

545

MAGNETOMETER SURVEY OF HUDSON BAY MOUNTAIN

SMITHERS, B.C.

Vancouver Office
January 16, 1967.
4

R.E. ANDERSON, Prof. Eng.

CONTENTS

Page

INTRODUCTION..... 1

LOCATION AND ACCESS..... 1

AREA OF INVESTIGATION..... 1

SURVEY EQUIPMENT..... 2

GENERAL STATEMENT..... 2

SURVEY TECHNIQUES..... 5

ACCURACY..... 7

PRESENTATION OF DATA..... 8

INTERPRETATION..... 8

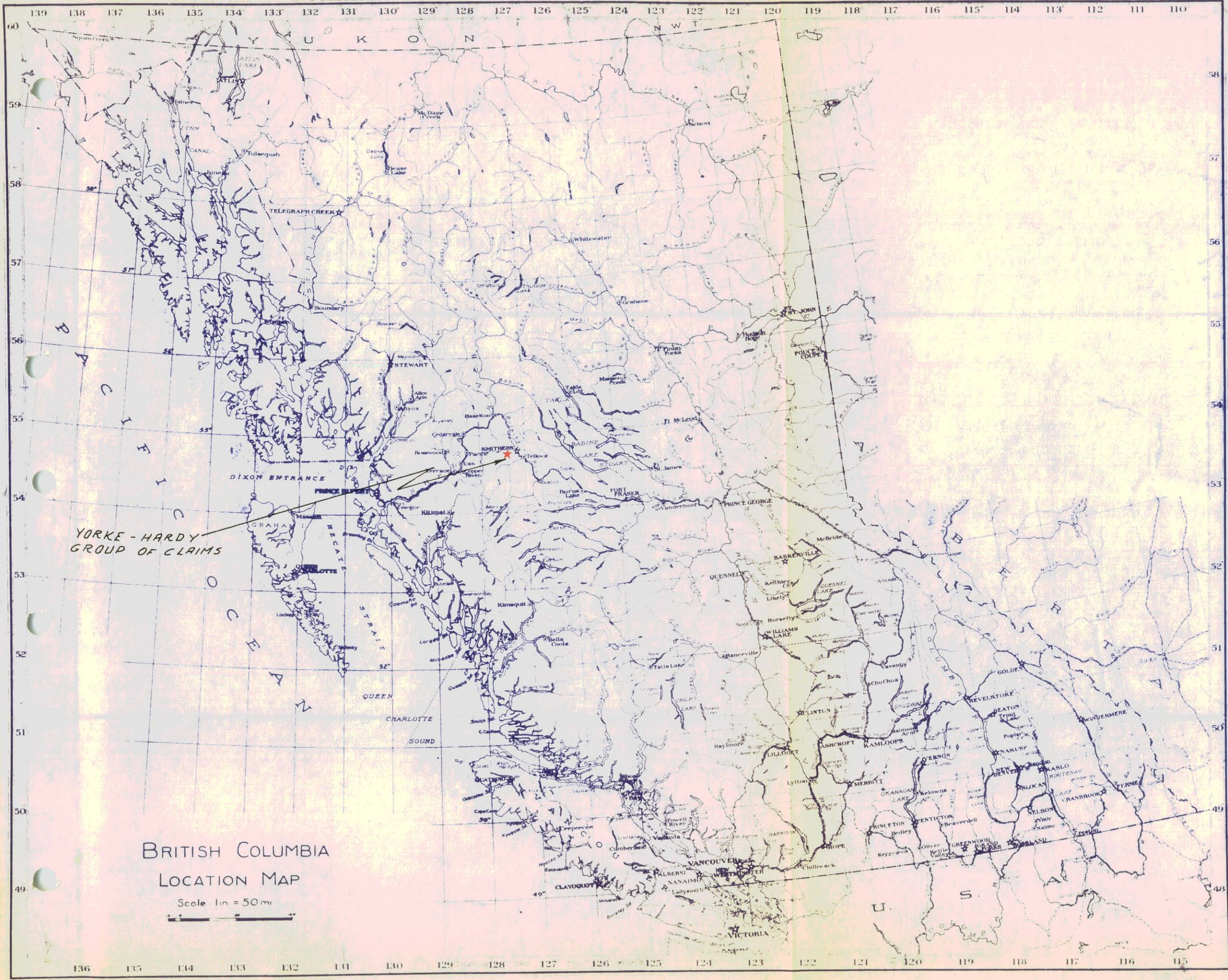
SURVEY STATISTICS..... 11

LIST OF MINERAL CLAIMS..... 12

ILLUSTRATIONS

Map I and Ia	Areomagnetic Readings Map Scale 1" = 1/4 mile	In pocket
Map 2	Areomagnetic Contour Map Scale 1" = 1/4 mile	" "
Map 3	Claim Map Scale 1" = 1/4 mile	" "

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 545 MAP.....



YORKE-HARDY
GROUP OF CLAIMS

BRITISH COLUMBIA
LOCATION MAP

Scale 1 in = 50 mi



INTRODUCTION

The following report and attached maps detail the results obtained by Climax Molybdenum (B.C.) Ltd. in completing an airborne magnetometer survey of a claim group located on Hudson Bay Mountain near Smithers, B.C. The survey was completed by company personnel during the early part of August, 1963.

LOCATION AND ACCESS

Hudson Bay Mountain is located in north central British Columbia, lying from 1 to 5 miles northwest of the town of Smithers, B.C. at latitude $54^{\circ}50'N$ and longitude $127^{\circ}20'W$. The general topography of the mountain is rugged and precipitous with surface elevations ranging from 2000 to 8500 feet above sea level. Permanent snow fields cover most of the higher peaks and extensive areas of glacial ice are present on the eastern flank at the head of Glacier Gulch and on the northern flank near the headwaters of Toboggan Creek. Several roads and numerous trails leading to scattered points on the mountain provide good access from Smithers.

AREA OF INVESTIGATION

The survey covered an area of approximately 35 square miles, which included a major part of Hudson Bay

Mountain and a portion of Mount Evelyn lying immediately to the north of Toboggan Creek (see Map I and Ia). Because of the precipitous terrain, flight paths could not be flown at regularly spaced, straight line intervals. As an alternative, a method of contour flying was adopted whereby closure was obtained on 1000 foot contours lying between the 4000 and 8000 foot elevations. The 6500 foot contour was also included and detailed investigations were completed in the cirque area lying at the head of Glacier Gulch. Survey stations and flight paths utilized in completing the survey are noted on Map I and Ia.

SURVEY EQUIPMENT

In addition to a Hiller 12E helicopter assigned to the project, the survey equipment consisted of a Varian Assoc. Portable Proton Precession Magnetometer Model No. 49A and a standard battery powered tape recorder.

