

GEOPHYSICAL SURVEY

NEAN GROUP #1-16

KAMLOOPS DISTRICT, BRITISH COLUMBIA

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4213 MAP _____

February, 1973

D. B. Blender

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ENCLOSURES

- #1 (1) Location Map of Jean Group
- #2 (2) Sketch Map of Magnetometer Grid with location of adits, trenches, roadways and claim posts.
- #3 (3) Magnetometer Survey of Jean Group of Claims #1-16
- (4) Statement of Expenditures

INTRODUCTION

The Jean Group #1-16 is located approximately two miles west of Copper Creek station at mile 14 from the Copper Creek turn-off. The turn-off itself is located two miles west of Savona on the Trans Canada highway. This road and the trail that winds its way through the property is navigable with four-wheel-drive vehicles all year round.

VEGETATION AND MAMMALS

Vegetation on the property varies from sage brush and short grasses in the low altitudes to Ponderosa Pine and Alpine fir in the higher more northern reaches. In the summer rattlesnakes and rodents can be found below treeline. There is between 20 - 30% outcrop on the property.

PREVIOUS WORK

To the best of the author's knowledge the only previous work was done in the 1940's consisting of three adits as well as several trenches which followed dolomite stringers into bedrock in search of cinnibar. Little cinnibar of economic significance was found. For further information on previous work please refer to The Sabiston Property on Page 93 of Memoir 249 of the G.S.C. (1).

GEOLOGY

Several different rock types are to be found on the property with most of the outcrop occurring on the southern half. Although no geological mapping was done in this program some outcrops were examined. The predominate rock type is serpentized greenstone of Nicola Group of the Upper Triassic which forms high topographic ridges from the centre of the grid towards the east.

An agglomerate rock, which outcrops immediately to the west of the greenstone, has well rounded fragments with diameters greater than 1" but less than 2 1/2", and a weak-cementing matrix. On this basis it would appear to fit the agglomerate of the Nicola Group.

Below the agglomerate, white to cream sandstone as well as a schistose shale outcrops. To the west of the conglomerates the greenstones have been altered to Ankerite in narrow zones characterized by iron oxide staining and thin stringers of dolomite. It is in these stringers and next to them that cinnibar is found. These rock types all strike north-northeast and dip steeply to the southeast.

Further information on the geology of the area can be obtained from Memoir 249 G.S.C. (1).

MAGNETOMETER SURVEY

To give the property even density magnetometer coverage, a grid, chained and flagged, was set up with a baseline running through the centre of the property bearing N 25° W, and lateral lines bearing S 65° W with a spacing of 300 feet and picketed stations located every 200 feet. (See attached map.) The line cutting was contracted out to Relcom Exploration Company which began its work on Friday, January 12, 1973. The author began the magnetometer survey on Monday, January 15, 1973 with an MF-1 magnetometer manufactured by E.J. Sharp Instruments, Serial No. 40698.

The control point for the entire survey was Base Station #1, located 50 feet southeast of the base line at Line 21+00S, with an arbitrary value of 500 gammas. All other base stations were corrected to it.

During the survey an accurate record of the reading and the time was kept by the author of every station read. Tie-ins to a base station were made within two hours with all readings made facing north and no readings taken directly over large rocks or boulders. There were a total of six base stations established:

Base Station #2 - 14' South of Line 15+00S, Station 0+35E

Base Station #3 - 15' North of Line 9+00S, Station 0+30E

Base Station #4 - 15' North of Line 0+00N, Station 11+30E

Base Station #5 - 10' North of Line 6+00N, Station 10+50E

Base Station #6 - On line 12+00N, Station 7+20E

All drift calculations were rounded off to the nearest 10 gammas.

INTERPRETATION

All of the magnetic data was corrected for drift, plotted on a scale of 1" - 200 feet and contoured with an interval of 200 gammas. No readings were obtained on Lines 21+00S, 18+00S, 15+00S and 12+00S between Stations 20+00E and 24+00E inclusive, due to lack of time and the near-impossible terrain. Contouring was not attempted in this area.

