1225

GEOCHEMICAL REPORT
JM NUMBER 1 CLAIM GROUP

LOCATION:	Due west of McNulty Creek approximately 6 miles northwest of Hedley, B.C. 49° 120° SE
REPORT BY:	Peter E. Hirst, P. Engr.
CLAIM OWNER:	Anaconda American Brass Limited
WORK FOR:	Anaconda American Brass Limited
DATE OF WORK:	August 29 - September 9, 1967 October 20 - October 25, 1967.

April 1, 1968

C O N T E N T S

M A P

APPENDIX "A"

STATEMENT OF COSTS OF THE SOIL SAMPLING SURVEY

Soil Sampling:		
Labour (a)	12 days for 3 men	$500.00
(b)	6 days for 1 man	72.26
Fringe Benefits		57.22
Maintenance (a)	12 days for 3 men	180.00
(b)	6 days for 1 man	30.00
Soil Sampling Supplies:		24.00
Sample Analysis:	467 samples @ $1.90 each	887.30
	60 samples @ $1.00 each	60.00
Transportation:	Panel truck 18 days @ $15.00 per day	270.00
Drafting:		50.00
Supervision:		150.00
Overhead:	50% of (Labour & Maintenance)	391.13
	Total	$2,671.91

I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act".

Declared before me at the City)
of Vancouver , in the) P.S. Hirt
Province of British Columbia, this 7th)
day of May, 1968 A.D.)

J. Paul
Sub-mining Recorder

APPENDIX "B"

EVIDENCE OF EXPENDITURE INCURRED

NAME	CATEGORY	RATE	DAYS WORKED	PERIOD	WAGE
Bruce Ott	Party Leader	450/mo	12	Aug. 29- Sept. 9, 1967	180.00
Wilfred Talbot	Party Leader	425/mo	12	Aug. 29- Sept. 9, 1967	170.00
Donald Kawano	Junior Assistant	375/mo	12	Aug. 29- Sept. 9, 1967	150.00
Joseph Breton	Junior Assistant	425/mo	6	Oct. 20-25, 1967	72.26
				Total	$572.26

I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act".

Declared before me at the City)
of Vancouver , in the) P. E. Hart
Province of British Columbia, this 7th)
day of May, 1968 , A.D.)

J. Paul
Sub-mining Recorder

Introduction

The 78 claims of the JM Group were staked during the 1967 field season.

From August 29 to September 9, 1967 and from October 20 to October 25, 1967 three and 1 man respectively collected soil samples on the following 40 claims referred to in this report as the JM No. 1 Claim Group: JM 1 to JM 8, JM 12, JM 14, JM 23, JM 25 to JM 30, JM 43 to JM 46, JM 48, JM 50, JM 52, JM 54, JM 58, JM 61 to JM 64, JM 66 to JM 72, JM 74, JM 75, and JM 77.

The $2,671.91 spent on the No. 1 Group is to be applied to the following 26 claims:

	Record Number
JM 1	20215
JM 2	20216
JM 3	20217
JM 4	20218
JM 5	20219
JM 6	20220
JM 7	20221
JM 8	20222
JM 23	20328
JM 25	20330
JM 26	20331
JM 27	20332
JM 28	20333
JM 29	20334
JM 30	20335
JM 43	20348
JM 45	20350
JM 46	20351
JM 48	20353
JM 50	20355
JM 52	20357
JM 63	20368
JM 64	20369
JM 74	20379
JM 75	20380
JM 77	20382

The field work was under the general supervision of Peter E. Hirst. Laboratory analysis was made under the direction of Alfred Burgoyne.

Location and Accessibility

The JM claims are due west of McNulty Creek and approximately 6 miles northwest of Hedley in the Osoyoos Mining Division, B.C. The group can be reached by a fire access road which leaves the main Hedley - Princeton Highway 2 miles west of Hedley.

Geology

Upper Triassic rocks of the Nicola Group, overlain in part by Miocene volcanics of the Princeton Group, occur within Coast Intrusives of Jurassic or later age on the JM claims.

Outcrop on the JM claims is very scarce. Rock types observed to date are fine grained dark green andesite and tuff and leucocratic medium grained quartz diorite and granodiorite.

The only mineralization observed occurs in the andesite and tuff in the northern claims. These rocks carry pyrite as disseminations throughout the rock and along fractures. Locally the pyrite content ranges from 0 to 1-2%. Very minor amounts of disseminated chalcopyrite and malachite stain occurs locally with the pyrite. A piece of angular andesite float found on claim JM 4 shows disseminated molybdenite and pyrite along fractures.

Purpose of the Geochemical Survey

Stream sediment samples on 2 streams on the JM Group were anomalous in molybdenum and copper content. Because of the lack of outcrop, additional samples were taken in the vicinity of the anomalous portions of these streams in an attempt to outline the limits of the anomalous ground. These limits when defined would act as a guide for future geophysical and geological work planned to determine the economic potential of the covered ground.