GENERAL STATEMENT

Experience in other parts of the world has indicated that, while the relationship is by no means universal or simple, hydrothermal processes, of which molybdenum mineralization might be one phase, are often accompanied by large scale destruction of magnetite in the country rocks. This is also a fairly common feature associated

with porphyry copper deposits and, of course, many barren pyrite zones.

As overburden and near surface patches of unaltered country rock can break up an otherwise continuous and extensive area of alteration into a group of apparently isolated and minor pockets of alteration, it is often extremely valuable to obtain complete magnetometer coverage of the area of interest to determine whether or not these apparently isolated patches of alteration are indeed discontinuous or are merely the surface expression of an extensive, continuous, and deep seated alteration zone. Conversely, there have been many cases of alteration being confined to a comparatively thin surface skin, the underlying rocks being quite fresh and unaltered.

It has been found that good quality magnetic coverage can be extremely useful in helping determine the extent and degree of alteration.

To be of any value in this regard, it is extremely important that the survey extend well beyond the limits of the zone or area of immediate interest. Any magnetic feature can have a variety of causes; more often than not, selection of the most likely of a variety of sources for any anomaly can be made only on the basis of geologic probability for the particular area in question. It is

obviously important to extend the survey far enough out from the center of interest to establish clearly, for example, that what looks like a magnetic low is in fact a real "low", and not just a return to normal values between areas of somewhat higher than normal magnetic intensity. Similarly, in areas of marked topographic relief, it is advisable to extend the survey to cover several of any one kind of topographic feature to help determine whether any given anomaly of interest is really unique or merely a normal function of its topographic location.

Apart from the above, it is obvious that any information regarding the structural setting of an area of interest is of value in assessing its mineral potential. Adequate magnetic coverage of suitable quality can provide, in many cases, a variety of structural information.

For the above reasons, it was decided that to be of any real value, a magnetometer survey of the claim group along Toboggan Creek should extend out to cover the greater part of the Hudson Bay Mountain.

Experience has shown that, to be of value in the detection and delineation of zones of alteration, a survey must be accurate to about 50 gammas. We have found that it is difficult or impossible to obtain the kind and extent of

information required by ground methods in areas of rugged topography. Topography and near surface effects are reduced or eliminated by having the magnetometer 300' to 500' above surface.

In areas as rugged as Hudson Bay Mountain it is impossible to maintain constant ground clearance with fixed wing aircraft; even with a helicopter it is impossible to fly straight line profiles and keep constant clearance, so we have been forced to fly selected topographic contours. This involves many sudden turns and we have found that the only instrument sufficiently insensitive to orientation of the measuring head is the proton precession magnetometer.

At the time of the 1963 surveys, the only suitable instrument was manufactured by Varian Associates of Palo Alto in California, and a unit was rented for the Hudson Bay Mountain survey.

SURVEY TECHNIQUES

A Hiller 12E helicopter, with space for a pilot, one operator, and one navigator, was used for the survey. The operator sat with the magnetometer on his lap and read off the individual magnetometer readings as they appeared on the instrument dial. These values were simultaneously dictated into a portable battery operated tape recorder.

The operator clicked a tally counter each time he took a reading, holding the tally counter dial so the navigator could see the numbers. The navigator followed the flight path around the pre-selected contour on a large scale topographic map, marking on the map the appropriate number shown on the tally counter as each recognizable topographic feature was crossed. These features would be the nose of a ridge, the back or apex of a cirque or gully, streams, etc. Meanwhile, the pilot maintained a fixed altitude on his altimeter, and flew around the mountain, thus automatically following the selected contour. Each contour flight would start and finish at a point where the selected contour crossed a prominent feature at a recognizable point, such as a stream junction, edge of a lake, etc. Thus, by flying up the mountain to this point, climbing to 400' ground clearance, then commencing the flight, the magnetometer head dangling on a 50' cable, was kept at constant 350' ground clearance.

The particular instrument used on the survey gave a reading every 6 seconds. For safety, the aircraft airspeed was kept at 35 m.p.h. giving a magnetometer reading at 200' to 500' intervals over the ground, depending on the direction and force of the wind. Good topographic location points averaged about 1500' apart.

The data was plotted by assuming constant ground speed between consecutive control points. Any error caused by this assumption would be confined between adjacent control points.

Normally, after starting at a selected point on a contour, flying completely around the mountain back to the known starting point would take 20' to 45'. The first 10 to 20 readings of each contour were repeated after completing the circuit and normally checked to within 10 to 20 gammas.

ACCURACY

The repeat checks mentioned above, and other checks during the course of the three days spent on the survey, showed that readings could be repeated to 10 to 20 gammas. The greatest source of error was faulty location when flying along a side hill which had a steep magnetic gradient at right angles to the aircraft path. In such cases, a reflight might be a hundred feet too far up or down the slope and an apparent error of 100 to 200 gammas could be produced. When such conditions were noticed a down hill profile was flown at constant elevation. The true location, and intensity of the change in magnetic values was then given by this check profile.

1) The pronounced low on the north flank of Elliot Mountain, south of Elliot Creek. This is suggestive of an area of alteration with complete destruction of the magnetic constituents through a considerable depth extent. The zone is about 4,000' long and 600' wide. The low does not appear to be caused by topographic effects and is roughly parallel to the north contact of the Elliot Mountain granodiorite.

2) The area around 15,000E, 17,000N is mapped as sediments. The magnetic data suggests that this is probably underlain by Igneous rocks or fragmentals at a shallow depth.

3) There is an area of apparent magnetic complexity around the cirque at the head of Glacier Gulch.

The most prominent feature in this complex area is a 350 to 700 gamma low closely coincident with the area of the glacier. The major part of this low is not produced by a deficiency of magnetite in the underlying rocks. Part at least is the normal low or negative found on the north side of a magnetic dipole, here produced by the very steep south wall of the cirque. This low is accentuated by the increased separation between the rock head and the magnetometer over the ice. While normal terrain clearance is 350', this would be increased to 750' because of the thickness of the ice.

PRESENTATION OF DATA

The results of the survey are shown on maps at a scale of 4" to 1 mile. The individual readings are shown on two separate sheets; the finished magnetic contours and the topographic contours are also presented on separate sheets.

In the preparation of the individual results and the completed contour sheet, 57,000 gammas was subtracted from the total field readings.

INTERPRETATION

In general, the areas of sedimentary rocks are magnetically featureless at about 58,000 gammas or less (<1,000 on map) in contrast to the areas of volcanic fragmentals or flows. The predominantly volcanic areas are also uncomplicated and have a field level of about 59,000 gammas.

There is little or no contrast between the areas of volcanic fragmentals and the areas of intrusive and extrusive rocks.

There are no features of interest in the area of Toboggan Creek. Here the magnetic data are typical of an area of sediments lying on top of volcanics.

There are a few areas within the surveyed area which do not fit the existing geologic data and which might be of interest.

There is a genuine low of some 200 gammas centered at 13,000E, 18,000N and trending NW. This probably reflects the quartz eye tuff unit encountered in drilling in the cirque area, known from susceptibility measurements in the drill core to be very deficient in magnetite.