The highest value encountered on the property was 3630 gammas on Line 3+00S, Station 4+00E, and the lowest value was -020 gammas on Line 15+00S, Station 24+00W.

In general most of the magnetic trends have a strike that closely parallels the baseline and the contacts of major rock types found by the author on the property.

The most prominent feature of the map is the magnetic high which roughly parallels the baseline and extends throughout the property. This high correlates very well with the greenstone outcrop, with higher readings being taken right over the outcrop and minor lows within the high being areas covered with overburden. The high has a well-defined even gradient found between Stations 0+00 and 2+00W of Line 3+00N and Line 12+00S. It is here that the contact between the agglomerate and greenstone was found.

The agglomerate outcrop coincides with the magnetic low that extends throughout the property immediately to the west of the high. To the west of the low there is another magnetic high which is a wider and less distinct zone with less outcrop than nearby areas. This high could be due to the greenstone, this time its full effect marked by a thicker overburden or a different volcanic rock entirely.

One of the adits is located near the flank of this high at Line 15+00S, Station 14+50W. This adit could be near the contact of the more magnetic rock and the wide featureless low to the west which has extensive volcanic outcrop.

The other adit occurs in this low, 150 feet north of Line 24+00S, Station 18+00W. In both adits, dolomite stringers have cut the volcanics accompanied with a zone of alteration.

To the northeast of the high which parallels the baseline are a

series of linear lows and highs that are in an area of no outcrop and could be due to varying thicknesses of overburden.

To the southeast the terrain becomes much more rugged with numerous deep gullies and cliffs. Here the highs and lows are more concentric in nature with no long trends being established and are more likely due to isolated outcrops in an otherwise overburdened area.

CONCLUSIONS AND RECOMMENDATIONS

The two adits on the lower southwest part of the property lie on the same zone of deformation and alteration. From the magnetics presented it is obvious that the trenches in the northeast part of the property belong to a different altered zone entirely. Lack of outcrop in this area makes it difficult to follow these zones for any length. No characteristic magnetic trends are associated with the known zones of alteration and fracture veins.

Due to lack of outcrop in the area of these northern trenches, a program of soil sampling is recommended for base metals as well as mercury. Detailed geological mapping to the south would delineate the full extent of these altered veined zones and provide more information on which to base further soil sampling.

A resistivity survey might delineate the altered zones sufficiently to trace them through areas of overburden.



D. B. Blender, Geophysicist.

Regina, Saskatchewan
February 15, 1973

C E R T I F I C A T E

I, DOUGLAS B. BLENDER, of the City of Regina, in the Province of Saskatchewan, hereby certify:

1. THAT I am a geophysicist employed by the firm, D. L. Surjik and Associates Ltd., Consulting Geologists and Geophysicists, and I am a member of the International Society of Exploration Geophysicists, a member-in-training of the Association of Professional Engineers of Saskatchewan, and the Canadian Society of Exploration Geophysicists, with a business address at 301 Gordon Building, Regina, Saskatchewan.
2. THAT I hold a Bachelor of Science degree in Geological Engineering (Geophysics) from the University of Saskatchewan (1972).
3. THAT I have been continuously engaged since 1972 in various phases of mineral resource exploration, evaluation and development.
4. THAT the accompanying report is based on personal examination of the property on which I ran a ground magnetometer survey.
5. THAT I have no interest, direct or indirect, nor do I expect to receive any interest, direct or indirect, in the property described in the attached report, entitled "Geophysical Survey Jean Group #1-16, Kamloops District, British Columbia."



Douglas B. Blender, B.E.
Geophysicist.

