

84-1410-

GEOPHYSICAL REPORT

HILLSIDE CLAIM

TRAIL CREEK MINING DIVISION

82 F 4 W

49° 3' 13" N, 117° 47' 11" W

Owner: D. K. Bragg

Operator: D. K. Bragg

Author: D. K. Bragg

Date: Dec. 1, 1984

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

13,587

84-1410-13587



Province of British Columbia

Ministry of Energy, Mines and Petroleum Resources

GOLD COMMISSIONER RECEIVED and RECORDED  
JAN 31 1985  
M.R. #

ASSESSMENT REPORT  
TITLE PAGE AND SUMMARY

TYPE OF REPORT/SURVEY(S) **GEOPHYSICAL** TOTAL COST \$800.00  
ROSSLAND, B.C.

AUTHOR(S) *D.K. Bragg* SIGNATURE(S) *D.K. Bragg*

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED *Oct. 26/84* YEAR OF WORK *1984*

PROPERTY NAME(S) *Hillside*

COMMODITIES PRESENT *Zinc, Lead, Silver, Gold, Copper. 12 veins.*

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN

MINING DIVISION *Trail Creek* NTS *B2F4W*

LATITUDE *49° 3' N* LONGITUDE *117° 47' W*

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that form the property [Examples: TAX 1-4, FIRE 2 (12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified Mining Lease ML 12 (claims involved)]:

*Hillside 4 units*

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ROSSLAND, B.C.

OWNER(S)  
(1) *D.K. Bragg* (2)

MAILING ADDRESS  
*1362 E. 41st Ave.  
Vancouver B.C. V5W 1R8*

OPERATOR(S) (that is, Company paying for the work)  
(1) *D.K. Bragg*

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

MAILING ADDRESS  
*Same*

13,587

SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, and attitude):  
*Mineralized stages occurring within fault structures within the Mount Roberts Formation (Pennsylvanian), the Rossland Formation (Lower Jurassic) and the Nelson Plutonic Complex (Lower Cretaceous).*

REFERENCES TO PREVIOUS WORK *Prospecting Report 1981, Geophysical Report 1982*

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS				COST APPORTIONED
GEOLOGICAL (scale, area)	.....	.....				.....
Ground	.....	.....				.....
Photo	.....	.....				.....
GEOPHYSICAL (line-kilometres)	.....	.....				.....
Ground	.....	.....				.....
Magnetic	.....	.....				.....
Electromagnetic	.....	.....				.....
Induced Polarization	.....	.....				.....
Radiometric	.....	.....				.....
Seismic	.....	.....				.....
Other	.....	.....				.....
Airborne	.....	.....				.....
GEOCHEMICAL (number of samples analysed for ....)	.....	.....				.....
Soil	.....	.....				.....
Silt	.....	.....				.....
Rock	.....	.....				.....
Other	.....	.....				.....
DRILLING (total metres; number of holes, size)	.....	.....				.....
Core	.....	.....				.....
Non-core	.....	.....				.....
RELATED TECHNICAL	.....	.....				.....
Sampling/assaying	.....	.....				.....
Petrographic	.....	.....				.....
Mineralogic	.....	.....				.....
Metallurgic	.....	.....				.....
PROSPECTING (scale, area)	.....	.....				.....
PREPARATORY/PHYSICAL	.....	.....				.....
Legal surveys (scale, area)	.....	.....				.....
Topographic (scale, area)	.....	.....				.....
Photogrammetric (scale, area)	.....	.....				.....
Line/grid (kilometres)	.....	.....				.....
Road, local access (kilometres)	.....	.....				.....
Trench (metres)	.....	.....				.....
Underground (metres)	.....	.....				.....
<b>TOTAL COST</b>					.....	

FOR MINISTRY USE ONLY	NAME OF PAC ACCOUNT	DEBIT	CREDIT	REMARKS:
Value work done (from report) .....	.....	.....	.....	.....
Value of work approved .....	.....	.....	.....	.....
Value claimed (from statement) .....	.....	.....	.....	.....
Value credited to PAC account .....	.....	.....	.....	.....
Value debited to PAC account .....	.....	.....	.....	.....
Accepted ..... Date .....	Rept. No. ....	.....	.....	Information Class .....