4) The most pronounced positive feature in the survey area runs obliquely across the northern wall of the Glacier Gulch cirque at about the ice/rock contact. This linear high does not extend over into the Toboggan Creek Glacier and has an intensity of 1,000 gammas above the general level of the surrounding volcanic fragmentals and flows.

The source may be in the coincident series of rhyolite flows which extends eastward into the grid area. If this is the case, the anomalous intensity must be due to remnant magnetism in the flows, as the rhyolite encountered in drilling has very low susceptibility.

Such anomalous high remnant magnetism is fairly common in extrusives.

SURVEY STATISTICS

11.

Aircraft: Hiller 12E

Crew: 1 Pilot, 1 Navigator, 1 Magnetometer Operator

Magnetometer Data: Varian Associates Portable Proton Pre-
cession Magnetometer Model 49A

Accuracy - 10 gammas

Read out cycle - 6 seconds

Sensing head towed 50' below helicopter

Navigation Control - 4" to 1 mile topographic
Contour Map compiled from National Topo-
graphic Series and private survey by Hunting
Surveys for Southwest Potash Corporation

Costs:

x Helicopter 17 hours at \$120.00 hour	= \$2040.00
Geophysicist/Operator 6 days at \$25.00 day	= \$ 150.00
Geologist/Navigator 6 days at \$25.00 day	= \$ 150.00
Draftsman 6 days at \$20.00 day	= \$ 120.00
xx Magnetometer rental 1 month	= \$ 408.46
xxx Import Duty	= <u>\$1016.43</u>
	<u>\$3884.89</u>

x No charge has been made for experimental and
development flying.

xx Minimum rental period 1 month.

xxx Canadian Customs duty on U.S. equipment non-
refundable when equipment returned to U.S.

R. E. Anderson
R.E. Anderson, Prof. Engineer.

January 16, 196⁴.

LIST OF MINERAL CLAIMS

<u>Claim Name</u>	<u>Record No.</u>	<u>Recording Date</u>	<u>Assessment 1 yr. @ \$100/yr.</u>
M-1	14540	Feb. 26/62	\$100.00
M-2	14541	"	\$100.00
M-3	14542	"	\$100.00
M-4	14543	"	\$100.00
M-5	14544	"	\$100.00
M-6	14545	"	\$100.00
M-7	14546	"	\$100.00
M-8	14547	"	\$100.00
M-9	14548	"	\$100.00
M-10	14549	"	\$100.00
M-11	14550	"	\$100.00
M-12	14551	"	\$100.00
M-13	14552	"	\$100.00
M-14	14553	"	\$100.00
M-15	14554	"	\$100.00
M-16	14555	"	\$100.00
M-17	14556	"	\$100.00
M-18	14557	"	\$100.00
M-19	14558	"	\$100.00
M-20	14559	"	\$100.00
M-21	14560	"	\$100.00
M-22	14561	"	\$100.00
M-23	14562	"	\$100.00
M-69	14608	"	\$100.00
			<u>\$2,400.00</u>

BORDER BROKERS

L I M I T E D

HEAD OFFICE: 60 FRONT ST. WEST, TORONTO, ONTARIO

EASTERN DIVISION: 322 YOUVILLE SQ. MONTREAL, QUEBEC

Customs House Brokers ♦ Consultants ♦ Pool Operators ♦ International Forwarders

SOUTHWEST POTASH CORP
25 ADFLAIDE ST W
TORONTO 1 ONT

7	5	63
DAY	MO.	YR.
DATE		

422451
CUSTOMER'S NO.

CUSTOMER'S ORDER NO.	INVOICE ENTRY NO.	DUTY & TAX	FREIGHT - BUS	MISCELLANEOUS CODE	MISCELLANEOUS AMOUNT	PAYING CHARGE	BROKERAGE	TOTAL
	MA 9058	999 68		20	5 00		11 75	1,016 43
MISCELLANEOUS CODE								
01 POSTAGE	09 OTHER	21 AFTER HOURS SERVICE	<p>CUSTOMS DUTIES ARE CASH</p> <p>PLEASE PAY THIS AMOUNT PROMPTLY IN CANADIAN FUNDS </p>					
02 TEL. & TEL.	10 DUTY. SEE ATTACHED	22 TRANSFER INVOICE AND/OR TITLE						
03 M.A. OR MCGOLDRICK	11 CUSTOMS FEE FOR AFTER HOURS SERVICE	23 RESHIPING						
04 CAR BONDS	12 STORAGE	24 PREPARATION OF DOCUMENTS						
05 AIR FREIGHT	13 OUT OF TOWN BROKERAGE	30 TORONTO ERRAND SERVICE						
06 FOREIGN FORWARDING	20 BROKERAGE SEE ATTACHED							
07 LIFE INSURANCE								
08 TAXI								
1,016 43								

NOT NEGOTIABLE
AIR WAYBILL

No 014 217404

(AIR CONSIGNMENT NOTE)

ISSUED BY

TRANS-CANADA AIR LINES AIR CANADA
PLACE VILLE MARIE
MONTREAL 2, P.Q., CANADA

'67-5 6896'

DESTINATION (AIRPORT OF)
SAN FRANCISCO, CALIF.

Carriage hereunder is subject to the rules relating to liability established by the Convention for the Unification of Certain Rules relating to International Carriage by Air, signed at Warsaw, October 12, 1929, (hereinafter called "the Convention") unless such carriage is not "international carriage" as defined by the Convention.

CONSIGNEE TO **Varian Associates** STREET ADDRESS **611 Hansen Way** CITY AND COUNTRY **PALO ALTO, California.**

ALSO NOTIFY **Frank P. Dow Inc.** 1261 Olympic National Bldg, San Francisco,

No. of PACKAGES	METHOD OF PACKING	NATURE AND QUANTITY OF GOODS	MARKS AND NUMBERS	DIMENSIONS OR VOLUME	GROSS WEIGHT SPECIFY KGS. or LBS.
1 Case		M-49A Magnetometer - 1 Only 20' Extension Cables - 2 Only 20' Extension Cable - 1 Only	ADD:		80#

CHARGES TO BE BILLED TO:-
Border Brokers Ltd.
P.O.B. 4040, Terminal "A", Toronto, Ontario, Canada

DOCUMENTS TO ACCOMPANY AIR WAYBILL

SHIPPER'S DECLARED VALUE (Specify Currency) FOR CUSTOMS \$4058.00	FOR CARRIAGE n.v.d.	METHOD OF ROUTING AND CHARGES—Agreed stopping places are those places (other than the places of departure and destination) shown under Air Carriage, and/or those places shown in carriers timetables as scheduled stopping places for the route. SEE CONDITIONS ON REVERSE HEREOF.	SHIPPER MUST INSERT ITEM NUMBER CHARGEABLE TO SELF
--	-------------------------------	---	--