February, 1973

LOCATION MAP of

JEAN GROUP

(16 CLAIMS)

4213

INFORMATION

STAKED - M. HJELT
DATE: MAR 24, 1972
DIR. S65°W
RECORDED: KAMLOOPS
APRIL 7, 1972
RECORD #S 108646-108661

SCALE: 1" = 1/2 MI.

SABISTON CREEK

CARABINE CREEK

M-1

Department of
Mines and Petroleum Resources

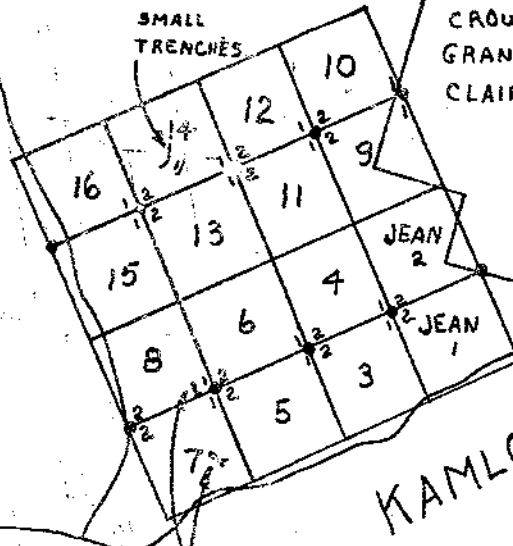
ASSESSMENT REPORT

NO. **4213** MAR. **#1**

M 149

CROWN GRANTED CLAIMS

SMALL TRENCHES



COPPER CREEK

KAMLOOPS LAKE

2 SMALL ADITS

To accompany Geophysical Report
by D. B. Blender, on the Jean
Group on Sabiston Creek, Kamloops
Mining Division, dated February 15
1972.

D. B. Blender

CLAIM MAP

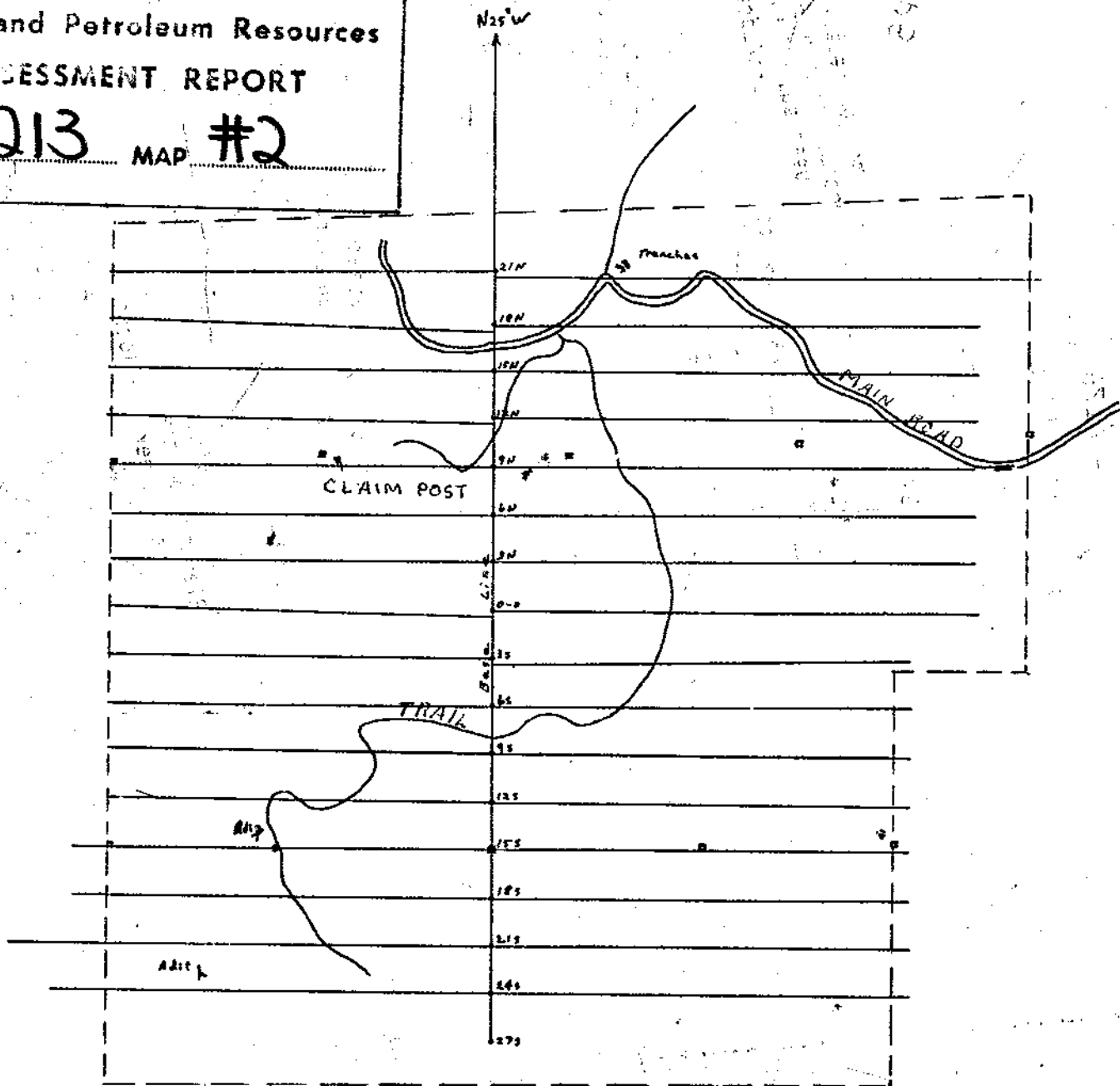
92I/15W (M)

