

4344

JAY BUTTERWORTH
MAGNETOMETER SURVEY

on the

92H/10E

JE Claim Group
Similkameen M.D.

49°37' N. 120°35' W.

Author: A. Homenuke, Geologist

P.Eng: D.C. Malcolm
May 9th 1973

DATE of WORK : APRIL 20-26 /73

Department of
Mines and Metallurgical Resources
ANALYTICAL REPORT
NO. 4344 MAP

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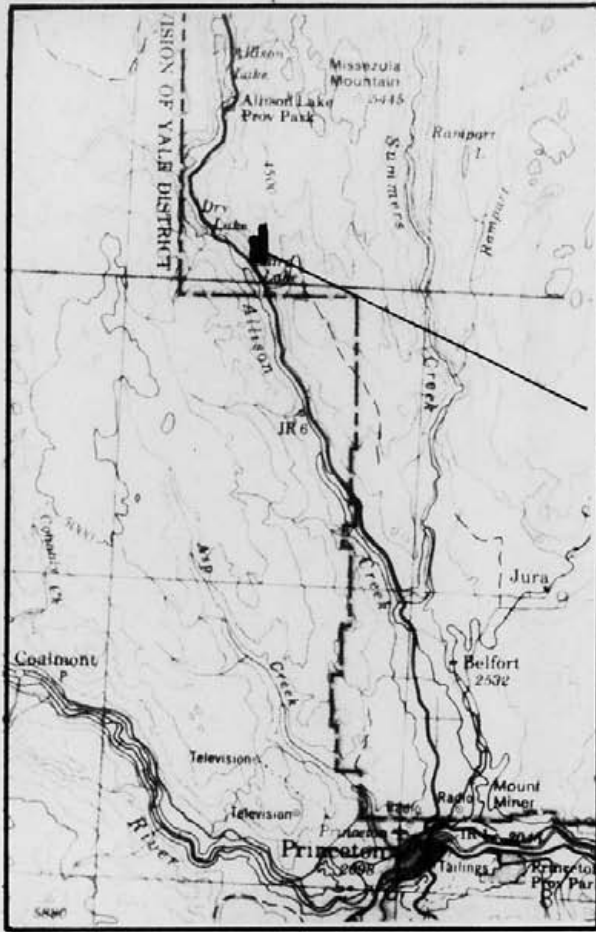
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Part of N.T.S. 92 H/10

1" = 4 miles

JAY BUTTERWORTH

LOCATION & CLAIMS MAP

JE & HI CLAIMS

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 4344 MAP # 1

N

	JE 13
HI 2	HI 1
JE 16	JE 15
JE 18	JE 17
JE 20	JE 19



EXPLORATION SURVEYS LTD.

FIG. 1

SUMMARY AND CONCLUSIONS

During April, 1973, Messrs. Jay Butterworth and Evan Sleeman carried out a magnetometer survey. The field data were presented to Tri-con Exploration Surveys Ltd. for interpretation.

The survey covered 6.3 line miles and showed a strong northwest trending magnetic high. From knowledge of the area and communications with associates, the author feels that this magnetic high is probably associated with an intrusive body, which in turn could be associated with copper sulfide mineralization.

The property definitely merits further exploration, especially in the form of a geological survey.

INTRODUCTION

During April, 1973, Messrs. Jay Butterworth and Evan Sleeman established a grid and carried out a magnetometer survey on the JE Claim Group, Similkameen Mining Division. The field data were turned over to Tri-con Exploration Surveys Ltd. for interpretation.

LOCATION AND ACCESS

The JE and HI Claims are located 13 miles north of Princeton, B.C., on the ridge between Allison and Summers Creeks. The exact location is $49^{\circ}37'$ N.Lat, and $120^{\circ}35'$ W.Long. (See Fig. 1).

The claims may be reached by the Oliphant Mountain road which leaves Highway 5 at the North end of Laird Lake.

