

Lucky Strike Explorations Limited, Room 404, 510 Hastings Street West, Vancouver, B.C.

Room 410, 100 Adelaide Street, West, Toronto, 1, Ontario.

Gentlemen: -

This report describes the results of electromagnetic and magnetometer surveys conducted by Geo-Technical Development Co. Limited on your mining property consisting of a block of 24 claims located in Carscallen Township in the Timmins Area of Ontario. The line cutting and the surveys were carried out from May 15th., to July 8th., 1964, and the results and interpretation are mapped on Plan No. 1 accompanying this report.

CONCLUSIONS AND RECOMMENDATIONS

The combined electromagnetic and magnetometer geophysical surveys have detected an excellent conductor for
a length of 2,250 feet up to the west boundary of the property. This conductor continues to the west, outside the
property, into Patented Claim 883 for an additional minimplication of 350 feet. The Sharpe S.E.-200 E.M. Instrument recorded strong E.M. "cross-overs" on every line at
1400 foot intervals for the length of 2,250 feet. The
"cross-over" on Line 16 East was checked with the Ronka
Mark-I electromagnetic instrument and it recorded a very

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strong and wide conductor zone between 300 feet and 1,000 feet south of the base line. The great width of 700 feet, picked up by this instrument, is attributed to greater depth penetration of the Ronka.

The conductor zone forms the core of the highest hill in the area, about 300 feet above creek level. The hill is mainly composed of Pre-Cambrian sheared silicified andesites and sheared rhyolite intruded by a main gabbro dyke striking nearly east-west through the complete length of the hill. Gossan and some sulphides have been seen on the north flank of this hill. The geophysical surveys indicate wide massive sulphides at depth.

physical results. A minimum of four holes, totalling 2,000 feet, are required for the preliminary program. The holes are each 500 feet deep and inclined at 45°. Locations and directions are on Plan No. 1, and particulars are in a schedule appended to this report.

Valuable surface information could be obtained by plugger-drilling and blasting. The localities on L.8 E. and L.16 E. are shown on Plan No. 1 accompanying this report.

PROPERTY, LOCATION AND ACCESS

The property is located in the western part of Carscallen Township, Porcupine Mining Division, Ontario, and comprises of a block of 24 mining claims. The area is approximately 960 acres. The claim numbers are listed

below:-

4 claims, P-58533 - 36 incl. 2 claims, P-58543 & 44 18 claims, P-58854 - 71 incl.

The surveys were done on the following 12 claims:-P-58533 - 36 incl., P-58543 and 44, and P-58866 - 71 incl.

The location is about 28 miles by road westwards of the town of Timmins. It is easily accessible with a pick—up truck from Timmins by going a distance of 20.5 miles on paved Highway 101 and 7.5 miles on Malette Lumber Co. gravel roads. A permit is required to pass a road gate. This may be obtained from the above lumber company in Timmins, or from Mr. Roger Boussiere of Mountjoy Timber Co., 341 Waterloo Street, Timmins.

GENERAL GEOLOGY

The property is most favourably located geologically in a belt of volcanics on a gabbro contact at the north and a granite contact about a mile to the south of the property. The volcanics are of the acidic and intermediate types; sheared rhyolite and sheared andesite are the main host rocks in the vicinity of the largest basic intrusive gabbro dyke shown on Plan No. 1. This is the area of main interest at present where the geophysical instruments gave such good results. It is in mining claims P-58535-34-43 and 44 and associated with the highest hill which forms a landmark for many miles.

The shearing is generally east-west and nearly vertical with a slight inclination to the south.

PROPERTY CHECK EXAMINATION

The writer accompanied by Geologists. Mr. Joseph Adie and Dr. Neil Hillhouse of Canex Exploration, left Toronto on July 4th., 1964, to check on the property both geologically and geophysically. The main area of the big hill was given a preliminary geological check and Line 16 East, south of the base line, was checked geophysically with the Ronka Mark-I electromagnetic instrument. results are given in the following section of this report. The writer returned to Toronto on July 8th., 1964.