AIR CARRIAGE		CHARGEABLE WEIGHT SPECIFY KGS. OR LBS.	RATE CLASSIFICATION	RATES	PREPAID	CHARGEABLE TO CONSIGNEE	
DEPARTURE AIRPORT OF	ADDRESS OF FIRST CARRIER					CUR RENCY	AMOUNTS IN CURRENCIES AS CHARGED
Toronto, International Airport	T. C. A.				XXXXXXXX		
1. Chicago	FIRST CARRIER						
2. to San Francisco	CARRIER	80#					
3. TO	CARRIER						
3a. TO	CARRIER						
4. VALUATION CHARGE FROM	TO						
5. VALUATION CHARGE FROM	TO						
6. INSURANCE	IN WORDS	IN FIGURES					
ORIGIN	Pick-up Charge				1.70	7	
8.							
9.							
10.							
11. TRANSIT							
12. DESTINATION							
13.							
14.							
15.							
16. C.O.D. FEE							
17. SHIPPER'S C.O.D.							
SHIPPER'S C.O.D. IN WORDS							

The Shipper certifies that the particulars on the face hereof are correct and agrees to the CONDITIONS ON THE REVERSE HEREOF.

Carrier certifies above described goods were received for carriage SUBJECT TO THE CONDITIONS ON THE REVERSE HEREOF, the goods then being in apparent good order and condition except as noted hereon.

NAME OF SHIPPER **Southwest Potash Corp.** EXECUTED ON **September 16th** AT **Toronto, Ontario.**

ADDRESS **25 Adelaide Street West, Toronto, Ont.**

SIGNATURE OF SHIPPER

NAME AND ADDRESS OF ISSUING CARRIER'S AGENT **Toronto International Airport, Malton, Ontario.**

SIGNATURE OF ISSUING CARRIER OR ITS AGENT

BY BROKER/AGENT **BORDER BROKERS LIMITED.**
P.O.B. 4040, TERMINAL "A", Toronto, Ont.

COPIES 1, 2, AND 3 OF THIS AIR WAYBILL ARE ORIGINALS AND HAVE THE SAME VALIDITY

No 014 217404

C 9

Dr. App. No. 509
1961



Port Serial No. H-15

S.S. Start _____

S.S. Finish _____

2-1-25

REGULAR HOURS C9

T.C.A.

DEPARTMENT OF NATIONAL REVENUE
CUSTOMS AND EXCISE

PRO-FORMA ENTRY FOR RELEASE OF GOODS
STANDING AUTHORITY RELEASE NO. **X 325**

One-time Authority Release No. _____

TORONTO INT'L AIRPORT,
PORT OF ~~TORONTO~~ ONTARIO.

I, We, the undersigned, having established security as required by the Department request that the goods itemized herein be released immediately upon presentation of this pro-forma entry on the understanding that formal entry for goods will be presented within the prescribed time.

Entry No. _____

EXAMINE PACKAGES NUMBERED: _____

Name of Importer SOUTHWEST POTASH CORPORATION,

TORONTO, ONTARIO. A/C 4224519

Bond \$ 25,000.00 File #8005-4-3 Feb.4/58. (HQ 2)

Security { Cash \$ _____ Signature BORDER BROKERS LIMITED
Importer or Agent ATTY.

Approved _____

Power of Attorney No. 81517 Date MAY 2ND, 1963

Sales Tax License No. EX.

Appraiser _____

Shipper _____

Value For Duty _____

VARIAN ASSOCIATES, PALO ALTO, CALIF.

\$ 4245.61

Name of Carrier _____

Manifest No. _____

T.C.A. W/B 2243169

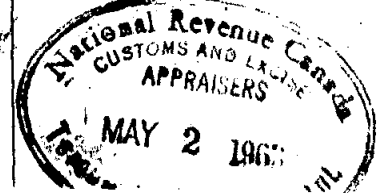
A855

DELIVERY WARRANT

MARKS AND NUMBER OF PACKAGES	DESCRIPTION OF GOODS	TARIFF ITEMS	Delivered
<p>ADDR. 1 BOX 824</p>	<p>1 M-49A MAGNETOMETER SERIAL NO. 145 INCLUDING ACCESSORIES 8 20' EXTENSION CABLES</p> <p>PRO FORMA ATTACHED.</p> <p>C9 AND SIGHT APPROVED BY: MRS. KNEESHAW</p>	<p>45TH-EX.</p>	<p>Pkgs. _____</p> <p>Short _____</p> <p>Over _____</p> <p>Officer's Initials _____</p>

Appraiser's Remarks

PORT DATING STAMP



FORM N-A

Form 705 - PRINTED BY CARLISLE, S. F.

FORM OF INVOICE

Approved by Canadian Customs (1959) for Goods shipped on consignment without sale by exporter prior to importation

(Place and date) Palo Alto, California, April 30, 1963

Invoice of Magnetometer consigned
 by Varian Associates Instrument Division of Palo Alto, California
 to Southwest Potash Corporation of Toronto, Canada
 to be shipped from Palo Alto, California per Air Freight
 CUSTOMER'S ORDER NO. Lease OUR ORDER NO. 37334D TERMS: Net 30 days

Country of Origin	Marks and Numbers on Packages	QUANTITIES AND DESCRIPTION OF GOODS	Fair Market Value at time and place of shipment in currency of country of export. (See clauses 6 to 9 of certificate of value hereon.)	
			@	Amount
U.S.A.	Address & Order #	One M-49A Magnetometer, Ser. #145 including accessories	\$3,950.00	\$3,950.00
		Handling Charge	\$75.00	\$75.00
		(One set) Two 20' extension cables	\$72.00	\$72.00
		One 20' extension cable	\$36.00	\$36.00
				<u>4133.00</u>
				<u>1075</u>
				<u>444298</u>

4451-6
D 51-22
4443-22/2 - 999.68

The following is the full declaration, combining the Certificate of Value (N) and of Origin (A), prescribed to be written, printed or stamped on invoices of articles for entry in Canada under the Most Favoured Nation Tariff when the goods have been shipped on consignment without sale by the exporter prior to importation. In cases where the vendor does not reside in the country of export or for other reasons the vendor is unable to sign the certificate both as to value and origin, a separate certificate of origin in prescribed form signed by the exporter in the country of export, bearing a full description of the goods and the marks and numbers of the packages, so that it may be identified with the shipment, will be accepted.

FORM N-A—to be made in British countries before a Collector of Customs, Justice of the Peace, Notary Public or any official authorized to administer oaths; and in other countries before a British or other Consular, Notary Public or other official authorized to administer oaths.

