EXPLORATION NTS: 82F/10E



ON THE BAKER MINERAL CLAIMS CRAWFORD BAY AREA FORT STEELE MINING DIVISION, B.C. 49°35'N; 116°39'W

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EXPLORATION NTS: 82F/10E

WESTERN DISTRICT 24 AUGUST 1979

GEOLOGICAL MAPPING AND SOIL GEOCHEMICAL SURVEY

ON THE BAKER MINERAL CLAIMS

CRAWFORD BAY AREA

FORT STEELE MINING DIVISION, B.C.

SUMMARY

A geological mapping and soil sampling program was carried out on the Baker claims which are located 16 kilometres southeast of Crawford Bay, B.C. The work consisted of detailed geological mapping and prospecting of the entire property area, and soil sampling of a grid which covers approximately half of this area. Sampling consisted of 939 soil samples and 11 stream silts. All samples were analysed for Cu, Pb, Zn, Ag, Mo and W. In addition, reconnaissance contour soil samples were collected in September 1978 to outline broad anomaly patterns for follow-up by detailed grid sampling. These results are also herein reported.

Results show anomalous values for Zn, Mo and W over a large area on the Baker 1 claim, extending onto the Baker 4 to the north and the Baker 2 and Baker 3 claims to the south. A small molybdenite occurrence was found near the north end of the anomalous zone.

Further work is recommended to follow-up these interesting geochemical anomalies.

LOCATION

Latitude: 49⁰35'N Longitude: 116⁰39'W NTS: 82F/10E

Fort Steele Mining Division, B.C.

The claims are located on Baker Creek which drains northeastward into Redding Creek, and are accessible by logging road from Kimberley, via the St. Mary's River, or by the powerline road east from Crawford Bay. Elevation ranges from 1650 to 2300 metres, with heavy forest up to about 2000 metres.

HISTORY

No previous work had been done by Cominco in this area prior to 1978. The claims were staked in response to the GSC Open File 514 released in June 1978. Preliminary soil sampling in September 1978 indicated anomalous concentrations of Zn, Mo and W over a large area. This work resulted in the 1979 program of mapping and soil grid sampling.

OWNERSHIP

Four claims comprising 63 units owned 100% by Cominco Ltd.

Date recorded : Baker 1-3 July 31/78

Baker 4 Oct. 20/78

Date assessment work due: Baker 1-3 July 31/79

Baker 4 Oct. 20/79

SOIL GEOCHEMISTRY AND ANALYTICAL PROCEDURE

The field work was conducted by R.L. Wright, M.Sc. 1974, assisted by J.C. Haskins, R.M. Eyre and G.G. Connolly.

Soil samples were collected from a grid at 30-metre spacing along eastwest lines which are 200-metres apart. Samples were also collected at 100 metre spacing along contour lines on both sides of the valley, and at 30 m spacing along lumber roads which were recently built in the valley bottom. Control of sample locations was provided by cut lines. The sample spacing being determined by chaining, using slope corrections. Several stream silts were also collected to provide coverage of areas outside the grid, particularly to the south.

Soil and silt samples were collected in numbered kraft sample bags, air dried, then shipped to Cominco's Vancouver Research Laboratory. Samples were then dried and sieved, and the -80 mesh fraction was analysed for Cu, Pb, Zn, Ag, Mo and W. The Cu, Pb, Zn and Ag were determined by atomic absorption following extraction by hot 20% nitric acid. Molybdenum was determined by nitric-perchloric acid digestion and HCl extraction followed by thiocyanate colourimetry. Tungsten was determined by pyrosulphate fusion and HCl extraction followed by Zn dithiol colourimetry. All values are reported in ppm.

GEOLOGY AND MINERALIZATION

Regional Geology

The claim group is in an area underlain by sedimentary rocks of Upper Paleozoic age. Mapping by the GSC indicates a homoclinal north-south trending sequence of sediments which include the Kitchener-Siyeh, Dutch Creek and Mount Nelson Formations of Purcell age to the east, unconformably overlain by the Toby and Horsethief Creek Formations of Windermere age to the west.

Property Geology

It was found, on detailed mapping of the property, that the lithologies could not be assigned to the formations described by the GSC; consequently, the geology was mapped by lithology only, and no attempt was made to confuse the issue by assigning formational names.

The sediments to the east of the unconformity constitute a complex assemblage of argillite, quartzite and dolomite, with minor amphibolite. Generally these units could not be correlated over more than a few hundred metres, due apparently to structural complications and/or sedimentary facies variations. To the west (above) the unconformity) three major units occur - a conglomerate, a massive quartzite, and black argillite. The distribution of these lithologies is shown in Plates 8a and 8b. An outcrop of intrusive rock was located in the centre of the claim group. This rock is a quartz monzonite consisting of quartz, feldspar and accessory biotite.

A skarn-type molybdenite showing was found on the property (Plate 8a). The host rock is a quartz-garnet-actinolite-calcite skarn.

