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REPORT ON
AEROMAGNETIC SURVEY
ON SOME HJ AND DAB MINERAL CLAIMS
TUNKWA LAKE AREA, BRITISH COLUMBIA
ON BEHALF OF
ALWIN MINING COMPANY LIMITED (N.P.L.)

92I/10W

by

Richard O. Crosby, B.Sc., P.Eng.

January 10, 1968

CLAIMS:

<u>Titles</u>	<u>Record Numbers</u>
HJ 13	53367
HJ 14	53348
HJ 15-20	53369-74
HJ 21	54156
DAB 2-10	54140-48
DAB 11-16	54158-63
DAB 17-23	54149-55
DAB 25 fr	54317

LOCATION:

Approximately 21 miles south of
Savona, B.C., and 4 miles south-
west of Lake Tunkwa, B.C.
Kamloops Mining Division
50° 33' N - 120° 52' W

DATE: December, 1967

TABLE OF CONTENTS

	<u>Page No.</u>
INTRODUCTION	1
PRESENTATION OF DATA	2
DISCUSSION OF RESULTS	2
INTERPRETATION OF RESULTS	3
CONCLUSIONS AND RECOMMENDATIONS	3
PLATES (in envelope)	
Plate 1 - Magnetic Contour Map -# 1	
Plate 2 - Geophysical Interpretation -# 2	

SEIGEL ASSOCIATES LIMITED

GEOPHYSICAL CONTRACTORS AND CONSULTANTS

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REPORT ON
AEROMAGNETIC SURVEY
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TUNKWA LAKE AREA, BRITISH COLUMBIA
ON BEHALF OF
ALWIN MINING COMPANY LIMITED (N.P.L.)

INTRODUCTION

During December, 1967, an aeromagnetic survey was flown over some HJ and DAB mineral claims, Tunkwa Lake area, British Columbia, on behalf of Alwin Mining Company Limited (N.P.L.).

The survey area is centered approximately 50° 33' North, 120° 52' West, about 21 miles south of Savona, British Columbia. It is approximately 4 miles in length north-south by 2.5 miles in width east-west. Lines were flown at 1/8 mile intervals, oriented east-west at a mean terrain clearance of 300 feet.

A Sharpe NPM-1 total intensity nuclear precession magnetometer was employed on this survey. It was towed on a cable approximately 75 feet below the helicopter. A 16 mm. single frame camera was employed for positioning purposes and a radar altimeter recorded height above the ground. Flight path recovery was achieved through the use of the camera and photomosaics of the area. Photomosaic scale was approximately 1" = 1000'.

The purpose of the aeromagnetic survey was to obtain information relating to the distribution of intrusive bodies and structural

§

information. In the present geological environment these localities could be of interest for copper mineralization.

The aeromagnetic survey was under the direction of Mr. Richard O. Crosby, P.Eng., with assistance from Mr. Ronald Pollard.

PRESENTATION OF DATA

The isomagnetic contours of the earth's magnetic field are presented on a transparent overlay (Plate 1) on a scale of 1 inch equals 1000 feet (approximate). The planimetry on these sheets has been traced from an aerial photograph employed for navigational purposes. Magnetic data are shown as total magnetic intensity contours with a contour interval of 100 gammas. Corrections have been made for diurnal variations and instrumental drift by means of tie lines. These tie lines were flown at right angles to the flight lines. Base intensity is arbitrary and no corrections for regional variation have been made.

DISCUSSION OF RESULTS

The value of the earth's total magnetic field in the center of the survey area is approximately 58,300 gammas. The inclination of the total magnetic field vector is $-73^{\circ} 20'$ north.

The magnetic field of the survey area increases from a low of about 200 gammas in the extreme northeast corner to a high of over 1700 gammas in the far west. Anomalies in the eastern two-thirds of the area are randomly oriented and of a low order of magnitude.

The remainder of the area is dominated by a strong magnetic gradient extending generally southeastwards from the northwest corner to the southern boundary. A 500 gamma positive anomaly was recorded just west of fiducial number 131 on line 24 E.