EXPORTER'S DECLARATION

(N) I, J. Ahern of Palo Alto, California
 name of party subscribing to this declaration city or town and country

do solemnly and truthfully declare as follows:

1. That I am Varian Associates
 a member of the firm of (giving the name of the firm when the shipment is made by a firm),
 or an officer, director or manager of (giving the name of the corporation when the shipment is made by a corporation)
 the owner of the goods shipped on consignment to: Southwest Potash Corporation at Toronto, Ontario, Canada
 name of consignee

- in Canada and described on the annexed invoice:
- That the said invoice is a complete and true invoice of all the goods included in this shipment;
 - That the said goods are properly described in the said invoice;
 - That there is included in the said invoice the true value of all cartons, cases, crates, boxes and coverings of any kind and all charges and expenses incident to placing the said goods in condition packed ready for shipment to Canada;
 - That none of the said goods have been sold by or on behalf of the owner to any person, firm or corporation in Canada;
 - That the said invoice also exhibits the fair market value, at the time when and place from which the goods were shipped directly to Canada, of like goods when sold in the same or substantially the same quantities for home consumption in the ordinary course of trade under competitive conditions to purchasers located at that place with whom the vendor deals at arm's length and who are at the same or substantially the same trade level as the importer;
 - That where like goods are not sold for home consumption in the circumstances described in the preceding section but where the goods shown on this invoice are similar to those sold for home consumption, the fair market value exhibited thereon is not less than the aggregate of
 - The cost of production of the goods exported; and
 - An amount that is the same percentage of the cost of production of the goods exported as the gross profit on the similar goods is of the cost of production of the similar goods;
 - That the said fair market value is without
 - any discount or deduction not shown, allowed and deducted on invoices covering sales for home consumption in the country of export in the ordinary course of trade;
 - any deduction on account of any subsidy or drawback of Customs duty that has been allowed by the Government of any other country, or on account of any so-called royalty, rent or charge for use of any machine or goods of any description, that the seller or proprietor does or would usually charge thereon when the same are sold, or leased or rented for use in the country of export; or
 - any discount or deduction on account of the amount of consideration or money value of any special arrangement between the exporter and the importer, or between any persons interested therein, because of the exportation or intended exportation of such goods, or the right to territorial limits for the sale or use thereof;
 - That if the fair market value of the said goods described in this invoice is other than the value thereof as above specified, such fair market value has, to the best of my knowledge and belief, been fixed and determined under the authority of the Customs Act at the value exhibited in this invoice.
- (A) That each article on this invoice is *bona fide* the produce or manufacture of the country specified on the invoice as its Country of Origin.
 That each manufactured article on the invoice in its present form ready for export to Canada has been finished in such specified country of origin, and not less than one-half the cost of production of each such article has been produced through the industry of U.S.A.
*Insert here name of country or countries.

Declared at Palo Alto, California
 this 30th day of April 19 63
 before me Rae B. Gill Rae B. Gill
 (Signature)

Varian Associates
 (Firm Name)
J. Ahern
 (Signature)

NOTE: When invoicing goods which have been produced in a country specified on the invoice as its country of origin from materials originating in a country or countries of the Most Favoured Nation Tariff or the British Preferential Tariff, the names of the countries contributing to one-half the cost of production should be shown in the spaces in the calculation of the cost of production for the purposes of determining the qualification for entry under the Most Favoured Nation Tariff none of the following is considered, viz:
 1. Outside packages and expenses of packing thereinto.
 2. Remuneration of any trader, broker,
 3. Customs or excise duty or tax paid or payable on imported materials.
 4. Carriage, insurance, etc., from place of production or manufacture to the place of exportation.
 5. Any other charges incurred or to be incurred subsequent to the completion of the goods.

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.
To Wit:

In the Matter of

SUB-MINING RECORDER
RECEIVED
JAN 17 1964
M.R. # *65373560.00*
VANCOUVER, B.C.

I, R. E. ANDERSON, Agent for
CLIMAX MOLYBDENUM (B.C.) LTD.

of 718 GRANVILLE STREET,
VANCOUVER 2, B.C.

in the Province of British Columbia, do solemnly declare that

EXPENDITURES

Helicopter (Hiller 12E)	17 hours @ \$120.00/hr	= \$ 2040.00
Geophysicist/Operator	6 days @ 25.00/day	= 150.00
Geologist/Navigator	6 days @ 25.00/day	= 150.00
Draftsman	6 days @ 20.00/day	= 120.00
Magnetometer Rental (1 month)		= 408.46
Import Duty		= <u>1016.43</u>
		\$ 3884.89

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

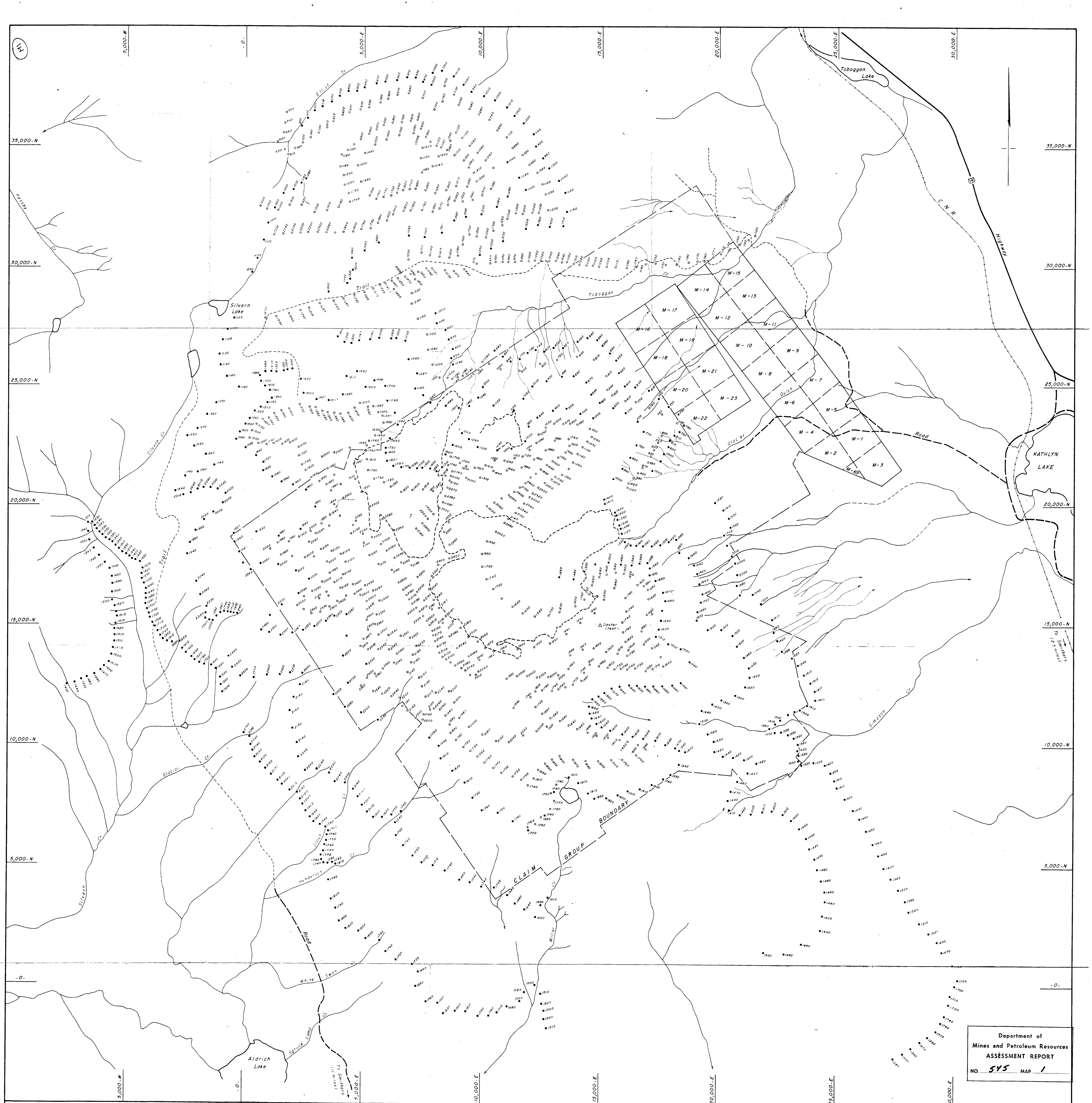
Declared before me at the *City*
of *Vancouver*, in the
Province of British Columbia, this *17*
day of *January* 1964, A.D.