RESULTS AND INTERPRETATION

The results for copper, lead, and silver in soils show very few anomalous values and the potential for significant mineralization is therefore considered to be limited.

The zinc results show a large anomalous zone (>300 ppm) on the west side of Baker Creek on Baker 1. This anomaly could not be related to any particular lithology or to mineralization and is therefore unexplained at this time.

The molybdenum and tungsten results show a broad anomalous zone (> 10 ppm Mo, > 20 ppm W) containing smaller highly anomalous zones. The skarn showing occurs within this broad zone. Due to heavy overburden particularly in the bottom of the valley, these anomalies cannot be related to any known source.

CONCLUSIONS

A program of detailed geological mapping and soil geochemistry on the Baker group has indicated broad anomalous zones for zinc, molybdenum and tungsten. Determination of the significance of these values requires further work.

Report by:

AL. Wright, Geologist

Endorsed by:

Cooke

Senior Geologist

RLW/qk

Distribution:

Mining Recorder Administration (1)

Western District (1)

RLW/DLC

Approved for

Release by:

G. Harren, Manager Western District

Exploration

COMINCO LTD.

EXPLORATION N.T.S. 82F/10E WESTERN DISTRICT 27 AUGUST 1979

APPENDIX I

STATEMENT OF EXPENDITURES

Cost of geological mapping and soil geochemistry surveys on the Baker mineral claims - Crawford Bay area, Fort Steele Mining Division, B.C. from August 1, 1978 to July 30, 1979.

SALARIES

R.L. Wright	(12 days @ 128.70/day) - June 12 - July 30/79	1,544.40
J.C. Hasǩins	(38 days @ 79.20/day) - June 12 - July 30/79	3,009.60
R.M. Eyre	(20 days @ 63.36/day) - June 12 - July 30/79	1,267.20
G.G. Connolly	(36 days @ 63.36/day) - June 12 - July 30/79	2,280.96
D.M. Carr	(4 days) - Sept. 7-10(incl.) 1978	900.00
A. Glatiotis	(7 days) - Sept. 7-10(incl.) 1978	300.00

TRANSPORTATION

Truck rental - 2 vehicles - June, July 1979	1,385.00
(including gas, oil, servicing, etc.)	

FIELD COSTS

Food and accomodation - 117 man days @ \$18.05	2,112.00
Equipment	2,680.00

GEOCHEMISTRY

Linecutting contract - 11.33 miles @ \$210.00/mile 868 soil samples @ 7.95	2,379.30 6,900.00
	\$24 458 46

Signed: R.L. Wright.

R.L. Wright Geologisť

COMINCO LTD.

EXPLORATION NTS: 82F/10E

WESTERN DISTRICT 27 AUGUST 1979

APPENDIX II

IN THE MATTER OF THE B.C. MINERAL ACT AND
IN THE MATTER OF A GEOLOGICAL AND GEOCHEMICAL
PROGRAM CARRIED OUT ON THE
BAKER MINERAL CLAIMS
LOCATED IN THE FORT STEELE MINING DIVISION
OF THE PROVINCE OF BRITISH COLUMBIA
MORE PARTICULARLY NTS: 82F/10E

AFFIDAVIT

- I, ROBERT L. WRIGHT, OF THE CITY OF VANCOUVER IN THE PROVINCE OF BRITISH COLUMBIA, MAKE OATH AND SAY:
- 1. THAT I am employed as a geologist by Cominco Ltd., and as such have a personal knowledge of the facts to which I hereinafter depose:
- THAT annexed hereto and marked as Appendix I to this my affidavit is a true copy of expenditures on a geological and geochemical program carried out on the Baker mineral claims.
- 3. THAT the said expenditures were incurred between the 1st day of August 1978 and the 30th day of July, 1979 for the purpose of mineral exploration on the above noted claims.

R.L. Wright.

R.L. Wright, Geologist

COMINCO LTD.

EXPLORATION NTS: 82F/10E WESTERN DISTRICT 27 AUGUST 1979

STATEMENT OF QUALIFICATIONS APPENDIX III

- I, ROBERT L. WRIGHT, OF THE CITY OF VANCOUVER, IN THE PROVINCE OF BRITISH COLUMBIA, HEREBY CERTIFY:
- THAT I am a geologist residing at 1859 Napier Street, Vancouver, British Columbia, with a business address at 409 Granville Street, Vancouver, British Columbia.
- 2. THAT I graduated with a B.Sc. in geology from McMaster University, Hamilton, Ontario in 1971 with a M.Sc. in geology from the University of British Columbia in 1974.
- 3. THAT I have practised geology with Cominco Ltd. from 1975 to 1979.

DATED THIS 27 DAY OF AUGUST 1979 AT VANCOUVER, BRITISH COLUMBIA.

Signed: R.L. Wright.

R.L. Wright, M.Sc.





























