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Arctic Gold & Silver Mines Ltd.

Summary Report

EXPLORATION WORK ON CARCROSS, Y. T. PROPERTY

31 March, 1967 - 27 September, 1967

Feb. 1, 1968.

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INTRODUCTION

In accordance with the required information for the Northern Mineral Assistance Grant the following report presents a brief description of the geology, history and work done on the mineral property of Arctic Gold & Silver Mines Ltd. at Carcross, Y.T.

Appended to the descriptive portion of the report is a complete list of the diamond drill holes drilled during the exploration of the deposit in the designated period. Maps showing the location of these drill holes; of an exploration adit; and of the area covered by a geochemical soil sampling programme are attached.

EXPLORATION WORK

PREVIOUS WORK:

The Arctic property was acquired by purchase, option and staking in 1964-65-66. The six properties, the Big Thing (now known as the Arctic Caribou), the Montana, the Uranus, the Mountain Hero, the Jean and the Joe Petty, all silver-gold occurrences, had not been seriously worked since the district had experienced minor production activity in 1910-15. Underground workings, which existed on the Big Thing and the Montana were blocked by ice in 1965 and for only one, the Big Thing, were any old records available. These indicated that 3,000 tons of silver-gold ore grading 1-2 oz/ton gold and 100-200 oz/ton silver had been shipped in 1915. There was no indication of what ore, if any, remained.

RECENT WORK - to 31 March, 1967:

Bulldozer trenching and dump sampling by Arctic Gold & Silver Mines Ltd. in 1965 indicated fair surface continuity and good grades in both the Big Thing and Montana veins. Because the former property was closest to Carcross, Yukon and in addition had old records available for it as mentioned above, it was

decided to concentrate work on it to determine the ore potential, if any, of that property alone. Accordingly a programme of exploration was started on the Big Thing in late 1965,

In view of the fact that permafrost made surface stripping slow and difficult and surface diamond drilling may not have been definitive enough for a high grade vein deposit of this type, the decision was made to collar a new adit, drive a cross-cut to the vein, drift on the vein and break into and open the old workings. The cross-cutting, drifting and raising portion of this programme was completed prior to 31 March, 1967. However, diamond drilling was continued during the period 31 March, 1967 to 27 September, 1967.

RECENT WORK - 31 March, 1967 - 27 September, 1967:

Caribou (Big Thing) Property: Underground diamond drilling was done for the purpose of exploring beyond the old workings to determine if enough ore was available to support an economic mining operation. Some surface drilling was done concurrently to supplement the underground programme. A listing of the individual drill holes with accompanying assays for the period in question is appended.

Jean Property: Four exploratory diamond drill holes were drilled from near the face of the Jean adit. These holes and the results obtained are appended.

Montana Property: An adit, 807 feet long, and two surface diamond drill holes were completed as initial exploration on this property. A plan of this work is attached.

Geochemical Soil Sampling: A programme of taking soil samples to determine anomalous metal content was completed, except for some assay determinations, during the designated period. A total of 101 miles of sample lines were surveyed and marked and 7565 samples were taken. The samples were assayed for arsenic and silver, the results plotted and anomalous values determined. Several anomalies were found on which it is planned to do further work. A map showing the area covered by the programme is attached.

MINE GEOLOGY

The Arctic Caribou Mine is located within a granodiorite stock intruding sediments and volcanics of Mesozoic age. All other known deposits on Arctic property lie within amygduloidal volcanics of the Hutshi Group of Cretaceous age.

All of the known ore occurrences on the Arctic property are vein deposits with principal values being in silver and gold. The veins are relatively narrow but

high grade with local ore shoots grading as high as several ounces per ton in gold and hundreds of ounces per ton in silver.

The veins are comprised of grey-white generally cherty quartz containing local nests and vugs of comb quartz. The most widespread sulphide is arsenopyrite but there are also local concentrations of galena, sphalerite, chalcopyrite and freibergite. Pyrite is uncommon within the veins but is widespread in the adjacent wallrock.

The veins are extremely variable in widths, ranging from a maximum of 5 ft. to stringers a few inches in width. Average width at the Arctic Caribou mine is 2-3 ft.

No regional or major faults are known in the area but a number of faults have been exposed underground at the Arctic Caribou mine. The faults belong to two sets, both vertical, one striking eastward and the other northward. Both sets displace the veins about 15 ft. vertically.