INTERPRETATION OF RESULTS

The 1000 gamma contour roughly outlines the contact between the Guichon batholith and extrusive rocks to the east. The strong anomalies in the west are interpreted as arising from increased concentrations of disseminated magnetite within the igneous mass.

Three parallel faults are interpreted trending generally northeast-southwest. A minor cross fault is interpreted in the west-central part of the survey area.

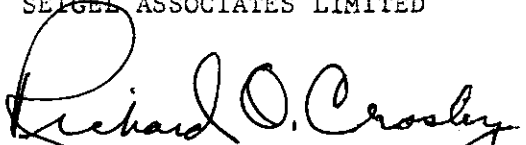
CONCLUSIONS AND RECOMMENDATIONS

The aeromagnetic survey has revealed magnetic features which warrant further investigation.

It is recommended that a geochemical survey be performed over the mineral claim group to check the possibility of copper mineralization in the vicinity of the interpreted faults.

Respectfully submitted,

SEIGEL ASSOCIATES LIMITED


Richard O. Crosby, B.Sc., P.Eng.
Geophysicist

Vancouver, B.C.
January 10, 1968.

SEIGEL ASSOCIATES LIMITED

DAILY FLIGHT REPORT

JOB: Alwin Mining Company Limited
 AREA: Ashcroft, B.C.
 SURVEY TYPE: Airborne Magnetometer
 SENSITIVITY: 10 gammas/S.D.

DATE: December 16, 1967
 OPERATOR: R. Pollard
 PILOT: T. Scheer
 FLIGHT No. 1

LINE NO.	FIDUCIALS		TIME		LINE LENGTH	REMARKS
	START	END	START	END		
25 W	0001	0083	1153	1155	1.7	Trace noisy due to turbulence
24 E	0087	0138	1156	1200	1.7	
23 W	0142	0209	1200	1203	1.7	
22 E	0213	0257	1203	1205	1.7	
21 W	0261	0334	1206	1209	1.7	
20 E	0338	0388	1209	1212	1.7	
19 W	0392	0464	1212	1215	1.7	
18 E	0468	0522	1215	1217	1.7	
17 W	0527	0576	1218	1221	1.7	
16 E	0581	0621	1221	1224	1.7	
15 W	0625	0670	1225	1227	1.7	
14 E	0674	0708	1227	1229	1.7	
13 W	0712	0757	1229	1231	1.7	
12 E	0761	0799	1231	1233	1.7	
11 W	0803	0846	1233	1235	1.7	
10 E	0850	0887	1235	1237	1.7	Landed
9 W	0896	0936	1245	1246	1.7	Took off
8 E	0940	0972	1246	1247	1.7	
7 W	0976	1020	1247	1248	1.7	
6 E	1024	1061	1250	1252	1.7	
5 W	1066	1109	1252	1253	1.7	
4 E	1112	1151	1253	1255	1.7	
3 W	1155	1194	1255	1256	1.7	
2 E	1198	1235	1256	1258	1.7	
1 W	1239	1280	1258	1300	1.7	
CL 10 S	1285	1349	1303	1306	3.0	
CL 14 N	1354	1464	1308	1311	3.0	

TOTAL MILES FLOWN -----

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

In the Matter of a geophysical survey on behalf of Alwin Mining Company Limited (N.P.L.)

I, Richard O. Crosby

of 115 - 744 West Hastings Street, Vancouver

in the Province of British Columbia, do solemnly declare that an aeromagnetic survey has been executed on some HJ and DAB mineral claims in the Tunkwa Lake area of British Columbia in December, 1967. The following expenses were incurred:

(1) Line Mile Charges	
60 line miles @ \$50/line mile	\$3,000.00
(2) Mobilization & Demobilization	390.00
(3) Subsistence & Quarters	<u>34.32</u>
	<u>\$3,424.32</u>

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 25TH
day of January 1968, A.D.