GEOPHYSICAL ANOMALOUS READINGS

The Sharpe S.E. -200 recorded strong "cross-overs" from L.00 to L.20 E. south of the base line in the order of 15N-21S, 2W-5E (in line method), 3N-6S, 15N-8S, 8N-23S, 5N-23S, and 16N-22S. These readings show a good conductor for a length of 2,250 feet.

The Ronka Mark-I checked L.16 E. from the base line to 1,200 feet South. The readings are given below:-

FOOTAGE	IN PHASE	OUT PHASE
00 100-8 200-8	+ 6% + 8% + 14%	- 5% - 6% - 5%
300-s 400-s	- 28% - 54%	- 17% - 11%
500-s 600-s	- Off scale	- Off scale
700-S 800-S	•• 11 11 •• 11 11	11 11 11 11
900-S 1000-S	- 53%	- " " - 4%
1100-S 1200-S	+ 1% 0	+ 1% + 1%

These readings indicate a very strong conductor at

depth between 300 feet and 1,000 feet on L. 16 E. south of the base line.

The magnetometer outlined the main gabbro dyke south of the base line contoured at 1,500 gammas with high readings above 5,623 gammas in the middle of it. Negative readings and "lows" were recorded on the north and south contacts of this gabbro dyke giving a di-polar effect indicating sulphides.

GEOPHYSICAL SURVEY METHOD AND INSTRUMENTS

A Sharpe Model S.E.-200 electromagnetic unit was used on the survey employing mainly the parallel line vertical loop method. Ronka Mark-I by horizontal loop method was used for electromagnetic check on L. 16 E., south of the base line.

Pass-check method was used for the magnetometer survey with a Base Control Station on the Base Line at L.-00 and Control Stations at L.8 E, L.16 E., L.24 E., L.28 E., and L. 36 E. A Sharpe Model A-2 magnetometer with vertical intensity was used. This magnetometer has a sensitivity of 19.02 gammas per scale division. Both surveys were under the supervision of the writer.

SURVEY DATA

Geophysical surveys were carried out by Geo-Technical Development Co. Limited during the period from May 15th., to July 8th., 1964. A base line was cut east-west for a distance of 4,050 feet across the property for the turning off of picket lines at 400 foot intervals. This base line was tied onto the Whitesides-Carscallen Township Line at

the west boundary.

A total of 11.4 miles of picket lines were cut including the base line. The electromagnetic survey totalled 10.9 miles and 564 observations were made. The magnetometer survey totalled 11.0 miles and 543 readings were made.

The number of eight-hour man-days required to complete the survey was as follows:-

	8-Hour Man-days	Attributable to Assessment work
Line cutting and chaining	60 x 4	240
Operating magnetometer survey	12 x 4	148
Operating E.M. survey	14 x 4	56
Calculation and inter- pretation	3 × 4	12
Drafting	11 x 4	141
Office and typing	2 x lt	8
	102	<u>408</u>

Respectfully submitted,

GEO-TECHNICAL DEVELOPMENT CO. LIMITED,

SG:S

STAN GUIMOND, Geologista

Stan Serimond

62 Richmond Street West, Toronto, 1, Ontario.

July 16th., 1964.

RECOMMENDED TEST DRILLING SCHEDULE

The recommended diamond drilling totals 2,000 feet, 4 holes, each 500 feet deep and 45° inclination.

LOCATION OF HOLES

DIRECTION OF HOLES (On Ast. Na)

D.D.H. No. 1. L.16 E. at 730' S. of B.L. and 27'W.

N. 20 W.

D.D.H. No. 2 L.8 E. at 610' S. of B.L. and 38' W.

N.