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INTRODUCTION

The Rossland mining camp in its hayday was one of the major gold and silver producers of British Columbia. It had its beginning in the early 1890's when some of the first claims were staked. Since then the camp has produced in excess of some five million tons of ore. Since the late 1920's little production has taken place except for leasors on some of the old properties and the production from the southern flank of Red Mountain.

It was in the Rossland camp that the Consolidated Mining and Smelting Company got the start that enabled it to become one of the worlds major producer of lead, zinc, and silver. This company is now Cominco.

Most of the early production was centered around the north and western part of the camp where the veins were predominantly copper and gold producers ie: the War Eagle, Centre Star and Le Roi claims. However many properties satellite to the main producing area were discovered. It is on these satellite properties that most of the recent exploration work has taken place, although sporadic.

The writer has been involved in the Rossland camp since 1970 and was actively mining on the BlueBird crown grant from 1972 to 1976. Since then he has been involved in exploration on claims in what is known as the South Belt area.

The Hillside claim was staked in Oct. of 1980. Some preliminary prospecting was done in the fall of 1980 and some more time was spent on the ground in Aug. of 1981. This preliminary work established that both the magnetometer and geochemistry were viable tools to use in a search for or to delineate the veins on the property.

Some follow up work was done on the Hillside claim in 1980, 1981 and 1982.

The intent of this current geophysical investigation was to continue the grid on the area immediately to the south of that work done during Nov of 1982.



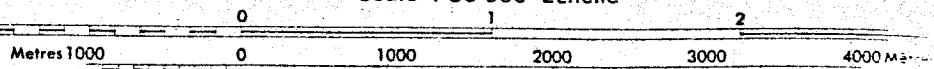
Fig. I

INDEX MAP

LOCATION OF THE HILLSIDE CLAIM

# ROSSLAND-TRAIL BRITISH COLUMBIA

Scale 1 50 000 Échelle



PROPERTY LOCATION AND ACCESSIBILITY

The Hillside claim is centered two kilometers south south east of the city of Rossland, and lies on the northern slope of Baldy Mountain known as Cherry Ridge. Access to the northern portion of the claim is by means of the old rail grade and power line roads. The eastern portion of the claim is traversed by old logging roads for the most part now impassible by vehicles. Elevations range from 2800 feet to 3900 feet on the Hillside claim. However, the terrain is for the most part fairly gentle and accessible by foot.

Forest cover is mainly second growth Hemlock, larch, fir, cedar and both white pine and jack pine with some poplar and birch. The undergrowth is fairly open and nowhere is it impassible.

GEOLOGY

The Rossland area is underlain by sedimentary and volcanic rocks which have been intruded and metamorphosed by igneous rocks ( see G S C Memoir 308 by L. V. Little ).

The oldest formation is the Mount Roberts Formation ( Pennsylvanian ) which are sediments consisting of slates, limestones, quartzites and greenstones (andesites and banded tuffs ) .

This in turn is overlain by the Rossland Formation ( Lower Jurassic ) which consists mainly of lava flows of andesitic to basaltic composition, augite porphyry, and bodies of tuff and argillite.

The above rocks have all been intruded by a number of different intrusions in the following sequence:

Ultrabasic intrusions	( Lower Cretaceous )	serpentinized peridotite
Rossland Monzonite	( Lower Cretaceous )	Monzonite
Nelson Plutonic rocks	( Lower Cretaceous )	Granite and other phases
Coryell Plutonic rocks	( Tertiary )	alkali granite and syenite
Sheppard Intrusions	( Tertiary )	alkali granite and syenite

Most of all these formations have been subjected to faulting and the intrusion of numerous dykes of various composition from monzonites to basalts. In general these dykes are steeply dipping and trend to the north.