ORE RESERVE: Enough silver-gold ore had now been outlined by the old workings and by the exploration diamond drilling programme whose individual holes are appended to this report (and a previous report covering the period Nov. 12, 1966 to March 31, 1967) to warrant placing the mine in production at 200 tons per day. Most of the ore outlined to date occurs on four veins in the Arctic Caribou mine. Results from the geochemical soils survey are sufficiently encouraging to project a life for the mine many years beyond the proven and well indicated ore.

Respectfully submitted,



Douglas D. Campbell, P.Eng., Ph.D.

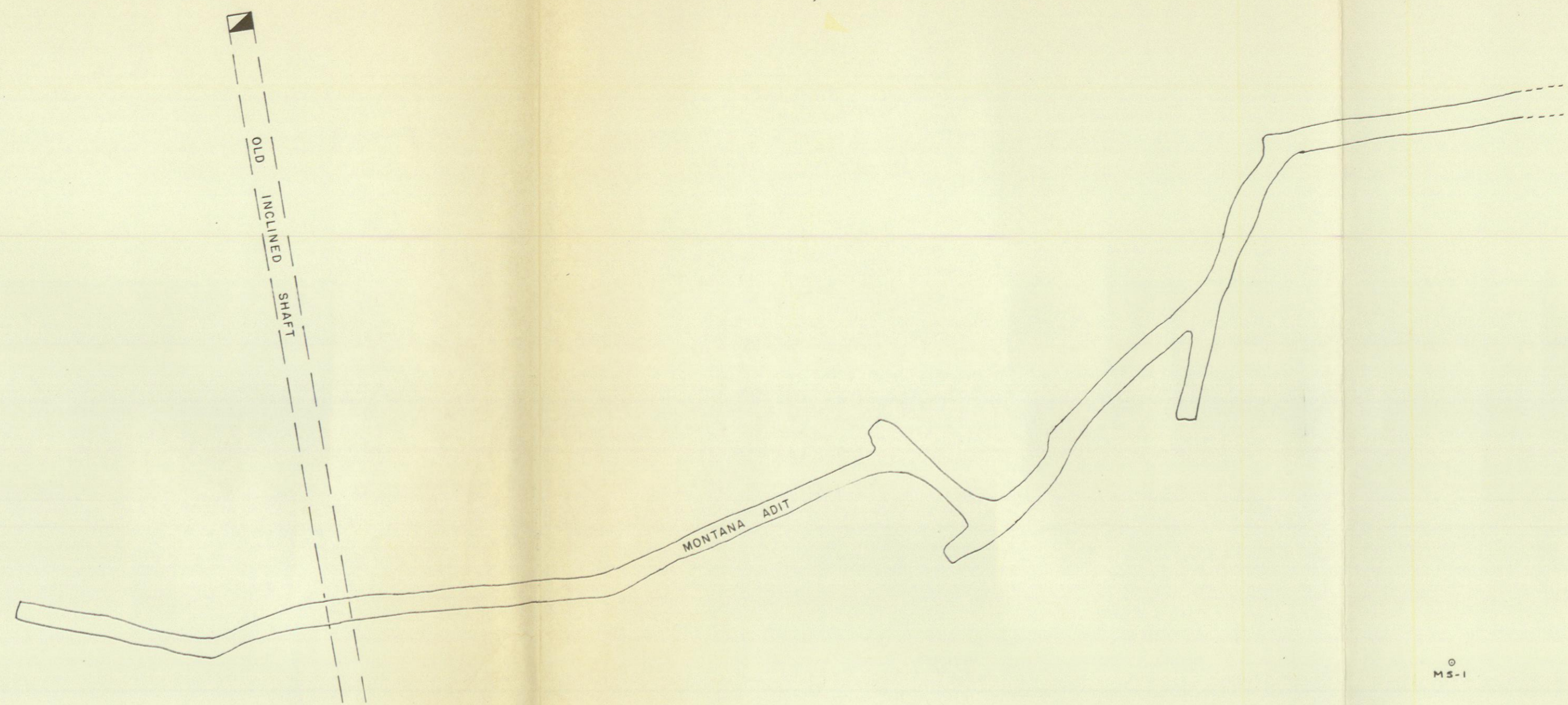
APPENDIX

List of all diamond drill holes drilled during the period 31 March, 1967 to 27 September, 1967, with pertinent assay data .