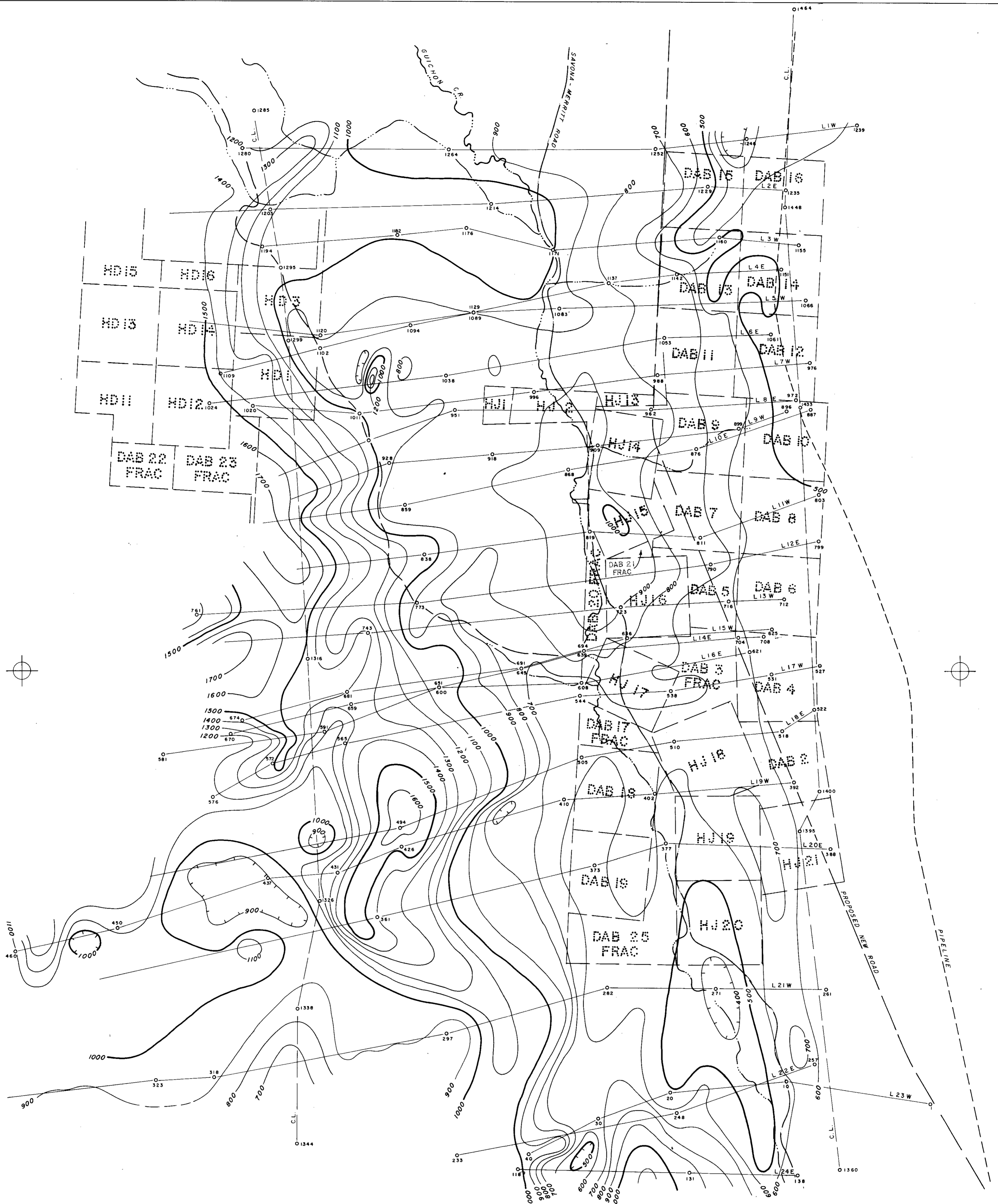
Richard O. Crosby

L. Strickler

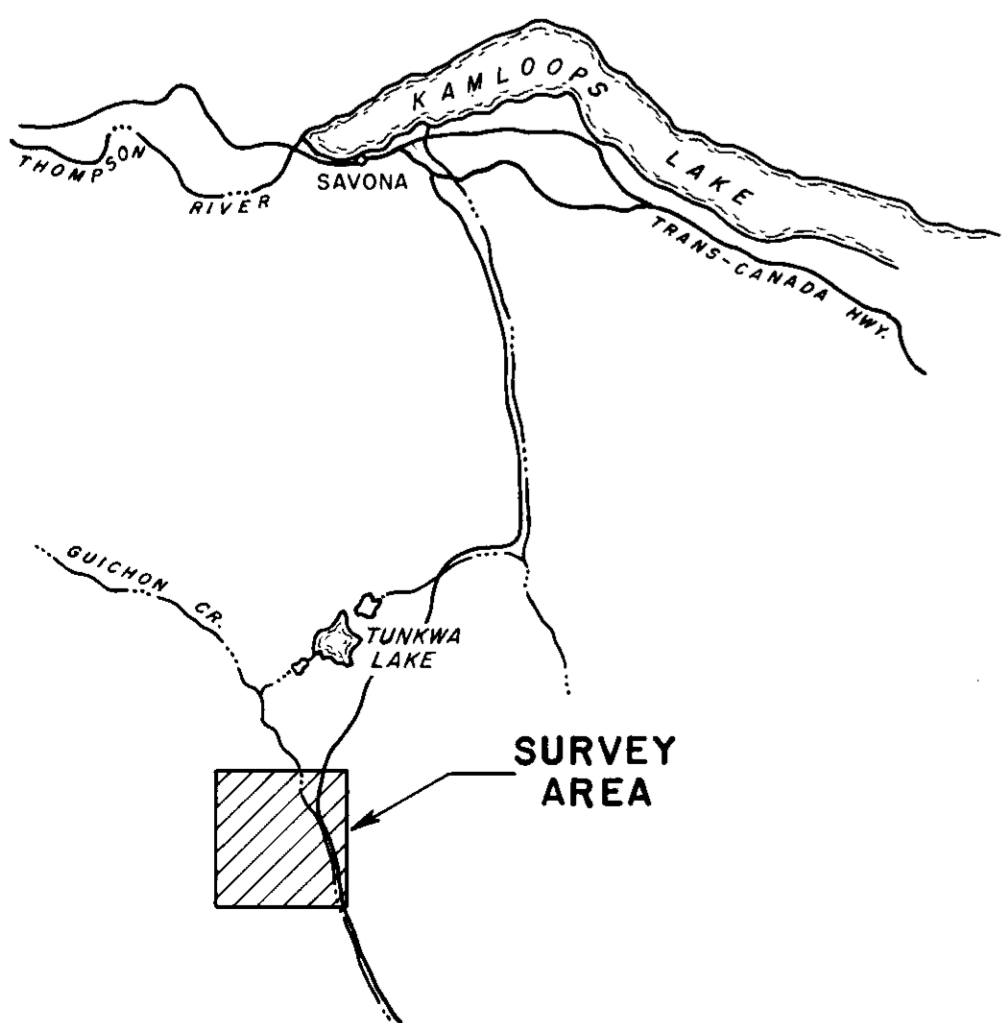
*A Commissioner for taking Affidavits within British Columbia or
A Notary Public in and for the Province of British Columbia.*

