

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

13,757

A MAGNETIC AND GEOLOGICAL REPORT

on the

DAVE CLAIM

located in the

Likely Area, Cariboo Mining Division

Map M93A/12E

Latitude $52^{\circ}37'N$ and Longitude $121^{\circ}35'W$

for

Raymond A. Cook (owner)

and

Rhamco Resource Explorations and Consultants Inc. (operator)

by

Raymond A. Cook B.Sc., M.Sc., Geology

July 20, 1985

Raymond A. Cook

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I. INTRODUCTION

A magnetic and geological survey was conducted central to the Dave claims to encompass a previously conducted VLF-EM16 survey and its geologically mapped outcrops of bedrock volcanics with epidote hornfels plus skarn alteration.

Property

The Dave claim includes twenty units located in the Quesnel Lake area of the Cariboo Mining Division, British Columbia. The claims are held by Raymond A. Cook and have record number 1773.

Location and Access

The Dave claim is situated approximately one kilometer southwest of the town of Likely, British Columbia, which is eighty-three kilometers east of One Hundred and Fifty Mile House by a partially paved and gravelled road. The claim is additionally accessible by the Horsefly-Likely gravel road. Slum Gulch Creek traverses diagonally across the claim from Slum Lake.

Topography and Vegetation

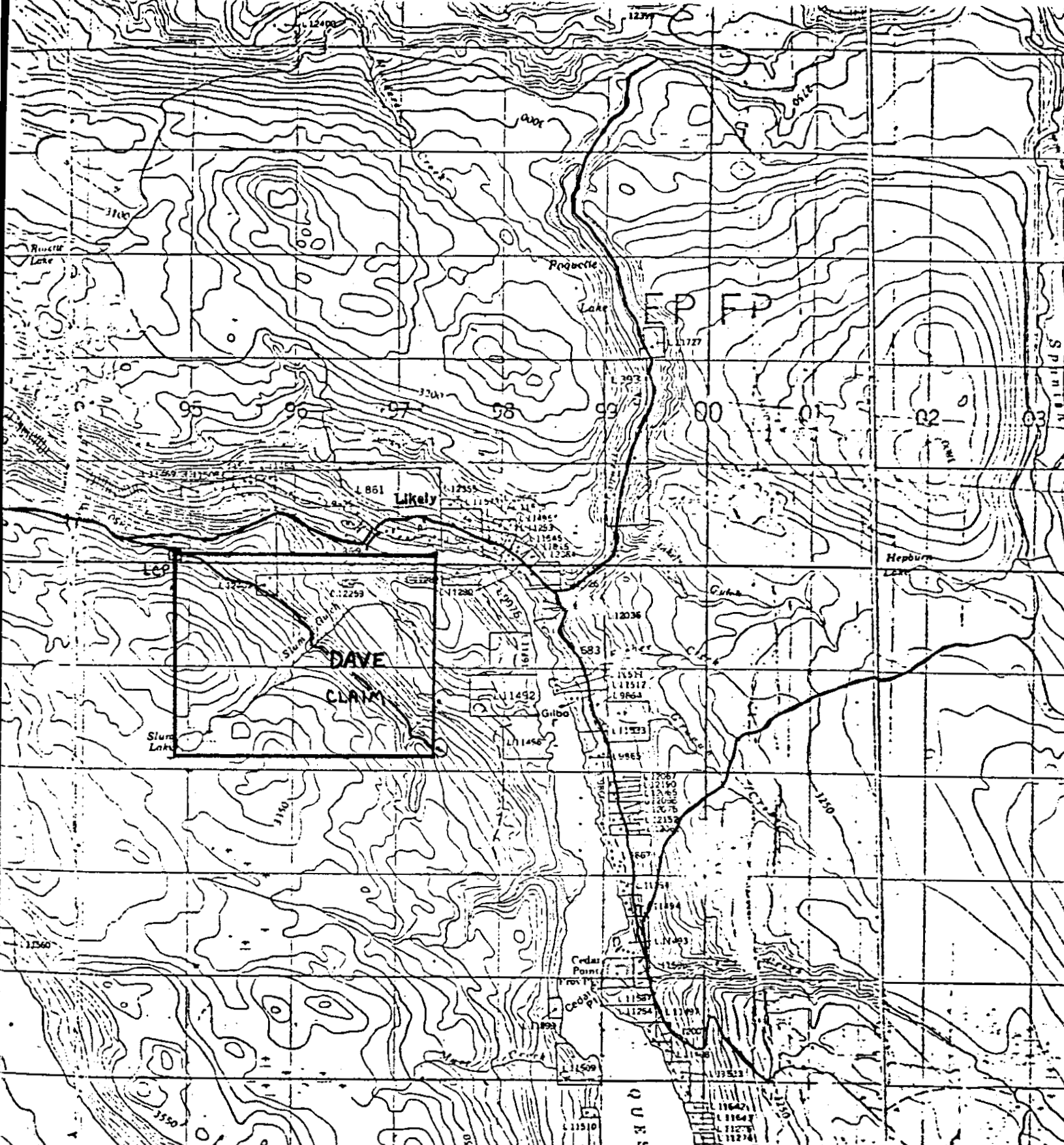
The elevation of the property varies from 750 meters at Quesnel River to 1200 meters for the Slum Lake Plateau. A marked change in slope occurs with the northeastern half of the claim dipping away from the higher southwestern plateau. The vegetation cover is dense with several periods of regrowth. Cedar predominates with less abundant birch, fir, pine and alder in a temperate environment.