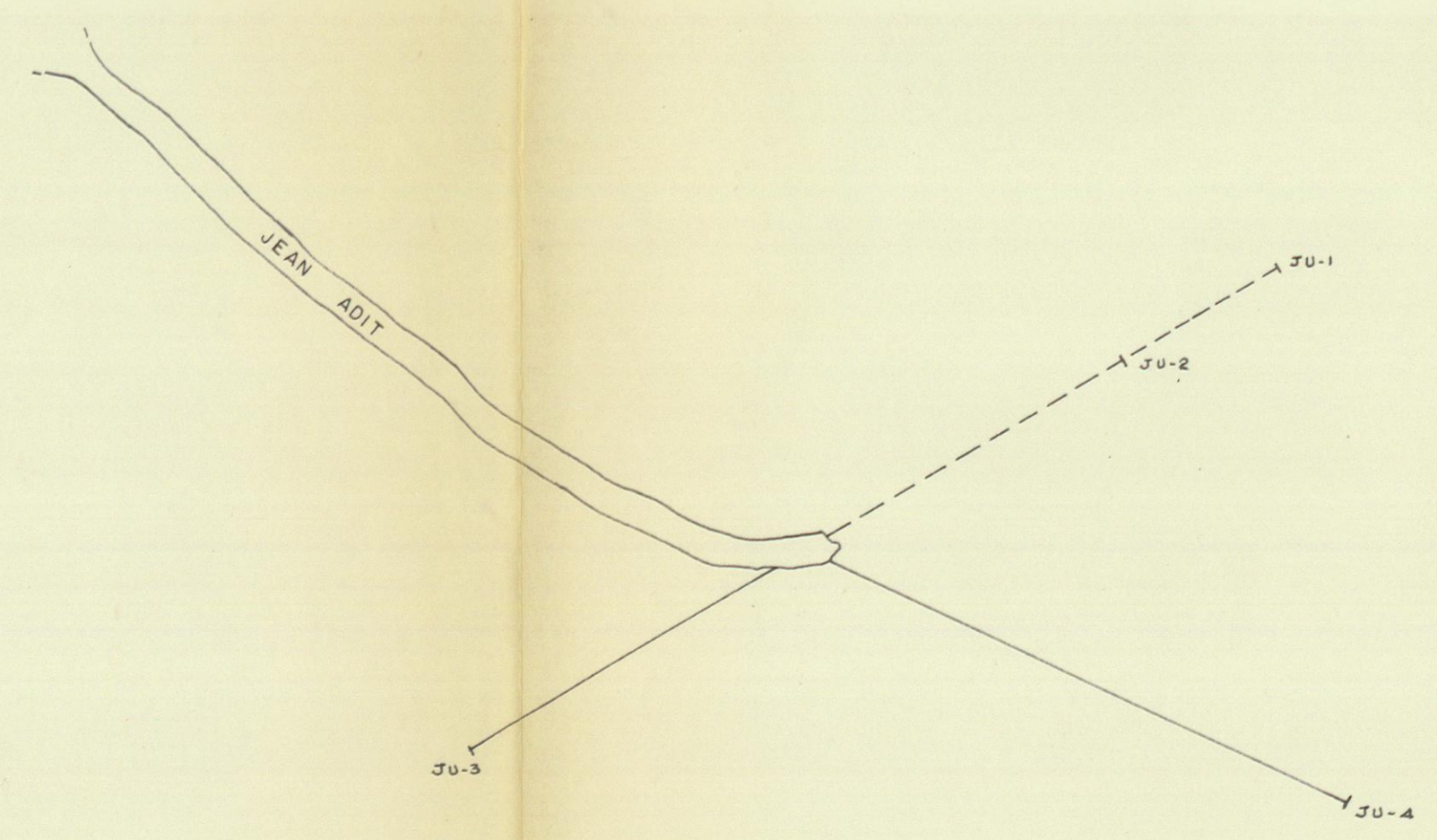
| Hole No. | Length | ASSAYS | | | | | | | | | | | |
|----------|--------|--------|-------|-----|------|-------|-------|------|------|-------|-------|-----|------|
| | | From | To | Au | Ag | From | To | Au | Ag | From | To | Au | Ag |
| U164 | 153 | 21.3 | 22.3 | Tr | 4.1 | 83.1 | 91.6 | .10 | 4.3 | | | | |
| U165 | 151 | 28.9 | 29.9 | .10 | .4 | 83.2 | 85.5 | Tr | 7.8 | 87.8 | 88.8 | .06 | 13.4 |
| | | 94.4 | 96.6 | .14 | 6.3 | 128.0 | 129.9 | .12 | 23.7 | | | | |
| U166 | 132 | | | | | | | | | | | | |
| U167 | 151 | | | | | | | | | | | | |
| U168 | 86 | | | | | | | | | | | | |
| U169 | 149 | | | | | | | | | | | | |
| U170 | 151 | | | | | | | | | | | | |
| U171 | 120 | 4.3 | 7.5 | .28 | 16.6 | 42.0 | 45.5 | .54 | 19.6 | | | | |
| U172 | 220 | 135.0 | 137.4 | .20 | .3 | 151.4 | 152.4 | .06 | 1.5 | 156.3 | 157.5 | .26 | 2.9 |
| U173 | 151 | | | | | | | | | | | | |
| U174 | 127 | | | | | | | | | | | | |
| U175 | 104 | 92.4 | 93.9 | .14 | .7 | | | | | | | | |
| U176 | 243 | 178.9 | 182.9 | .66 | 4.2 | | | | | | | | |
| U177 | 199 | | | | | | | | | | | | |
| U179 | 180 | 110.7 | 114.2 | .28 | 2.4 | 118.2 | 122.1 | .14 | .6 | | | | |
| U180 | 180 | 96.3 | 97.8 | .04 | 4.1 | 156.2 | 160.0 | Tr | 2.5 | | | | |
| U181 | 120 | 2.2 | 3.4 | Tr | 2.3 | | | | | | | | |
| U182 | 99 | | | | | | | | | | | | |
| U183 | 121 | 102.5 | 110.6 | .22 | 8.3 | | | | | | | | |
| U184 | 101 | | | | | | | | | | | | |
| U185 | 121 | 7.3 | 8.8 | .10 | 1.6 | | | | | | | | |