PHYSICAL FEATURES

The grid is located on the steep slope of the ridge east of Highway 5. The slope is grassy and largely underlain by talus. Vegetation consists of bunchgrass and ponderosa pine.

CLAIMS

The claims covered by the survey are owned by Jay Butterworth. They have been grouped as the JE Group and include the following:-

<u>Name</u>	<u>Record No.</u>
JE 13	35409
JE 15-20	35411-35416
HI 1-2	37298-37299

The claims are shown on Fig. 1 and also on the maps of the survey, Fig. 2 and 3.

GEOLOGY:

The geology of the area is described by D.C. Malcolm, Consulting Geologist and Professional Engineer, as follows:-

"The area north of Princeton is underlain by Nicola volcanics intruded by numerous granitic rocks. It is faulted by major north to northwest striking faults and the rocks are crushed between these faults and northeast striking ones. Most of the crushed rocks are intensely altered and contain pyrite and chalcopyrite.

Some areas of these older rocks are overlain unconformably by green purple tuffs and agglomerates, by coal formations and by gravel and overburden.

Mineralization is extensive and a belt of chalcopyrite-pyrite deposits extend from north of Princeton to Aspen Grove along the contacts of granodiorite intrusives in crushed Nicola Volcanics and diorite intrusives.

In addition the green and purple tuffs contain stringers and disseminations of metallic chalcocite in some beds and secondary chalcocite deposits occur beneath the coal formations and areas formerly covered by these rocks".

Intrusive and volcanic rocks are known to occur on the property.

GRID

6.3 line miles of grid were established by Messrs. Butterworth and Sleeman. Lines were run east-west at 400 to 600 foot intervals with a station interval of 100 feet.

MAGNETOMETER SURVEY

A McPhar M-700 fluxgate magnetometer was used to take readings at 100-foot intervals along the grid lines. Control was established using a base station and by looping back to the base line every 1-2 hours.

Readings were taken on the 1000 and 3000 gamma scales for maximum sensitivity.

INTERPRETATION

A constant of 1000 gammas was added to the field data to eliminate negative values for contouring. Values ranged from 160 to 4300 gammas (on the adjusted data) and were contoured at 200-gamma intervals. The results of this interpretation are shown on the Isomagnetic Plan (Fig. 2).

A cumulative frequency distribution was done on the data to indicate the levels of magnetic response. The graph of this distribution and the areas covered by the different intensities are shown on the General Interpretation Map (Fig. 3). Magnetic linears are also shown on this map.

DISCUSSION OF RESULTS

The major magnetic feature is a high trending from southeast to northwest across the property. The trend includes several small anomalous highs which strike north to northeast and is broken up by areas of lower magnetic values which strike north.

From communications with associates who have done much work in the region, the author feels that the major trend is probably associated with an intrusive. And, as sulfide mineralization is known to be associated with intrusive bodies and contacts, the claim group definitely warrants further exploration.

This hypothesis will have to be investigated through geological mapping.

Respectfully Submitted

TRI-CON EXPLORATION SURVEYS LTD.



A.M. Homenuke,
Geologist

APPENDIX I

INSTRUMENT SPECIFICATIONS

M700 FLUX GATE MAGNETOMETER.

- Vertical field measurement
- Self Levelling
- Direct read out in gammas
- 5 scale ranges, 1000 to 100,000 gammas
- Sensitivity: 20 gammas per scale division on 1000 gamma range
- Readability: 5 gammas maximum
- Temperature drift: less than 50 gammas from -35 to +55^o Centigrade

APPENDIX II

CERTIFICATES:

1. A. Homenuke, Geologist
2. D.C. Malcolm, P. Eng.

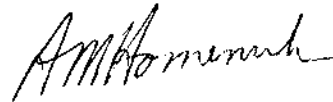
1. STATEMENT OF OPERATOR'S QUALIFICATIONS

I, Alexander M. Homenuke, DO HEREBY CERTIFY:

- That I am a graduate in Mining Technology from the British Columbia Institute of Technology.
- That I have further studied Geological Engineering at the Colorado School of Mines.
- That I have been employed by Tri-con Exploration Surveys Ltd. since June of 1969 in mineral exploration as a geochemical, geological and geophysical operator.
- That I am presently employed by Tri-con Exploration Surveys Ltd. in the capacity of Geologist.