R. E. Anderson

Jill Turner
A Commissioner for taking Affidavits within British Columbia or
A Notary Public in and for the Province of British Columbia.

★0

Sub-mining Recorder



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 545 MAP 1

NOTES

Base — Hunting Survey and Government Topographical Survey.
Instrument — Varian Proton Precession Total Field.
Local Zero — 57,000 gammas.
Flight Lines Follow Topographical Contours.
Mean Terrain Clearance — 350'
Helicopter Average Speed — 40 m.p.h.
Reading Interval — 6 seconds.

..... Flight Line (Readings — Mon. 5th Aug. 1963)
○○○○○○ Flight Line (Readings — Wed. 7th Aug. 1963)

Survey by: W. W. Shaw

SOUTHWEST POTASH CORPORATION — (CLIMAX MOLYBDENUM (B.C.) LTD.)

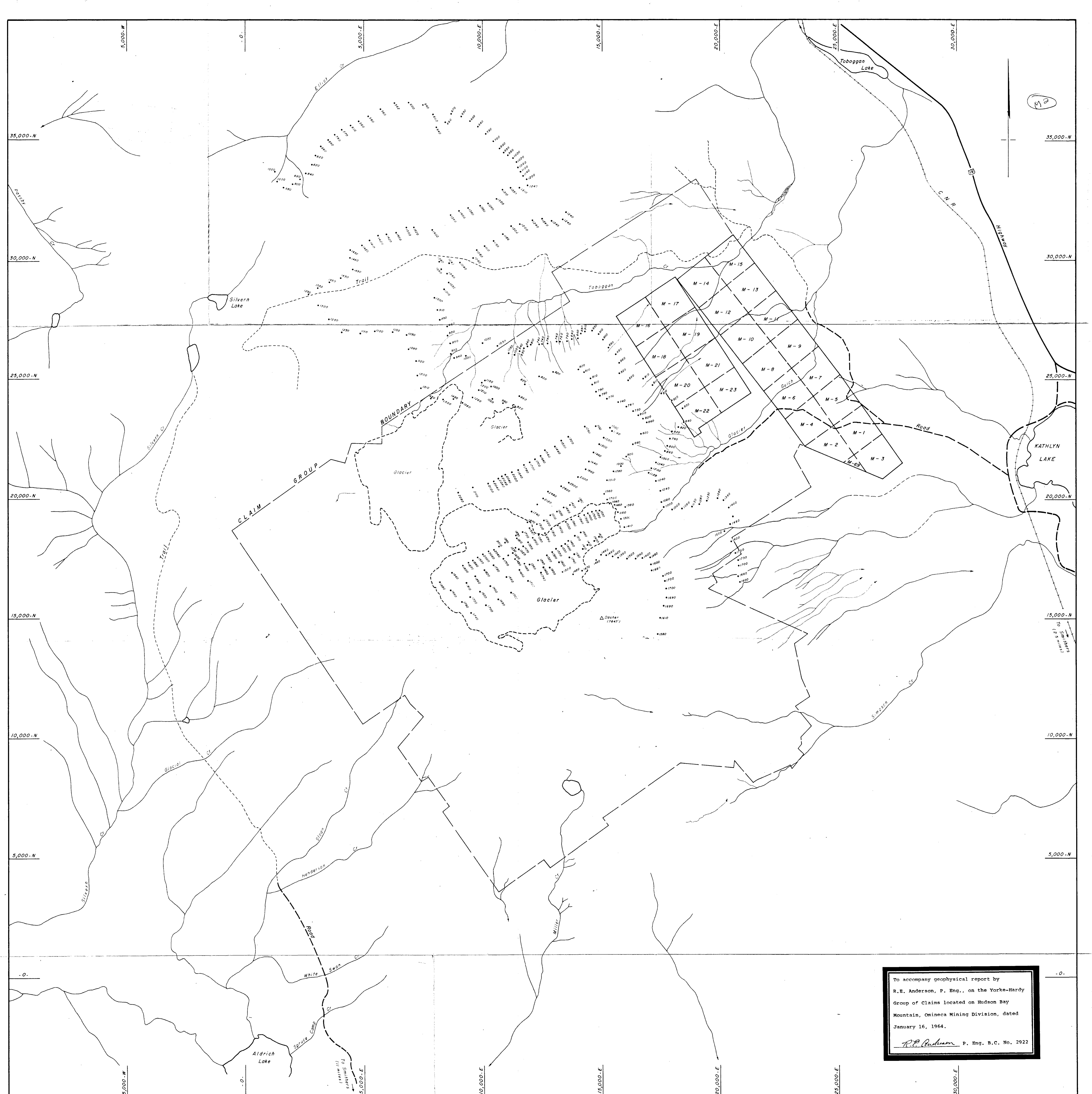
YORKE-HARDY PROJECT — B.C.

AEROMAGNETIC READINGS MAP

Scale: 1" = 1/4 Mile = 1320'

To accompany geophysical report by
R.E. Anderson, P. Eng., on the Yorke-Hardy
Group of Claims located on Hudson Bay
Mountain, Omineca Mining Division, dated
January 16, 1964.

R.E. Anderson P. Eng. B.C. No. 2922



To accompany geophysical report by
 R.E. Anderson, P. Eng., on the Yorke-Hardy
 Group of Claims located on Hudson Bay
 Mountain, Omineca Mining Division, dated
 January 16, 1964.
R.E. Anderson P. Eng. B.C. No. 2922

NOTES

Base — Hunting Survey and Government Topographical Survey.
 Instrument — Varian Proton Precession Total Field.
 Local Zero — 57,000 gammas.
 Flight Lines Follow Topographical Contours.
 Mean Terrain Clearance — 350'
 Helicopter Average Speed — 40 m.p.h.
 Reading Interval — 6 seconds.

