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### MAGNETIC SURVEY

ON THE

#### BONNIE GROUP

(Bonnie, Marwill No. 1 & 2, G and R 5-8, Dale 1-4, Speculator and Mt. Glen, Mineral Claims)

Omineca Mining Division

SUB-RECORDER RECEIVED

MAR 3 0 1990

93 M/5E

55° 19'N 127° 38' W

North of Hazelton, B.C.)

Owner and Operator: Tri-Con Mining Ltd.

Writer:

A.M. Homenuke, P. Eng. (Geol.)

Submitted:

March 30, 1990

GEOLOGICAL BRANCH ASSESSMENT REPORT

19,861

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#### I. INTRODUCTORY NOTES

### Location and Access

The Bonnie Claim Group covers an area from the southern and western slopes of Mount Glen, adjoining the Silver Standard Mine, to the Skeena River on the West and is centered about 6 km. north-northeast of Hazelton, B.C. (Fig. 1). Access to the west side of the claims is provided by the recently relocated Salmon River Road which branches off the Hazelton-Kispiox Highway. The Silver Standard Mine Road passes through the center of the claim group, and old mining and logging roads provide local, in part 4-wheel drive, access.

### Physical Features

Mount Glen, elevation 645 metres, is located on the southeast portion of the claim group. The mountain has a relatively flat top about 700 metres wide, then drops steeply to Two Mile Creek on the east and the Silver Standard Mine Road on the west. The area between the Mine Road and the Skeena River on the west side of the claims is relatively flat in general aspect, but locally made up of abrupt ridges and gullies with swamps in many of the low areas. The river is at an elevation of 230 metres. Outcrops are scarce to non-existent except along the southern 500 metres of the claims and on the slopes of Mount Glen.

The area is covered by a mixed coniferous-deciduous forest, in part second growth after a fire at the turn of the century, except along the Skeena River where it is cleared for farming. Much of the area was selectively logged for cedar poles and there are marketable stands of cedar and spruce remaining. The deciduous growth consists of birch, poplar and alder and represents about 20% of the forest. Undergrowth is moderate and in general does not impede foot travel, however there are many small and few large swamps which inhibit access to some degree.

#### Property Description

The Bonnie Group consists of 13 reverted crown grants, which were formerly part of the Silver Standard Mine holdings, and one located claim. (Fig. 1). Table I below summarizes the claim data.