★o

Sub-mining Recorder

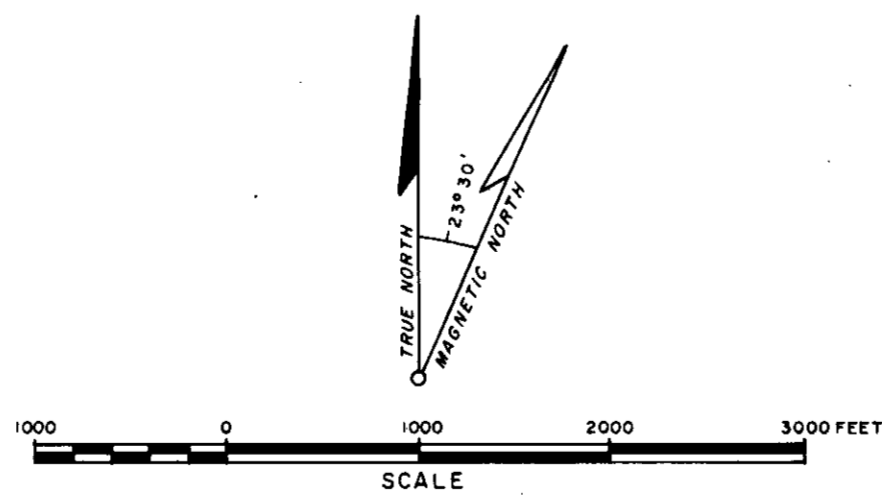


NOTE: CLAIM POSITIONING APPROXIMATE



LOCATION MAP

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 1166 MAP



LEGEND

- Magnetic Inclination - 73° 20' North
- Approximate Total Magnetic Intensity 58,300 Gammas
- Flight Line Interval Approximately 1/8 Mile
- Flight Lines And Photo Identity Points
- Isomagnetic Contours : 500 Gammas.....
- 100 Gammas.....
- Mag. Dep.

TO ACCOMPANY A GEOPHYSICAL REPORT BY
RICHARD O. CROSBY DATED JANUARY 10, 1968

PLATE I

ALWIN MINES LIMITED N.P.L.
TUNKWA LAKE AREA, BRITISH COLUMBIA
AIRBORNE MAGNETOMETER SURVEY

CONTOUR INTERVAL - 100 GAMMAS

FLOWN AND COMPILED BY
SIEGEL ASSOCIATES LTD.

