An Airborne Radiometric Survey was flown over the 100 claims belonging to Richore Gold Mines Limited in Conger Township, Ontario, on July 8th and 9th 1970. This Survey detected a number of radioactive anomalies which are described in the present report.

Location and Access:

The claim group lies about 6 miles north and 2 to 6 miles east of the Village of MacTier, on Highway 69, about 115 miles north of Toronto, Ontario.

It is reached by good gravelled roads leading from the main paved highway to general points within the claims.

Property:

The claim group is divided into four blocks identified as A, B, C and D from north to south. The claims in each group are as follows and as appear on the enclosed map.
Property: (Cont'd)

Block A: 220328 to 220339 inclusive; 220355 and 220357; 39914 to 39917 inclusive. 18 claims.

Block B: 41732 to 41735 inclusive; 220372 to 220376 inclusive; 41940 to 41942 inclusive; 220358 and 39918 14 claims.

Block C: 220324 to 220327 inclusive. 4 claims.

Block D: 220340 to 220354 inclusive; 220359 to 220363 inclusive; 209240 to 209250 inclusive; 41934 to 41939 inclusive; 209264 to 209276 inclusive; 63 claims.

Total: 99 claims.

These claims are each 1500 feet long by 1320 feet wide, thus totalling 45 acres each or 4,000 acres for the group.

Line System and Ground Control:

The property is divided into 4 blocks referred to as Blocks A, B, C and D and defined hereabove.

Blocks A, B and C have been flown altogether in a series of north-south traverses spaced every 660 feet with readings every 100 feet. The results of this survey have been recorded on the map drawn at 400 feet to the inch, called Airborne Spectrometer Survey East Section. This part of the survey includes 27.5 miles of lines spaced every 660 feet running north-south, totalling 1450 readings.

Block D as described hereabove, was flown from east to west in a series of traverses spaced every 500 feet, totalling 51.5 miles and 2,710 instrument readings, as recorded on the map entitled Airborne Spectro-
Line System and Ground Control: (Cont'd)

Meter Survey West Section.

When flying the east section the northern boundary line of Conger Township was used as baseline. When the west section was flown the north-south power line lying a quarter mile east of Fogel Lake was taken as a baseline.

Instrument:

The instrument used was a Sharpe GIS-2, Serial No. 801-128 with 4 thallium activated crystals feeding an input amplifier.

The probe is a special probe for airborne work, type ASP-5, connected to a continuous recorder plotting a constant profile of radioactivity in counts per second. The recorder is an Easterline-Angus type AW, 1400 ohms, the instrument constant for airborne survey is 16 counts per second.

Results:

In the east section background was found to be about 30 counts per second. In Block A three anomalies have been measured, ranging from 50 to 60 counts per second. These are located respectively as follows:

Claims 220334, 220335, 220336
In the centre of claim 39915
In the west half of claims 39916 and 39917.

The first anomaly is 1800 feet long and 1000 feet wide. The second anomaly is roughly circular and about 500 feet in diameter. The third anomaly is elongated, measuring 2400 feet in length and from 500 to 800 feet in width. Several zones of lower radioactivity ranging from 40 to 50 counts per second were found to extend over most of the claims in Block A.
Results: (Cont’d)

Block B extends over four well-defined anomalies trending generally north-south and located from east to west as follows:

On claims 41732, 41734, 41735, 220372, 41733, 220358, 220374, 220373, 39918

The dimensions of these anomalies are respectively in the same order as follows:

The first anomaly is 4500 feet long averaging 600 feet in width and ranging from 50 to 90 counts per second.

The second anomaly is 1800 feet long averaging 500 feet in width and ranging from 50 to 60 counts per second.

The third anomaly is approximately 3400 feet in length and swinging cast towards the south end. It has an approximate width of 1000 feet to 1500 feet and ranges from 50 to 123 counts per second. It seems to be connected to the fifth anomaly on claim 39918, which anomaly is 2000 feet long by 1000 feet in width. These last two anomalies are overlying a mass of granitic rock which can be seen outcropping as hills and cliffs south and west of Josselin Lake and on either side of Mogridge Lake.

On Block C the radioactive pattern is not well defined. Radioactivity is seen to increase up to 50 and 60 counts per second on the east border of claim 220327 and it would seem that the most markedly anomalous zone in this area would be located on the north shore of Brown Lake from the eastern part of 220327 and further east beyond the boundary.

West Section:

In the west section background stands generally between 20 and 30 counts per second. There are four marked anomalous zones running from 50 to 60 counts per second. These are found to lie as a straight band running
east-west on the north side of Lake Healey. These anomalies are lying mostly along flight line 7B.

From east to west there are four anomalies measuring respectively,

900 feet in length by 200 feet in width,
1300 feet in length by 200 feet in width,
5200 feet in length by 800 feet in width,
1100 feet in length by 200 feet in width.

In the centre of flight line 3B there is another anomaly ranging better than 50 counts per second, 1400 feet long by 150 feet wide.

At the west end of flight line 5B is another anomaly 800 feet long by 150 feet wide, ranging better than 50 counts per second.

The main anomaly on flight line 7B covers the southern part of claim nos. 220347, 220346, 209264, 209265 and the northern part of claims 419239, 220363, 209269, 209270. It ranges up to 66 counts per second and overlies elongated bands of medium grained slightly pegmatitic plagioclase intrusive.

A few other secondary anomalous readings between 40 and 50 counts per second have also been measured in numerous locations. Very little anomalous patterns have been detected in the northern part of Block B and it is suggested that the fifteen claims north and west of Lake Quillan could be abandoned.

Conclusions:

Six anomalies ranging between 50 and 66 counts per second have been measured in the west section of the property, while nine anomalies ranging from 50 to 123 counts per second have been detected in the east section of the property.

Some of these anomalies appear to be overlying various intrusive masses with or without pegmatites, while others might be covering massive wide pegmatite zones.
Conclusions: (Cont'd)

The anomalies located north of Healey Lake and west of Josselin Lake are of main interest because of their size and the fact that they range 3 to 4 times above background.

The anomalous zones should be further investigated by a Ground Radiometric Survey, followed by rock trenching and bulk sampling of the better areas.

Recommendations:

1. In the east section lines should be cut in an east-west direction, spaced every 300 feet across the anomalous zones and radiometric ground readings should be taken every 100 feet.

2. In the west section lines should be cut every 300 feet in a north-south direction across the main zone of the anomaly and radiometric readings should be taken every 100 feet on the said line system. The total line cutting should be approximately 30 miles.

3. The better radioactive areas defined by the ground survey should be drilled and blasted in order to provide large size samples coming from below the altered surface.

The estimated cost of the above program is $5,000.00 and the program should be completed in approximately two months time.

Respectfully submitted,

Pierre G. Lacombe, Eng.
P.G. Lacombe & Associates Consulting Engineers

July 28th 1970.
RICHORE GOLD MINES LTD

CONGER TWP. PROPERTY
ONTARIO

AIRBORNE SPECTROMETER SURVEY

BY: P.G. LACOMBE 
CONSULTING ENGINEERS

SCALE: 1" = 400'