DATED at Vancouver, British Columbia this 9th day of May 1973

TRI-CON EXPLORATION SURVEYS LTD.



A.M. Homenuke,
Geologist

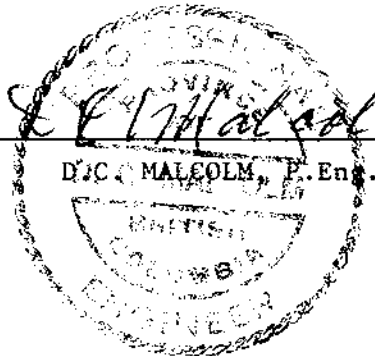


2. CERTIFICATE

This is to certify that:

1. I, DOUGLAS C. MALCOLM a resident of Vancouver, B.C., and live at 2290 West 23rd Avenue.
2. I am a graduate of the University of British Columbia with the degree of Bachelor of Applied Science in Geological Engineering (1935).
3. I am a member of the Association of Professional Engineers of British Columbia and Ontario and have practised my profession continuously since graduation.
4. I have not, directly or indirectly, received or expect to receive, any interest, direct or indirect, in the property of AALENIAN RESOURCES LTD., or of any affiliate; or beneficially own, directly or indirectly, any securities of the company or of any affiliate.
5. I have reviewed a report dated MAY 9th, 1973, based on work conducted by TRI-CON EXPLORATION SURVEYS LTD. This work was conducted during the month of April 1973.

DATED this 19th day of MAY, 1973



DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.

In the Matter of

*GEOPHYSICAL
SURVEY*

To Wit:

Department of *LINE CUTTING*
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. *4344* MAP

I, J. Butterworth

of 4727 Wesley Drive
Delta, B. C.

in the Province of British Columbia, do solemnly declare that the following is a true cost of survey:

<u>NAME</u>	<u>DATE OF WORK</u>	<u>MAN DAYS</u>	<u>COST/DAY</u>	<u>TOTAL</u>
J. Butterworth	April 20 - 26	7	50	\$ 350.00
E. Sleeman	April 20 - 26	7	50	350.00
Administration -----				70.00
Food & Accomodation @ \$20.00 /D/Man @ 14 Days -----				280.00
Vehicle @ \$15.00/Day + 10¢/Mile @ 7 Days -----				125.00
Instrument Rental: ----- McPhar M 700				95.00
Reports & Maps -----				500.00
Secretarial -----				50.00
			TOTAL	\$1,820.00

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 *27*
day of *April* *1973*, A.D.

J. Butterworth

Jill Jensen
A Commissioner for taking Affidavits for British Columbia or
A Notary Public in and for the Province of British Columbia.
Sub-mining Recorder



120 N

116 N

112 N

104 N

100 N

94 N

90 N

82 N

74 N

70 N

66 N

62 N

58 N

15+00 E

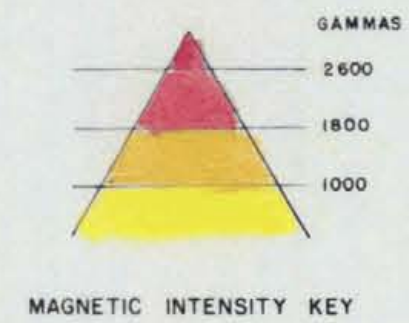
20+00 E

25+00 E

30+00 E

35+00 E

40+00 E



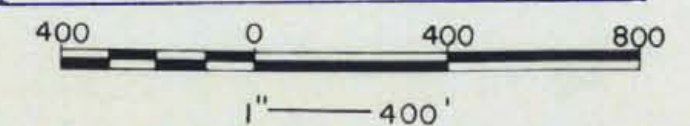
LEGEND

- Claim post + boundaries
- Road
- Survey station + magnetic value (in gammas)
- MAGNETIC CONTOURS**
- 1000 gamma intervals
- 200 " "
- Magnetic depression