DECEMBER 1967

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Richard O. Crosby

GUICHON

BATHOLITH

V
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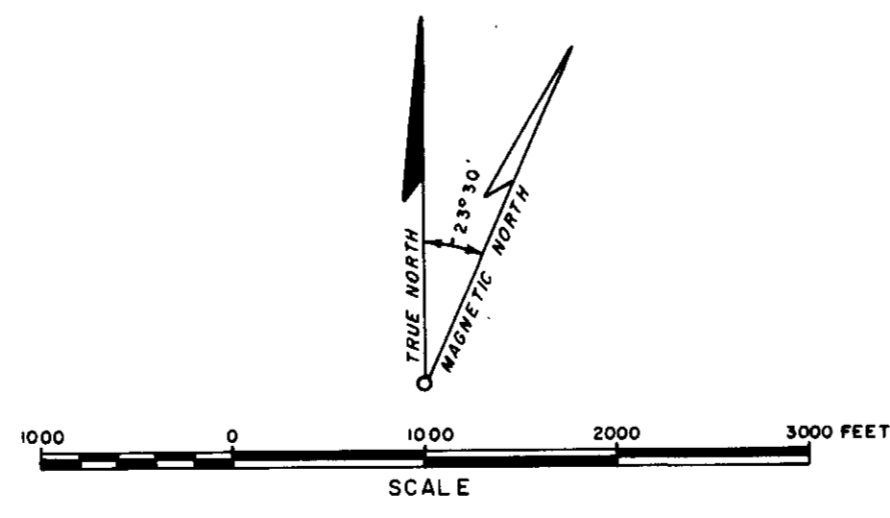
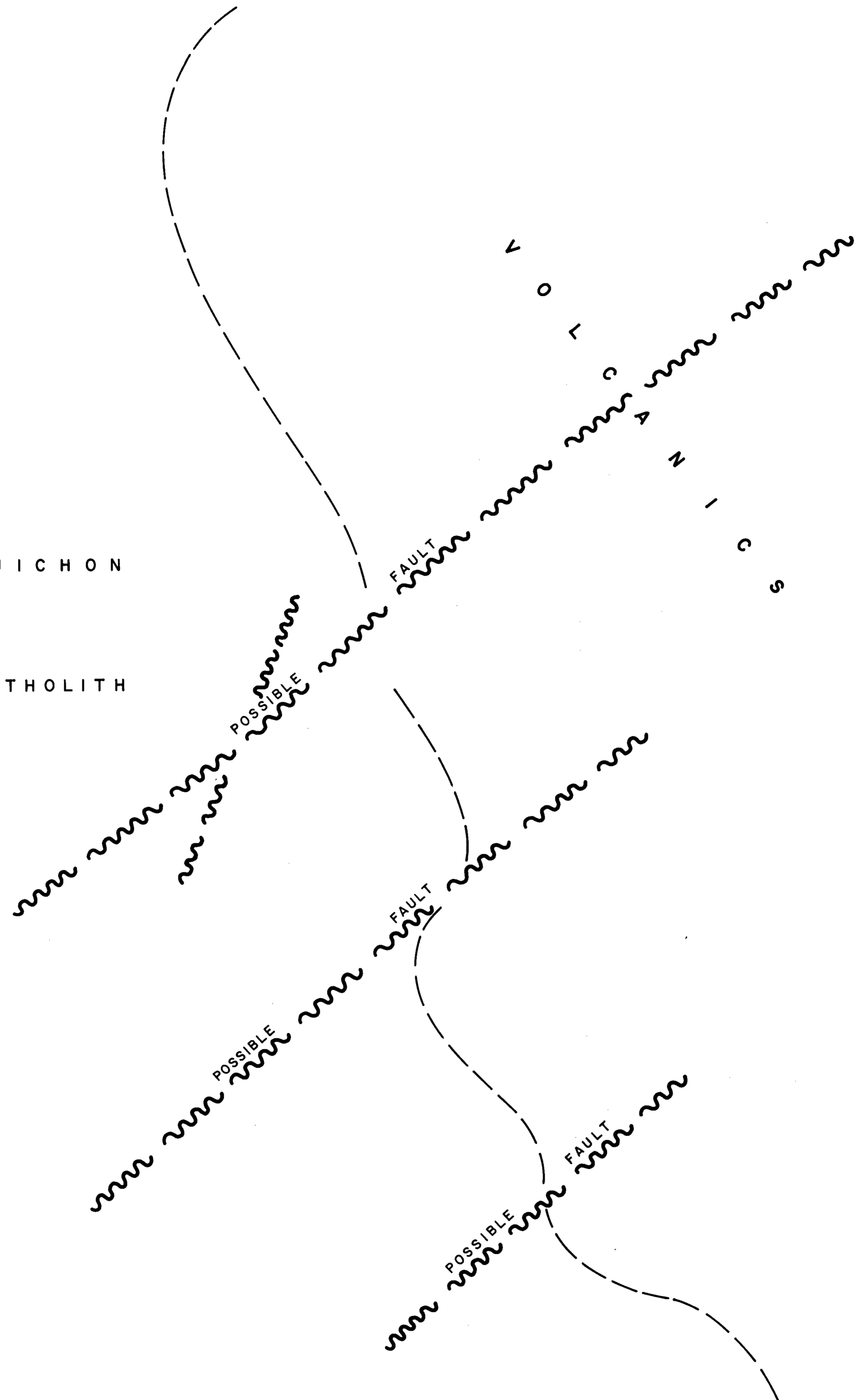


PLATE 2

ALWIN MINES LIMITED N.P.L.
TUNKWA LAKE AREA, BRITISH COLUMBIA
GEOPHYSICAL INTERPRETATION

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 1166 MAP 2

FLOWN AND COMPILED BY
SIEGEL ASSOCIATES LTD.
DECEMBER 1967

TO ACCOMPANY A GEOPHYSICAL REPORT BY
RICHARD O. CROSBY DATED JANUARY 10, 1968

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Richard O. Crosby