DATE: FEB 16, 1973

SKETCH MAP OF MAGNETOMETER GRID

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NO. 4213 MAP #2



BOUNDARY
OF
PROPERTY

To accompany Geophysical Report
by D. B. Blender, on the Jean
Group on Sabiston Creek, Kamloops
Mining Division, dated February 15,
1973.

Doug Blender

Grid: Jean Group

Scale: 1" = 1000'

January 18, 1973

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

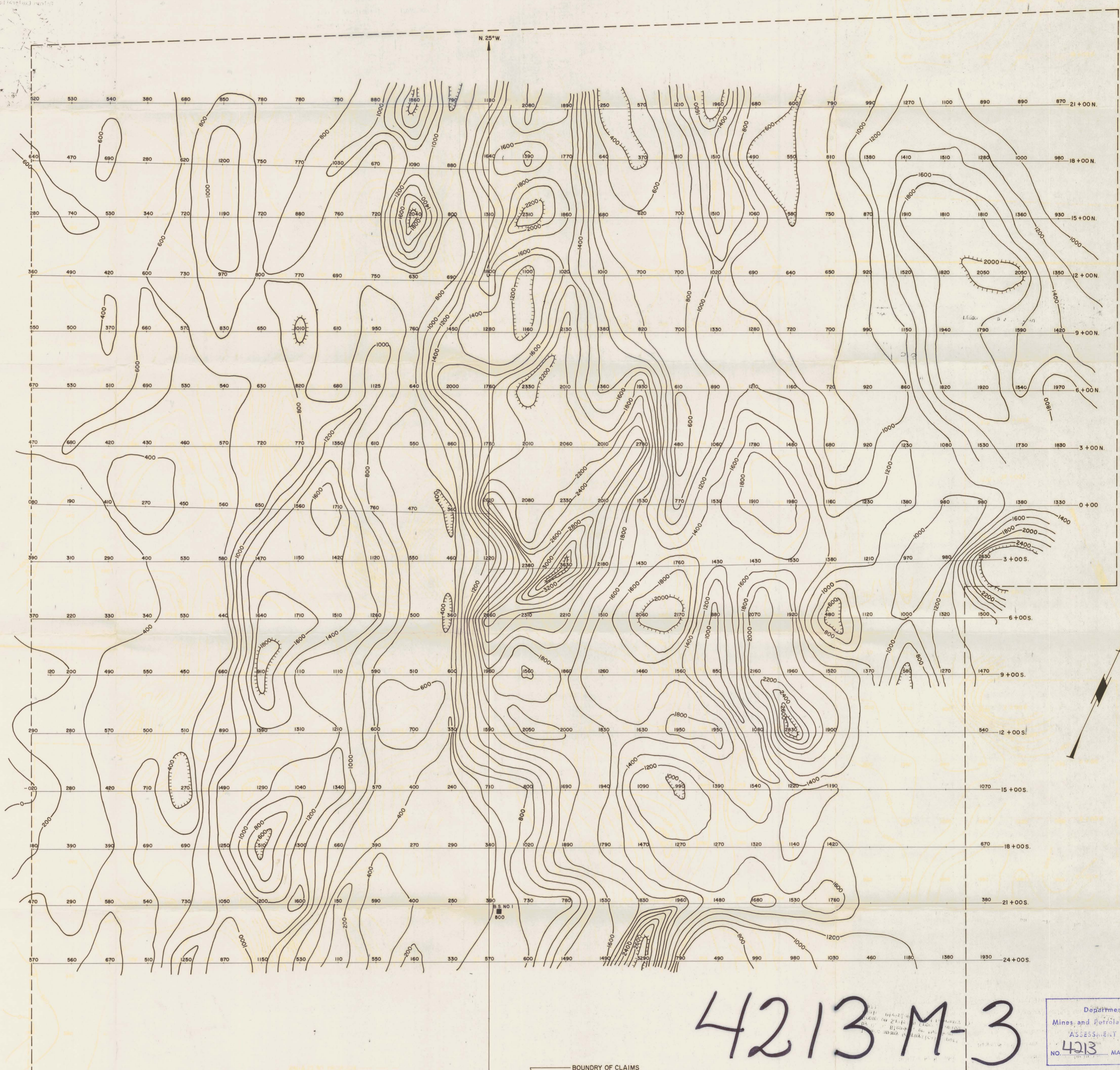
STATEMENT OF EXPENDITURES No. **4213** MAP

Douglas B. Blender	January 15 - January 19, 1973 inclusive	
	Magnetometer Survey - 5 days at \$70/day	\$ 350.00
	Plotting and contouring the data; writing report - 2 days at \$70/day	140.00
Relcom Exploration Co.	January 12 - January 19, 1973 inclusive	
	16.5 miles picket line at \$65/line mile	1,053.00
	Rental of MF-1 Magnetometer (Serial No. 40698) 1 week	57.00
Miscellaneous Expenditure		
	Motel Accommodation - 5 days	\$63.00
	Meals	48.30
	Cork Boots	<u>28.98</u>
	Drafting and Photocopying	40.21
	TOTAL	<u><u>\$1,780.49</u></u>

To accompany Geophysical Report
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Group on Sabiston Creek, Kamloops
Mining Division, dated February 15,
1973.

is Expenditure

(18) 1 we



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4213 M-3

To accompany Geophysical Report
by D. B. Blender, on the Jean
Group on Sabiston Creek, Kamloops
Mining Division, dated February 15,
1973.

**MAGNETOMETER SURVEY OF
JEAN GROUP CLAIM NO'S. 1-16
LONG: 120°51' W. LAT: 50°47' N.**

CONTREX LIMITED REGINA, SASK.	DATE: JAN. 1973	SCALE: 1" = 200'
APPROVED BY: <i>me</i>	MAP NO. 92 1 / 15 W.	CHECKED BY: <i>me</i>
MAGNETOMETER MF-1 SERIAL NO. 40698	CONTOUR INTERVAL: 200 GAMMAS	