4344 M-2

INSTRUMENT— McPHAR M-100 Fluxgate Magnetometer

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. **4344** MAP #2



To accompany Geophysical report on JE & HI Claims
Similkameen M.D., B.C.

by A. Homenuke, Geologist

dated May 9/73

A. Homenuke

JAY BUTTERWORTH

JE 13, JE 15-20, HI 1 & 2 CLAIMS

SIMILKAMEEN MINING DIVISION B.C.

MAGNETOMETER SURVEY
ISOMAGNETIC PLAN



EXPLORATION SURVEYS LTD.

INTERPRETED by A. HOMENUKE

DRAFTED by J.H.S.

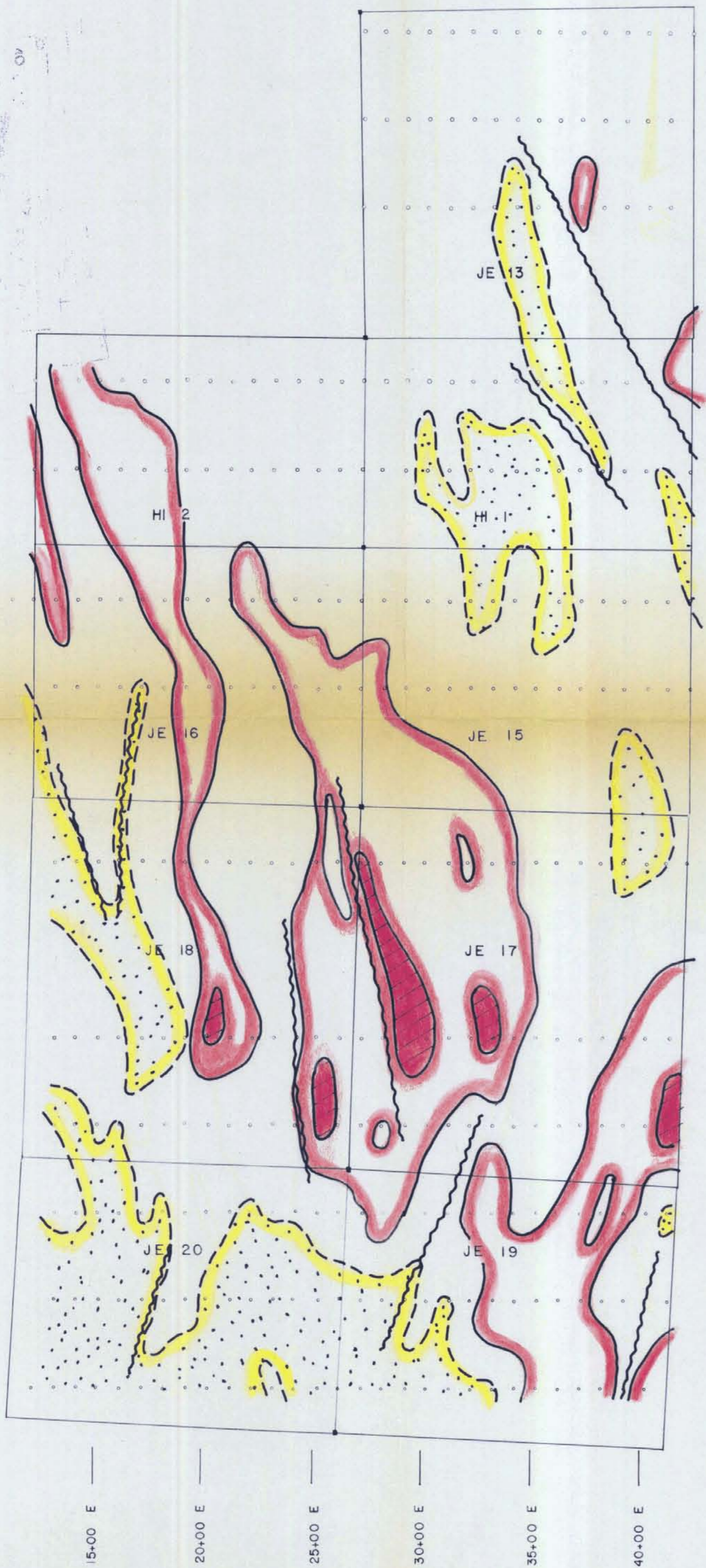
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DATE: APRIL 1973