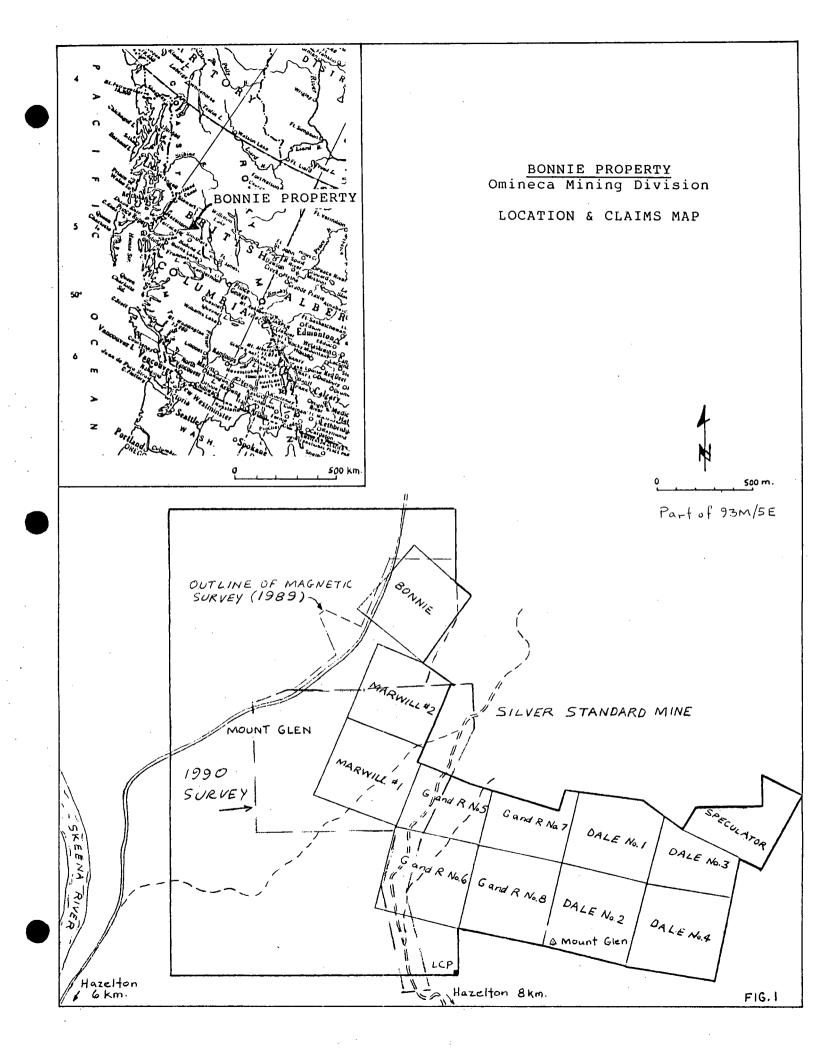


TABLE I. BONNIE GROUP

Name	Lot No.	Record No.	Units	Year Acquired	Record	Date
Bonnie	6454	305	1	1976	June	3
Marwill No. 1	6457	306	1	1976	June	3
Marwill No. 2	6456	307	1	1976	June	3
G & R No. 5	6458	2468	1	1980	Feb.	15
G & R No. 6	6459	2469	. 1	1980	Feb.	15
G & R No. 7	6460	2470	1	1980	Feb.	15
G & R No. 8	6461	2471	1	1980	Feb.	15
Dale No. 1	6462	2472	1	1980	Feb.	15
Dale No. 2	6463	2473	1	1980	Feb.	15
Dale No. 3	6464	2474	1	1980	Feb.	15
Dale No. 4	6465	2475	1	1980	Feb.	15
Speculator	2412	2476	1	1980	Feb.	15
Mt. Glen (reduced)		2490	1	1980	Feb.	25

Owner and Operator is Tri-Con Mining Ltd., of Vancouver, B.C.

### History

The adjoining Silver Standard Mine has been in operation since 1910, with major production during the period 1918 - 1922 and 1948 - 1958. It is presently being operated by lessee, shipping a few railcar loads of ore per year.

Total production was about 200,000 tons yielding over 7.5 million ounces of silver plus gold, lead, zinc, copper, and cadmium.

The Bonnie Group consists partially of reverted Crowngranted mineral claims which were once part of the Silver Standard Mine holdings. Old cat trenches and cut lines are present, but no records of work are available. A quartz vein with minor sulfides has been exposed on the southwest part of the claim group (National Ex Area). This was explored around 1950 by National Exploration Ltd. Tri-Con did limited work on this area in 1978 and 1980 and a more extensive exploration program in 1981.

On the Bonnie - Marwill Area, immediately west of the Silver Standard Mine, Tri-Con has been exploring for a parallel continuation of the sequence of veins at the mine. VLF-EM surveying has been the primary tool; followed by backhoe trenching and diamond drilling.

The claim group was expanded to the north in 1983 to cover an intrusive on the south side of the Shegunia River and some small sulfide bearing quartz veins on the north side of the river. This area was explored by geochemical and VLF-EM surveys and allowed to lapse due to disappointing results. During 1983-1989, geochemical and geophysical surveys were continued on the present claim area.

The EM survey was extended to cover a portion of the Silver Standard veins to aid interpretation of the results.

### Economic Assessment

The historic production of the Silver Standard Mine at present metal prices, would be over 100 million dollars. The westerly limit of the know veins is also the point at which glacial overburden becomes substantially deeper.