..... Flight Line (Readings — Wed. 7th Aug. 1963)

Survey by: W.W. Shaw

SOUTHWEST POTASH CORPORATION — (CLIMAX MOLYBDENUM (B.C.) LTD.)

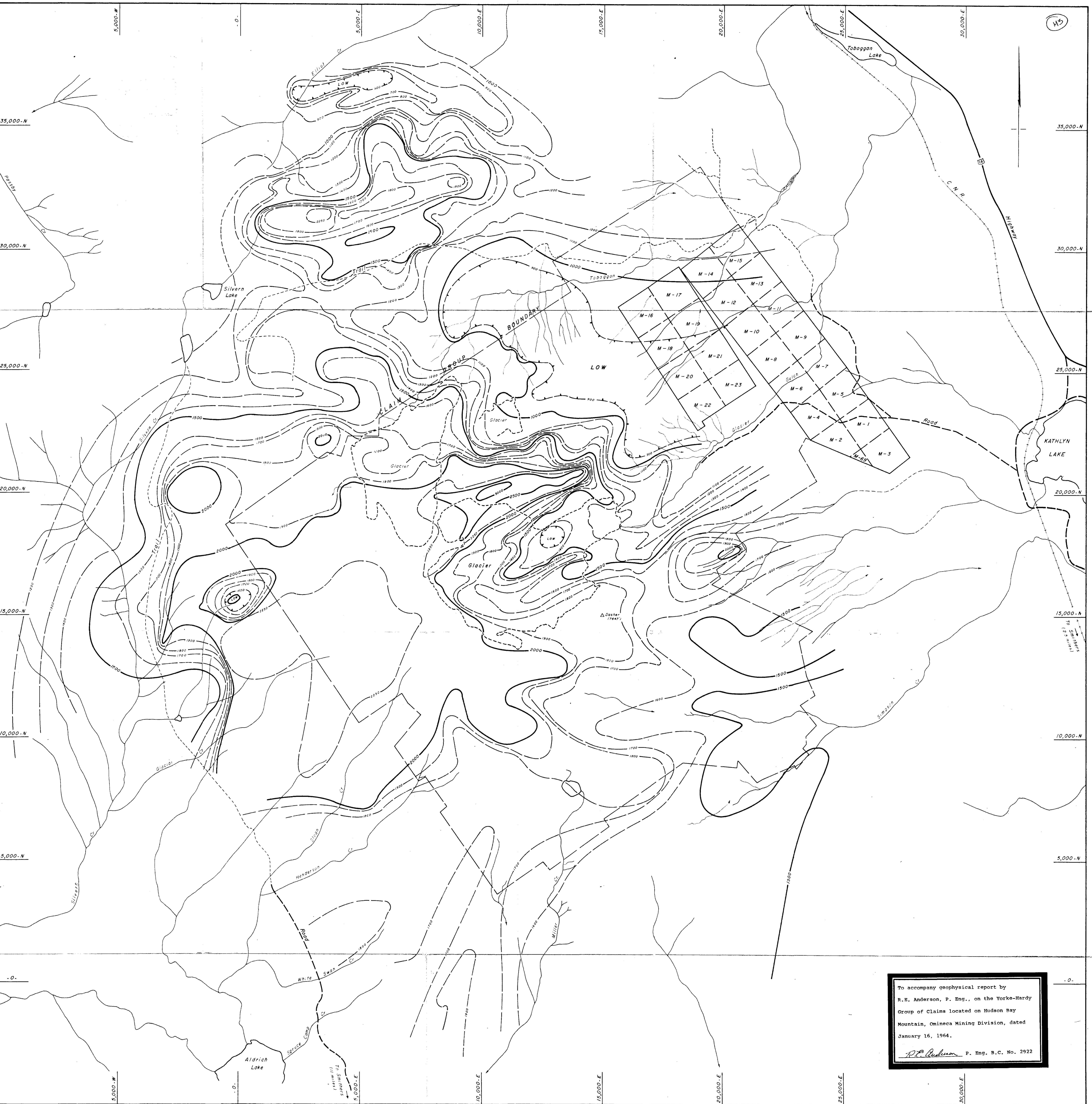
YORKE-HARDY PROJECT - B.C.

AEROMAGNETIC READINGS MAP

Scale: 1" = 1/4 Mile = 1320'

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 545 MAP 10

MS



To accompany geophysical report by
 R.E. Anderson, P. Eng., on the Yorke-Hardy
 Group of Claims located on Hudson Bay
 Mountain, Omineca Mining Division, dated
 January 16, 1964.
R.E. Anderson P. Eng. B.C. No. 2922

NOTES

Base — Hunting Survey and Government Topographical Survey.
 Instrument — Varian Proton Precession Total Field.
 Local Zero — 57,000 gammas.
 Contour Interval — 100 gammas.
 Mean Terrain Clearance — 350'
 Helicopter Average Speed — 40 m.p.h.
 Reading Interval — 6 seconds.