Previous Work

Ardo Mines conducted a geochemical and geophysical (I.P.) survey of the northern half of the property in the early 1970's. Several anomalies were delineated some of which were diamond drilled. The results of this drilling detected copper and gold mineralization immediately north of the present Dave claim.

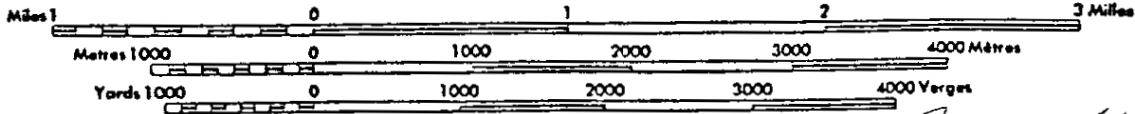
In 1981 the Dave claim was partially mapped at a 1:11000 scale and prospected with follow up selective rock geochemistry. A shallow Winkie diamond drill hole was cut in 1982 to test for metallic mineralization in epidote hornfels and skarn at Slum Gulch Creek road cut. In 1984 seven thousand meters of line were cut and tested by VLF-EM16 with accompanied geological mapping where outcrop permitted. The results from the previous work are documented in filed assessment reports.

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CARIBOO LAND DISTRICT
 BRITISH COLUMBIA

Scale 1:50,000 Échelle



This Provisional Map is equivalent to a standard map in accuracy of content.

Some names on this map are not yet official. Corrections or additions are invited by the Surveys and Mapping Branch.

CONTOUR INTERVAL 100 FEET
 Elevations in Feet above Mean Sea Level
 North American Datum 1927
 Transverse Mercator Projection

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Performed Work

The Dave claim was magnetically surveyed and geologically mapped from June 19 to June 30, 1985. Twelve thousand six hundred meters were tested magnetically at 25 meter stations. The magnetic grid encompassed seven thousand meters of previously cut VLF-EM16 survey lines plus an additional five thousand six hundred meters of newly cut line. Survey lines were compassed, blazed, flagged and chained.

Geological mapping was by chain and compass with rare outcroppings available for observation. Heavy vegetation and a thick moss undergrowth limited mapping of the bedrock.

The magnetic survey was conducted using a Barringer portable protonmag model GM-122. Magnetic readings were corrected diurnally using closure of survey line loops and averaged using a three station running average. Topographic relief over the surveyed area was approximately 150 meters ranging from an eastern low of 915 meters to a western high of 1075 meters. A slight increase in background magnetics corresponds with the increased property elevation.

II. RESULTS

Magnetic Survey

Magnetic contours show highly variable and sharp gradient changes throughout the surveyed area. The magnetic contours are plotted in gammas with values above the background of 58,000 gammas being positive and below being negative (map in pocket). Survey results are bimodal with the eastern half strongly dominated by low magnetic anomalies coupled with small diametered magnetic highs and the western half strongly dominated by linear high magnetic anomalies trending east-west plus northwest to southeast with associated small widely spaced magnetic lows. A fault system reflected by low magnetic contours trends northwest-southeast starting at station 6 North-20 West and continuing to station 2 South - 15 West bisecting the property between two areas of highly variable magnetic character.

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Geological Survey

Mapping detected four previously known lithologies in the survey area:

1. Rock outcrop at station 9 West - 5 North contained silicified hornblende hornfels crosscut by felsic and mafic diorite dyke with narrow chill margins. Minor sulphides and magnetite occur disseminated along microfractures.
2. The most eastern outcrops contain slight to moderately altered volcanic andesite with fair silicification and epidotization.
3. Most of the studied outcrops are composed of slightly altered andesite flows and breccias. Carbonate or silica infilled amygdules and augite phenocrysts in a finely crystalline mafic groundmass are common to the andesite flows.
4. Outcrops in the survey area west of line 19 West are dominated by magnetite rich brecciated mafic and ultramafic volcanics. Pyroxenites occur with abundant fracturing, secondary silica cement, hornblende plus pyroxene phenocrysts and magnetite.