Details of the Survey

Compass control lines were used and tied to the claim location lines. Stations were from 100 to 500 feet apart and marked by coloured ribbons bearing the number of the sample taken. In areas of prime interest samples were taken at 100-foot centers.

Samples were collected at depths varying from 2-12 inches. The friable, somewhat oxidized B horizon was sampled. All samples were sent to the geochemical laboratory at Britannia Beach for analysis

Method of Geochemical Analysis

The samples were dried and then screened to minus 80 mesh. A one-gram sample was then digested in a sulphuric-nitric mixture of acids and taken to dryness. The resulting residue was then dissolved and made to a specific volume with dilute hydrochloric acid. Separate aliquots of this solution were analysed for copper, lead, zinc, molybdenum, silver, and arsenic.

Copper, lead, and zinc were determined by atomic absorption spectrophotometry using a Techton AA-3 Atomic Absorption Spectrophotometer, type M-1 Serial No. 313. This unit consists of three major components - a hollow cathode lamp (separate lamps for each element), a burner-atomizer, and a monochromator. The test solution is aspired directly into the burner atomizer and the respective transmittancy is read directly on a scale expansion unit on the monochromator. The respective metal contents are calculated by comparing the transmittancy with standard curves.

Molybdenum was determined colorimetrically. A coloured molybdenum thiocyanate complex was formed by the addition of thiocyanate and stannous chloride to an acidified aliquot of the sample solution. The coloured complex was then extracted with iso amyl alcohol, and the light transmittancy of the complex in alcohol determined by a spectrophotometer to obtain the respective parts per million concentration.

The method for determining arsenic in soils is a quantitative strip test using a modified Gutzeit apparatus in which, by the action of zinc metal in hydrochloric acid solution, arsenic (III) is reduced to arsine, AsH_3 and the evolved arsine gas is reacted with a mercuride chloride sensitised paper strip to form a yellow to orange compound. The intensity and length of the yellow to orange compound on the strip is proportional to the arsenic concentration.

Results of the Geochemical Survey

A map on a scale of 400 feet to the inch is enclosed with this report. It shows the values obtained in parts per million for copper, lead, zinc, and molybdenum. All samples were run for silver, but owing to lack of space these have not all been plotted. In all cases, however, the samples contain less than 1 part per million silver. Sixty samples were also run for arsenic; these are indicated with solid location circles on the map.

Results of the Geochemical Survey (cont.)

The geochemical survey has indicated that anomalous values in molybdenum, copper, and zinc exist in portions of the area surveyed. Values in lead, silver and arsenic do not appear to be anomalous.

As most of the ground in the area surveyed is covered, it is not possible at this time to determine the cause of the various geochemical anomalies. More work in the area is planned.

Respectfully submitted,

P.E. Hirst

Peter E. Hirst, P. Engr.

PEH:bs

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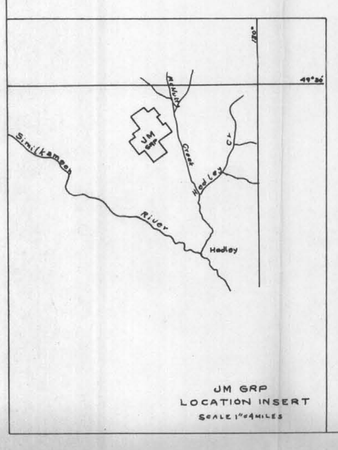
JM NO.1 CLAIM GROUP

LEGEND:

o ● SAMPLE LOCATIONS. ASSAY RESULTS ARE GIVEN AS PARTS PER MILLION WITH THE METALS IN THE FOLLOWING SEQUENCE:
MOLYBDENUM, COPPER, LEAD, ZINC, SILVER, AND **ARSENIC**
ALL SAMPLES WERE ASSAYED FOR **SILVER** AND ALL RESULTS SHOWED LESS THAN 1 PART PER MILLION AND THUS THE SILVER ASSAY IS OFTEN OMITTED FROM THIS MAP.
ONLY 60 SAMPLES WERE ASSAYED FOR **ARSENIC**. THESE ARE DESIGNATED BY THE "●" LOCATION AND THE ASSAY RESULT IS PRECEEDED BY THE SYMBOL "As"

ROAD TRAIL STREAM (*) SWAMP

THE MINERAL CLAIM NAME IS SHOWN WITH THE RECORD NUMBER BENEATH IT.



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 1225 MAP 1

ANACONDA AMERICAN BRASS LTD WESTERN EXPLORATION DIVISION

JM CLAIMS

OSOYOOS M.D., B.C.—SCALE: 1"=400'

TO ACCOMPANY GEOCHEMICAL REPORT BY P.E.HIRST DATED APRIL 1, 1968

1225

P.E. Hirst
April 1, 1968