ARIS SUMMARY SHEET

District Geologist, Smithers Off Confidential: 90.02.23 ASSESSMENT REPORT 18725 MINING DIVISION: Omineca **PROPERTY:** Bonnie 55 19 00 LOCATION: LAT LONG 127 38 00 UTM 09 6130666 586734 NTS 093M05E 045 CAMP: Silver Standard - Rocher Deboule Area CLAIM(S): Bonnie, Marwill 2, Mt. Glen OPERATOR(S): Tri-Con Min. AUTHOR(S): Homenuke, A.M. 1989, 14 Pages **REPORT YEAR:** COMMODITIES SEARCHED FOR: Gold, Silver KEYWORDS: Bowser Lake Group, Quartz Veins WORK DONE: Geophysical, Geochemical MAGG 9.0 km SAMP 8 sample(s) ;AU,AG RELATED **REPORTS:** 08906, 10189, 13181, 13440, 14135, 14840, 15891, 17363

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1989 EXPLORATION PROGRAM

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	93 M/5E		
MAY 1 - 1989	55 [°] 19'N 127 [°] 38' W	H C	
M.R. #\$	(North of Hazelton, B.C.)	ZC	
VANCOUVER, B.C		X A	
	The Con Mining Ita		
Owner and Operator:	a Tri-Con Mining Ltd.	A L	
Writer:	A.M. Homenuke, P. Eng. (Geol		
Submitted:	April 28, 1989	SC	
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INTRODUCTORY NOTES

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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 4wheel 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.

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TABLE I. BONNIE GROUP

		Record		Year		
Name	Lot No.	No.	Units	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	2 41 1 2 4 4	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 1983-1987, geochemical and VLF-EM 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 9 km was performed on the Bonnie Claim and on portions of the Mt. Glen and Marwill No. 2 Claims. During the course of this survey old grids lines from portions of several previous VLF-EM surveys were located and tied in the magnetometer survey. The VLF-EM data were reinterpreted to aid in interpretation of the present survey.

Preliminary samples were taken from old mill tailings in a swamp on the Bonnie Claim and assayed for gold and silver.

MAGNETOMETER SURVEY

Procedure

II.

A total of 9 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 <u>+</u> 10 gammas. Test readings showed unacceptable orientation variation, so all readings were taken facing east. Diurnal variations were corrected by looping to previous stations. Readings were taken at 25 metre intervals. The survey 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. To this end, the locations of VLF-EM grid lines were located with respect to the magnetic survey and to improve the control on the former surveys. A contoured plan of the corrected magnetic results is shown on Fig. 2.

Discussion of Results

Relative magnetic intensity ranged from 280 to 670 In general, readings were lower to the south and east gammas. and high to the northwest. Major trends are northeast and east with lesser northwest and north trends. These trends are sympathetic to the major regional block faults. The producing veins on the adjoining Silver Standard Mine Property trended northeast and north and generally show a coincident VLF-EM conductor. Inferred faults from the magnetic survey are shown on Fig. 3 along with a simplified plan of the previous VLF-EM surveys. Many of the inferred faults are coincident with interruptions of the VLF-EM conductors. Other inferred faults are along the flanks of conductors and appear to assist in determining the dip of structure related conductors. Until further geological information is gathered from preliminary drilling, the best drill targets appear to be the conductors with the same orientation as the Silver Standard veins. The combined magnetic - VLF-EM interpretation has shown several fo these targets.

III. TAILINGS SAMPLING

When the Silver Standard Mine was in production from 1948 to 1958, approximately 200,000 tons of silver-gold-leadzinc-copper ore were milled. The tailings were simply allowed to discharge with no containment. The writer estimates that as much as 50% of the tailings accumulated in a swamp on the present area of the Bonnie Property (See Fig. 1). The writer took 8 samples from 6 sites in this area with a 90 x 2.5 cm soil auger to make a preliminary evaluation of the metal content and distribution in

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TAILINGS SAMPLING PLAN

FIG. 4

S SAMPLE	ANALYSIS
Gold	Silver
oz/ton	on/ton
0.064	4.40
0.032	2.48
0.050	4.26
0.069	3.88
0.042	2.88
0.041	2.39
0.047	4.96
0.051	3.65
	S SAMPLE Gold oz/ton 0.064 0.032 0.050 0.069 0.042 0.041 0.047 0.051

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the tailings. The samples were delivered to Chemex Labs in North Vancouver and fire assayed for gold and silver. The locations of the samples and tabulated results are shown on Fig. 4. The arithmetic average of the assays is 0.05 oz. gold/ton and 3.6 oz. silver/ton. Although there are too few samples for a statistical analysis, it can be seen from the table that the assays have a narrow range of values with no presently discernable areal tend. From one profile (sample T-6 A,B,C) gold appears to increase slightly with depth, likely a gravity effect.

These results are sufficiently encouraging to warrant further investigation in the form of more detailed sampling, analysis for basic metals, tonnage measurements and preliminary metallurgical testing.

IV. CONCLUSIONS & RECOMMENDATIONS

Magnetometer surveying improves the interpretation of VLF-EM data and several targets for further exploration by diamond drilling have been outlined. The magnetometer surveying should be extended to cover the balance of the property and, with permission, over the Silver Standard Mine area.

Sampling of abandoned mill tailings yielded encouraging precious metal values and further investigations are warranted.

Respectfully submitted, TRI-CON MINING LTD, CESS

OF A. M. HOMENUKE

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

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COST STATEMENT

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Sept. 15, 1988 and Feb. 12 - 19, 1989	
A. Homenuke, P. Eng - Field and report 4 days @ \$400/day	\$1,600.00
Operator (A. Homenuke) 7 days @ \$300/day	2,100.00
Vehicle 8 days @ \$75/day	600.00
Room & board 8 days @ \$45/day	360.00
Magnetometer Rental 5 days @ \$25/day	125.00
Analysis 8 samples for Au, Ag @ \$16.25 sample	130.00
Misc. supplies, secretarial, copying	150.00
	\$5.065.00

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REFERENCES

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

Homenuke, A.M., 1978 - 1988, 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:

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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 20 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 28th day of April 1989.

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

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