REVISED:

PROJECT No. 7304

FILE: D-10



120 N

116 N

112 N

104 N

100 N

94 N

90 N

82 N

74 N

70 N

66 N

62 N

58 N

15+00 E

20+00 E

25+00 E

30+00 E

35+00 E

40+00 E



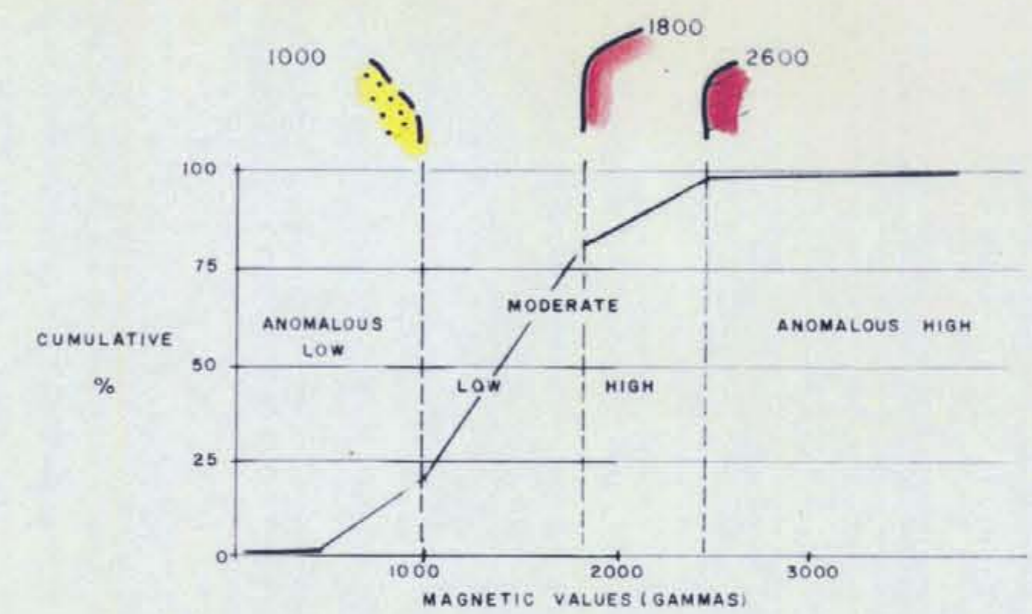
LEGEND

Claim post & boundaries

Survey stations

INTERPRETATION FEATURES

Magnetic linear



CUMULATIVE FREQUENCY DISTRIBUTION OF MAGNETIC DATA

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
No. 4344 MAP #3

JAY BUTTERWORTH

JE 13, JE 15-20, HI 1&2 CLAIMS

SIMILKAMEEN MINING DIVISION B.C.

MAGNETOMETER SURVEY
GENERAL INTERPRETATION MAP

EXPLORATION SURVEYS LTD.

INTERPRETED BY: A. HOMENUKE

DRAFTED BY: J.M.S.

CHECKED BY: Fig. 3

DATE: APRIL 1973

REVISED:

PROJECT No. 7304

FILE: D10

To accompany Geophysical report on JE & HI Claims
Similkameen M.D., B.C.

by A. Homenuke, Geologist

dated May 10, 1973

JHS for A.M. Homenuke