Survey by: W.W. Shaw

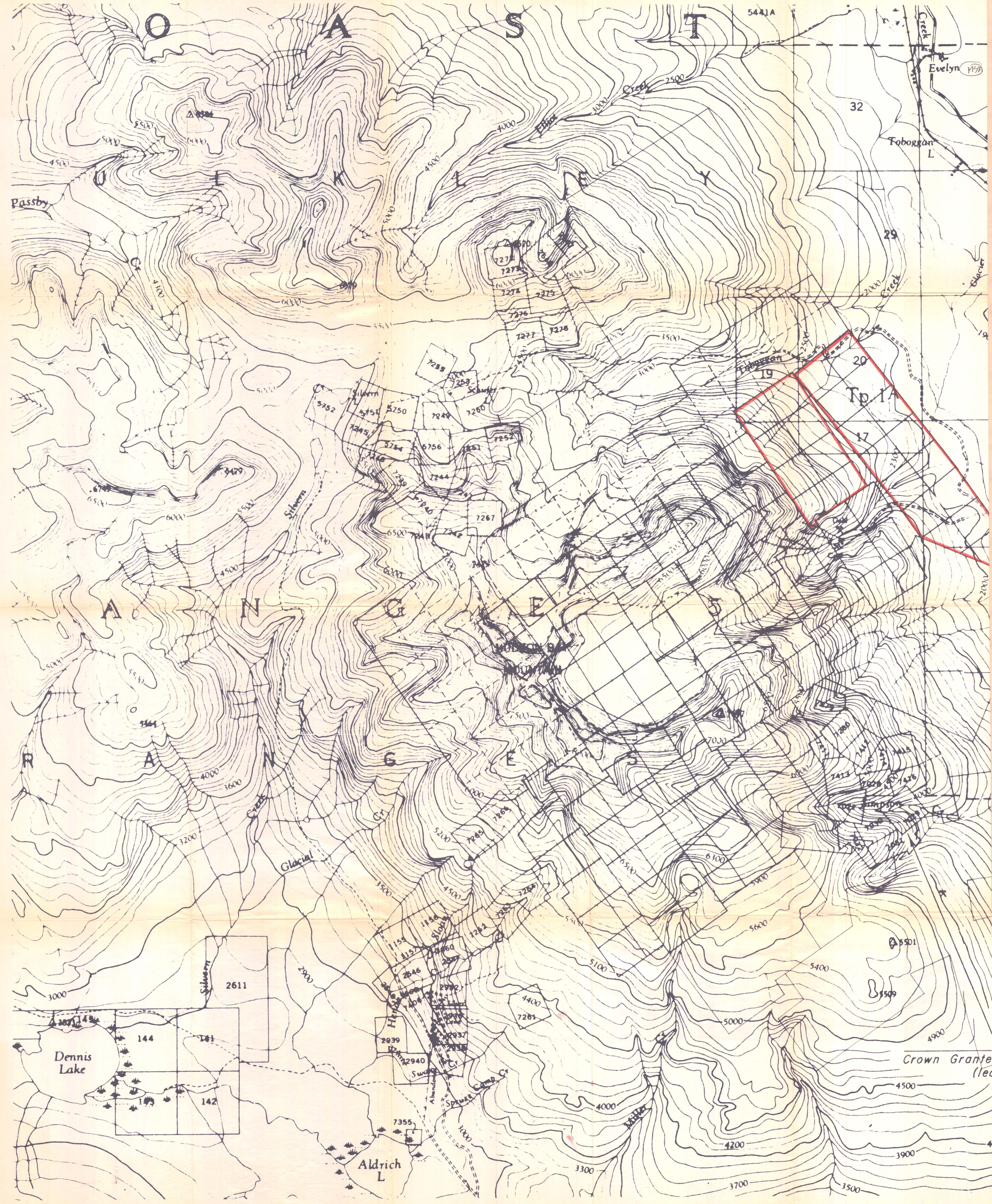
SOUTHWEST POTASH CORPORATION — (CLIMAX MOLYBDENUM (B.C.) LTD.)

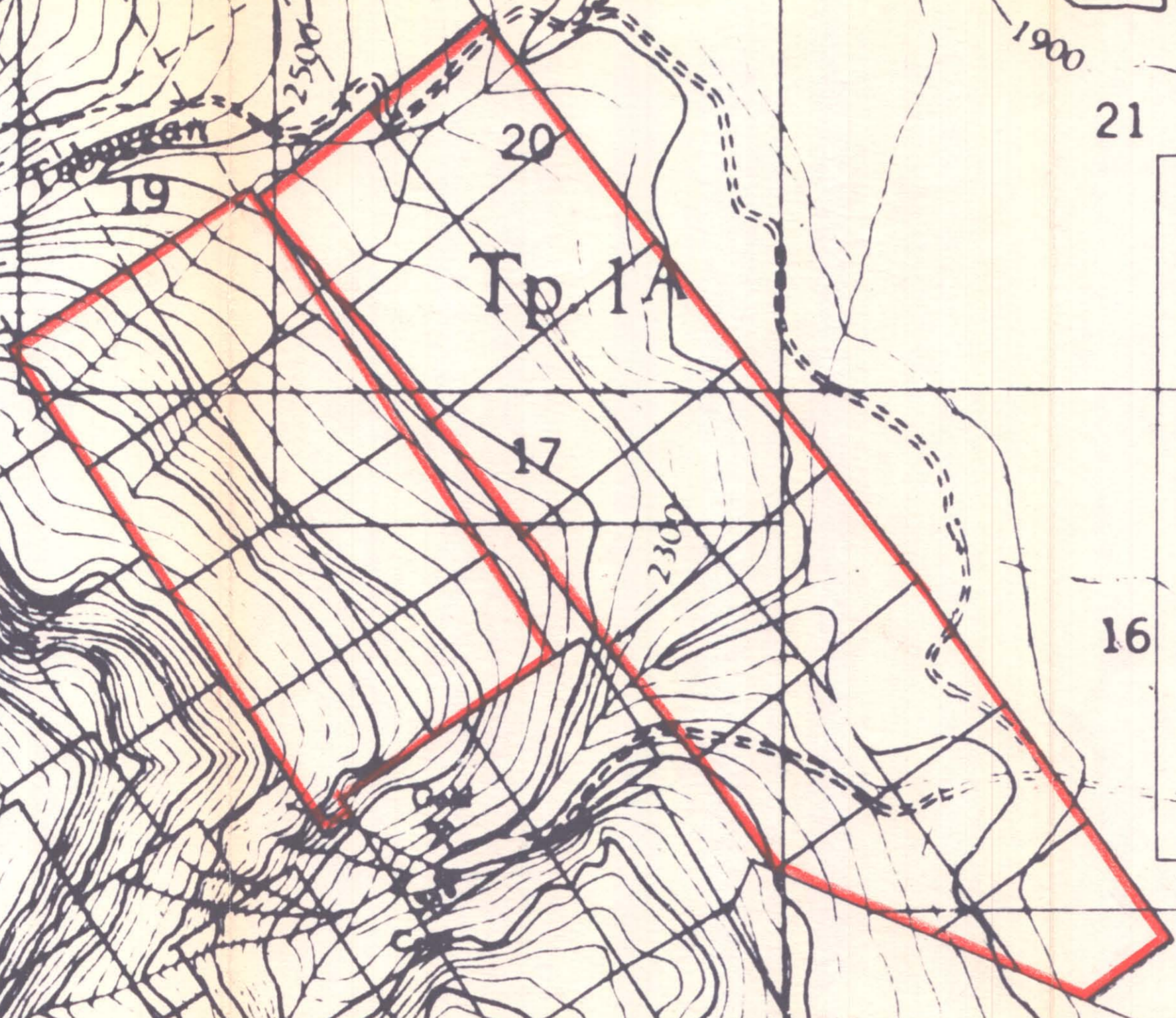
YORKE-HARDY PROJECT - B.C.

AEROMAGNETIC CONTOUR MAP

Scale: 1" = 1/4 Mile = 1320'

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 545 MAP 2





Crown Granted Claim Group
(leased) S.W.P.

To accompany geophysical report by
R.E. Anderson, P. Eng., on the Yorke-Hardy
Group of Claims located on Hudson Bay
Mountain, Omineca Mining Division, dated
January 16, 1964.
R.E. Anderson P. Eng. B.C. No. 2922

Climax Molybdenum (B.C.) Ltd.

YORKE-HARDY PROJECT
CLAIM MAP

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 545 MAP 3

Scale: 1" = 1/4 mile = 1320'

Vancouver 1964