III. INTERPRETATION

The area surveyed is divisible by a northwest to southeast trending fault and/or sharp lithologic contact starting from station 6 North - 20 West to 3 South - 15 West. The rock magnetic content and to a lesser extent the geological character supports this eastern and western division.

East of the fault the bedrock contains low magnetic contours and several anomalies indicated by sharp changes in magnetic gradient. The magnetic contours contain small circular to elongate magnetic highs which increase in frequency and size from east to west. Geological mapping describes saussuritized, silicified and altered epidote hornfels plus skarn in the eastern study area coincident with the low magnetic contours. The rare high magnetic anomalies contain crosscutting syenite and magnetite rich diorite dykes. The extensive alteration of the bedrock is hydrothermal and decreases to the west where the magnetic background moderately increases. Bedrock exposure is mainly absent from line 12 to line 20 West thus precluding a clear geological interpretation of this area's magnetic contours.

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West of the designated fault, from station 6 North - 20 West to station 3 South - 15 West, the magnetic and bedrock character is completely different from that observed to the east. High magnetic contours with sharp gradients and linear trends dominate two thirds of the survey area. The high magnetic anomalies trend northwest - southeast and east - west with widths of seventy to one hundred and fifty meters and strike lengths of 600 meters. Geologically mapped outcrops are common to the topographic highs which in turn coincide with the areas of high magnetic character. The outcrops are composed of diorite and brecciated andesite with the diorite containing pyroxene and hornblende phenocrysts plus abundant magnetite and minor plagioclase minerals. Epidote and silica occur as common secondary replacement minerals.

IV. CONCLUSION

A magnetic and geological survey central to the Dave claim has outlined two distinct areas of different magnetic and geological character. The western half of the survey area is dominated by magnetite rich mafic to ultramafic diorite and volcanic rock. Magnetic anomalies are frequent, mainly high and linear in extent.

The eastern half of the survey area contains mainly low widely spaced magnetic contours and relatively few high magnetic anomalies. The more easterly outcrops of volcanic bedrock are moderately to strongly altered with abundant epidote skarn and hornfels development. The bedrock exposures central to the study area are rare and those mapped contained andesite flows and breccias of a slightly altered character.

Metallic mineralization was largely undetected except for abundances of magnetite and minor disseminated sulphides along microfractures. Magnetic variations show strong fluctuations such that the bedrock may contain associated metallic deposits.

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V. RECOMMENDATIONS

Volcanic bedrock and crosscutting intrusive stocks express highly variable magnetic contours and anomalies in the central surveyed area of the Dave claim.

Recommendations are for more expansive geophysical surveys to delineate magnetic trends and conduct Induced Polarization surveys to detect metallic zones. A detailed geochemical survey is recommended to enhance geophysical discoveries and to test for precious and base metals including platinoids. Trenching and diamond drilling should follow the discovery of significant geophysical and geochemical anomalies.

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APPENDIX I

COST STATEMENT - DAVE CLAIM

Magnetic and Geological Survey June 19 to June 30, 1985.

<u>NAME</u>	<u>WORK</u>	<u>DATES WORKED</u>	<u>NO. OF DAYS</u>	<u>RATE/DAY</u>	<u>COST</u>
G. Richmond	Supervision, magnetometer operator, cut and flag line, geologic mapping	June 19 to June 30, 1985	12	\$150	\$1800.
M. Vance	Cut and flag line	June 19 to June 30, 1985	12	\$70	\$840.

Subtotal: \$2640.GENERAL EXPENSES

Truck rental and gasoline	\$600.
Magnetometer rental	\$367.
Accomodation	\$300.
Meals	\$350.
Misc. (laundry, flagging, topofil, etc.)	\$ 70.
Report compilation	\$400.

Subtotal: \$2087.TOTAL: \$4727.*Raymond A. Cook*

APPENDIX II
Qualifications

I, Raymond A. Cook have been practising my profession as a geologist since 1973.

I have an honours B.Sc., in Geology from the University of Alberta, Edmonton 1973 and a M.Sc., Geology from the University of British Columbia, Vancouver 1981.