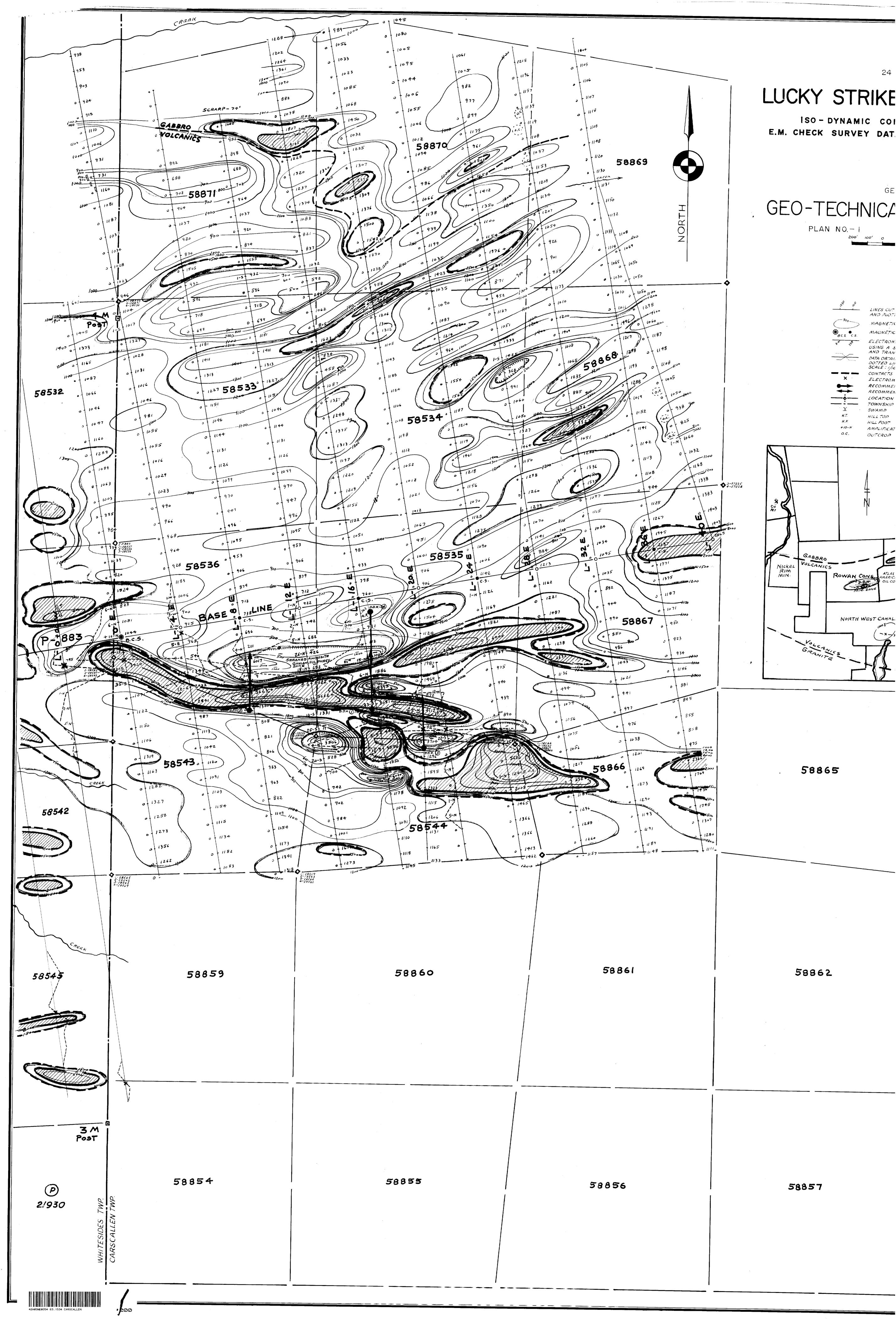
D. D.H. No. 3. L.20 E. at 1,050' S. of B.L.

N. 2° E.

D.D.H. No. 4. L. 16 E. at 100' S. of B.L. and 70' E.

8. 20 E.

Stan Freemoud



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1005

0 1044

1188

1012

58860

58855

1227 58533° 1227

736 ° \ 1953

0 + 1182

859

1 73BLINE

1126

0 1099

947

2 996

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953

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