None of the old Silver Standard cat trenches in this area reached bedrock. Previous VLF-EM surveying indicated possible vein structures. Recent drilling of such EM targets showed the presence of two veins, one of which, though narrow where intersected, was identical to the production veins on the adjoining mine. The results of this drilling greatly enhance the geologic potential of at least this part of the Bonnie property.

### Present Work and Distribution

A magnetometer survey totalling 13.4 km was performed on the Marwill No. 1 and 2, Mt. Glen and G and R No. 5 and 6 Claims.

#### II. MAGNETOMETER SURVEY

### Procedure

A total of 13.4 km of lines were surveyed with a Scintrex MF-1 fluxgate magnetometer. This instrument reads the relative intensity of the vertical magnetic field. A scale was chosen to give a sensitivity of + 10 gammas. Test readings showed unacceptable orientation variation, so all readings were taken facing north. Diurnal variations were corrected by looping to previous stations. Readings were taken at 25 metre intervals. The survey was an extension to the south of a previous survey and was done to assist in interpretation of structural geology and, in correlation with previous VLF-EM surveys, locate drilling targets in a totally overburdened area. A contoured plan of the corrected magnetic results is shown on Fig. 2. The contours from the 1989 survey are also included.

### Discussion of Results

Relative magnetic intensity ranged from 280 to 780 gammas. Part of this range may be due to variations in overburden depth, as the general low area on the center of the grid is the area of deepest overburden and the highest values are in the vicinity of outcroppings. There does appear to be an indication of the presence of northeast and east trending faults. These are indicated on Fig. 2. Until further geologic information becomes available, the primary usefulness of magnetic surveying seems to be as a detailed survey tool to enhance interpretation of individual electromagnetic conductors.

#### III. CONCLUSIONS & RECOMMENDATIONS

The magnetic surveying conducted in 1989 indicated that this type of survey enhances interpretations of VLF-EM data on the Bonnie Property. The extended survey in 1990 has reinforced the interpretation of the presence of several northeast-and-east-trending block faults. Further magnetic surveying is not recommended until sufficient geological information becomes available from trenching and/or drilling to determine the ongoing usefulness of the technique.

Respectfully submitted, TRI-GON/MINING LTD.

A.M. Homenuke, P. Eng. Senior Vice-President

## COST STATEMENT

# February 8 - 15, 1990

Operator 8 days @ \$300/day (incl. travel)	\$2,400.00
A. Homenuke, P. Eng. Maps, interpretation and report 2 days @ \$400/day	800.00
Vehicle 7 days @ \$75/day	525.00
Room and board 7 days @ \$50/day	350.00
Airfare Vancouver/Smithers return	470.00
Instrument Rental 7 dyas @ \$20/day	140.00
Misc. supplies, secretarial, printing	150.00
	\$4,835.00

### REFERENCES

Black, J.M. 1950, Glen and Nine Mile Mountains area, B.C., B.C. Mine of Mines Ann. Rept.

Homenuke, A.M., 1978 - 1989, Various assessment reports.

Kindle, E.D., 1954, Hazelton and Smithers Area, G.S.C. Mem. 223

Richards, T.A., 1980, G.S.C. Open File Map No. 720

#### CERTIFICATE OF QUALIFICATION

- I, Alexander M. Homenuke, do hereby certify:
- 1. THAT I am a member in good standing of the Association of Professional Engineers of British Columbia.
- 2. THAT I received the Degree of Bachelor of Science in Geological Engineering from the Colorado School of Mines in 1974.
- 3. THAT I received a Diploma of Technology in Mining from the B.c. Institute of Technology in 1969.
- 4. THAT I have been employed in various aspects of mining exploration for 21 years and am presently employed by Tri-Con Mining Ltd., of Suite 2580, 1066 West Hastings Street, Vancouver, British Columbia.
- 5. THAT I presently reside at 29825 Harris Road, Mt. Lehman, British Columbia.
- THAT this Report is based on work supervised or conducted by myself.

DATED at Vancouver, British Columbia, this 30th day of March 1990.

A.M. Homenuke, P. Eng. Geological Engineer