In applying my profession I have worked with Eldorado Nuclear, Cominco, Terra Mines Ltd., Union Carbide, Crowdis Oil Consultants, Belloy Petroleum Consultants, Home Oil and Rhamco Resource Explorations and Consultants Inc., in mineral and oil-gas exploration.

I have worked on research projects in geology for the University of Alberta, Edmonton, Alberta and the University of British Columbia, Vancouver, British Columbia.

I have worked privately on interests of my own in British Columbia and the Northwest Territories since 1975.

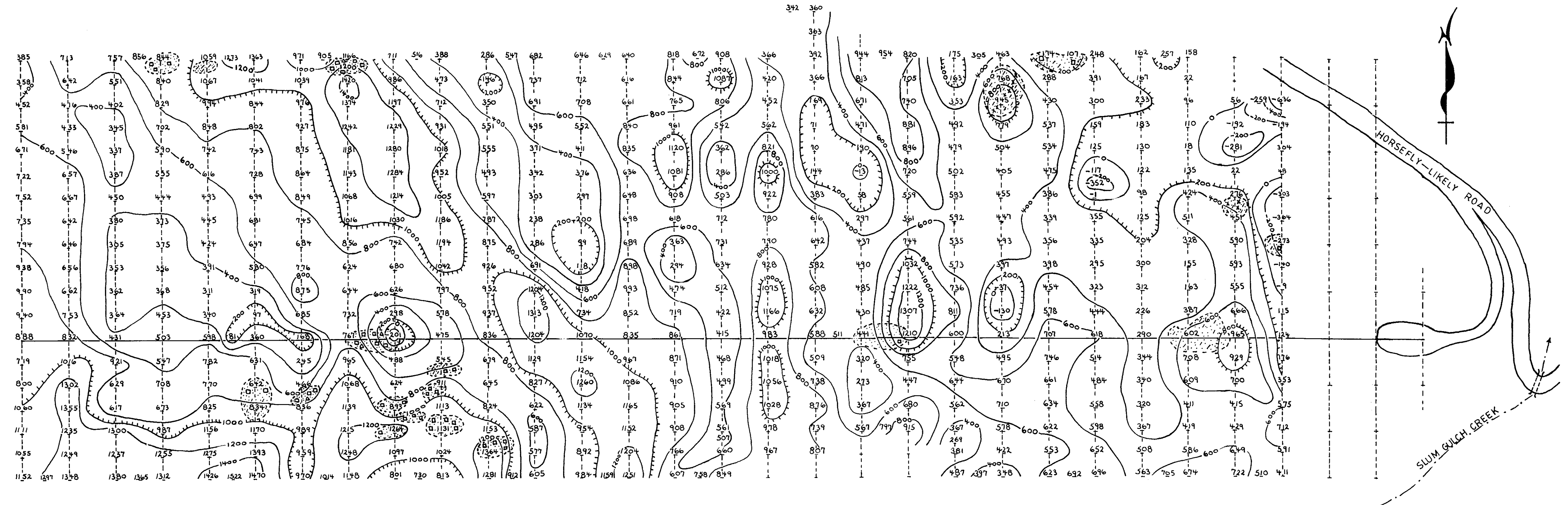
I hold interest in the property described in this report and have supervised and directed all exploration activity.

Raymond A. Cook, B.Sc., M.Sc., Geology

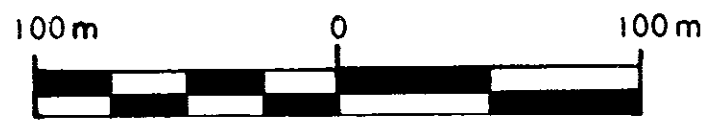
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30W 29W 28W 27W 26W 25W 24W 23W 22W 21W 20W 19W 18W 17W 16W 15W 14W 13W 12W 11W 10W 9W 8W 7W 6W 5W 4W 3W 2W 1W 00

7N
6N
5N
4N
3N
2N
1N
BLO
1S
2S
3S



SCALE
1:2500



LEGEND DAVE CLAIMS
MAGNETOMETER AND GEOLOGICAL
SURVEY 1985

- MAGNETIC CONTOURS IN GAMMAS WITH VALUES ABOVE(+) OR BELOW(-) THE BACKGROUND OF 58000 GAMMAS
- MAGNETIC HIGH
- MAGNETIC LOW
- MAPPED OUTCROP
- DYKE (SYENITE/DIORITE)
- ANDESITE—BRECCIATED
- ANDESITE—PILLOWS AND FLOWS
- ANDESITE—STRONG HORNFELS/SKARN ALTERATION
- ROAD
- CREEK

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MAP BY: R. COOK

DRAWN BY: R. COOK

Roger A. Cook