In the area to the south and south east of Rossland there are east west fractures or faults along which mineralized stopes are formed. These stopes seem to be well developed vertically, but are limited horizontally. One such stope on the Blue Bird crown grant measures about a hundred feet horizontally and has been drilled vertically to a depth of two hundred and forty feet and is still open downward.

There are two known mineralized fractures of considerable length in what is known as the south belt. The Blue Bird - Mayflower vein system has been traced over a distance of 1200 meters from the eastern portion of the Hattie Brown crown grant through the Blue Bird, Copper Queen, Olla Podrida and on to the Alfi crown grant and still may be open on both ends. The second vein system is the Homestake vein, and although it is not known for certain that this is a continuous system, mineralization has been found along a strike distance of 2200 metres. This system runs through the Monday, Homestake, Gopher, Maid of Erin, Robert E. Lee, Celtic Queen crown grants and on to the S D R claim.

There are numerous other short fractures in the area along which mineralization has been found, but since information is scarce and it is not known whether these mineralized occurrences are aligned along continuous fracture systems.



FIELD WORK

On April 22nd of 1984 the magnetometer survey grid was continued on the Hillside claim to the south of 55+00 S and to the west of 64+00 E where it was expected that the magnetometer might delineate one small S P anomaly plus a longer east westerly elongated S P anomaly.

Accordingly the lines were run 25 metres apart with stations established every 5 metres along the lines. Approximately 1.4 km of new line was run in as well as placing the 5 metre stations along the existing 64+00 E location line using compass and topochain for controll.

Two hundred new magnetometer readings had been taken over these lines using a M<sup>C</sup>Phar M 700 vertical field magnetometer, using the fluxgate principle, when it was realized that I was experiencing either instrument malfunction or a magnetic storm. As a check a number of readings were taken over stations established in previous years work, and especially along line 55+00 S. When these readings could not be duplicated within a 50 gamma range the survey was discontinued with the intent of returning at a later date and redoing the magnetometer readings.

Base stations had been set up and the magnetometer had been calibrated at these stations so that the lower range scales would be used in the survey. As the survey progressed these stations were checked into on a regular basis in order to monitor the diurnal drift. Although the readings at the base stations were slightly higher the problem had not been recognized with the base station readings.

It had been anticipated that the magnetometer readings would be retaken and the survey completed either during the time we were in Rosslund in the spring or during another trip later in the season. Unfortunately time spent on other areas in Rosslund precluded the first and a later trip did not materialize due to lack of funds.

RESULTS

After approximately 200 magnetometer readings had been taken I began to suspect that I was experiencing either equipment malfunction or a magnetic storm. The areas of highs that I was getting were considerably stronger and broader than I would have expected. A problem had not been recognized during the periodic checks at the base stations since most of these check readings were within acceptable tolerances of 70 gammas and only two were over 100 gammas.

The survey was discontinued and check readings were taken over the highs on 63+00 E and over line 55+00 S between 64+00 E and 63+50 E. The high readings on line 63+00 E could not be duplicated at all, and on initial perusal of the readings on line 55+00 S it was concluded that I was not reproducing these readings consistently within the tolerances experienced in previous years when I had made check readings. Even after the diurnal corrections had been made it was found that duplication of individual readings varied from 30 to 250 gammas.

The lines that were run in were plotted on a scale of 1 - 500. Since time constraints during the periods that we were in Rosslund did not allow us to re-do the readings and complete the survey, and a lack of finances did not allow us to return to Rosslund at a later date the readings that had been taken were corrected for diurnal drift and plotted on the map. To illuminate the problems experienced the results of the work done in November of 1982 were plotted on the map. These are the dashed lines to the north of Line 55+00 S. (See Geophysical Report on the Hillside Claim, Dated Dec. 15, 1983 by D. K. Bragg ).

Since the results of this survey could not be accepted with any degree of confidence there was no attempt made to contour the plot of these results on the map.

CONCLUSIONS

During the survey I became convinced that I was either experiancing equipment malfunction or a magnetic storm. Although the battery that was in the instrument at the time checked out at 7.5 volts, well above the 6 volt output at which time the battery should be replaced, the battery was replaced and no further problems were experianced on April the 22 and 23 while working on the adjoining Tigre claim.

The results of this survey can not be accepted with any degree of confidence. The readings should all be re-done again.

STATEMENT OF COSTS

D. K. Bragg	April 22, 1984 $\frac{1}{2}$ day @ \$ 180.00 per day	\$ 90.00
E. S. Warner	April 22, 1984 1 day @ \$ 180.00 per day	\$ 180.00
Board,	$1\frac{1}{2}$ man days at \$ 40.00 per man day	\$ 60.00
Magnetometer rent and field supplies		\$ 20.00
Pro rated transportation costs to Rossland		\$ 30.00
Truck costs one day at \$ 50.00 per day		\$ 50.00
Report preperation		\$ 180.00
	Sub Total	\$ 610.00
P. A. C. Withdrawl		\$ 190.00
	Total	\$ 800.00

STATEMENT OF QUALIFICATIONS

D.K. Bragg supervised and did most of the work involved in this investigation, including the line cutting, prospecting, mapping the geology, soil sampling, magnetometer survey and report preparation. His qualifications are as follows:

Graduated Armstrong High School, Armstrong B.C. 1951.

Attended U.B.C. from 1958 to 1962 in the faculty of Arts and Science, in Honors Geology.

Has worked in the mineral exploration industry since 1956.

Worked for Kennco Explorations during the summers of 1956, 1957, and 1959 in the Yukon and northern B.C. as an assistant prospector and geochem sampler under the direction of Dr. R Campbell and R. Woodcock.

Worked as head prospector for the Nahanni 60 Syndicate in the Northwest Territories in 1960 under the direction of Doug Wilmont.

Worked as head prospector in the Yukon for Dualco in 1961 under the supervision of E.Wozniak.

Worked as head prospector for Mining Corp. of Canada in southwest B.C. in 1962 under J.S. Scott and Dr. K. Northcote.

Worked as head prospector during the summer of 1963 for the Francis River Syndicate, in the central Yukon, under the direction of Dr. A. Aho.

Worked as field geologist in the Greenwood area of B.C. for Scurry Rainbow Oil in 1965 under the direction of Bill Quinn.

Worked as a field supervisor for Alrae Explorations Ltd. from Sept 1965 to April 1967 under the direction of Rae Jury.

Since 1956 has also worked as a self employed contractor, working for various mining companies in the following fields: prospecting, property examination, staking, line cutting, topographical mapping, geological reconnaissance and mapping, mineral sampler, draughting, air photo interpretation, geochemistry, geophysics and supervising property exploration programs.

Since 1956 has been a self employed prospector working in various areas in B.C. on numerous properties.

Has worked in the Rossland camp since 1971 as a miner on the Snowdrop and Blue Bird claims. Has spent considerable time in the camp as a prospector and mining exploration contractor.

Has recieved the B.C. Provincial Grubstake for the years 1964, 1968, 1969, 1970, 1980, 1981, 1982 and 1983.

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REFERENCES

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- D. K Bragg., 1981 Prospecting Report on the S D R and Hillside claims.
- D. K. Bragg., 1982 Geophysical Report on the S D R claim
- D. K. Bragg., 1983 Geophysical Report on the Hillside Claim



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**LEGEND**

Contours from Report Dated Dec. 15, 1983

Contour interval 100 gammas

Lines showing 5 metre Stations

Plus Magnetometer Readings

TRUE  
MAGNETIC

22°

**MAGNETOMETER SURVEY**

HILLSIDE CLAIM  
ROSSLAND B.C.  
82F4W  
49° 3' 13" N 117° 47' 11" W

To accompany 'GEOLOGICAL REPORT' by D.K. Bragg on the HILLSIDE Claim, Rossland B.C., Trail Creek M.D. Dated Dec 1, 1984

SCALE: 1 - 500  
DATE: DEC. 1, 1984  
DRAWN BY: D.K. Bragg  
FIG. 2