| U186 | 76 | 51.3 | 58.9 | .05 | 2.4 | | | | | | | | |
| U187 | 129 | | | | | | | | | | | | |
| U188 | 160 | | | | | | | | | | | | |
| U189 | 168 | | | | | | | | | | | | |
| U190 | 153 | 67.0 | 69.0 | .48 | .8 | 81.6 | 82.5 | 3.92 | 4.4 | 87.3 | 88.4 | .10 | .12 |
| U191 | 87 | 36.0 | 37.3 | .20 | 3.6 | 39.2 | 42.3 | .83 | 3.1 | 58.3 | 59.3 | .06 | 2.0 |
| | | 62.4 | 63.4 | .36 | 3.7 | | | | | | | | |
| U192 | 265 | | | | | | | | | | | | |
| U193 | 180 | 129.8 | 130.7 | .08 | 1.3 | | | | | | | | |
| U194 | 75 | 15.2 | 16.8 | .10 | 2.3 | | | | | | | | |
| U195 | 140 | | | | | | | | | | | | |
| U196 | 150 | | | | | | | | | | | | |
| U197 | 69 | | | | | | | | | | | | |
| U198 | 140 | | | | | | | | | | | | |
| U199 | 86 | 72.0 | 78.0 | .03 | 29.5 | | | | | | | | |
| U200 | 80 | | | | | | | | | | | | |
| U201 | 132 | 49.0 | 50.0 | .10 | 2.0 | | | | | | | | |
| U202 | 171 | 118.0 | 119.5 | .02 | 5.0 | | | | | | | | |
| U225 | 108 | | | | | | | | | | | | |
| U226 | 190 | 10.8 | 13.6 | .72 | 24.7 | 30.5 | 31.5 | .08 | .8 | 43.9 | 45.0 | .08 | 1.2 |
| | | 70.1 | 71.2 | .34 | 2.5 | 163.4 | 165.0 | .16 | 3.2 | | | | |



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| VANCOUVER, CANADA | | |
| PLAN | | |
| GEOCHEMICAL SOIL SURVEY | | |
| COMPLETED DURING THE PERIOD APRIL 1 1967 TO SEPT. 27 1967 | | |
| SCALE 1" = 1000' | FEB. 8, 1968 | FIG. |



| | | |
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| MONTANA ADIT | | |
| DRIFTING & SURFACE DIAMOND DRILLING | | |
| COMPLETED DURING THE PERIOD APRIL 1 /67 TO SEPT. 27 /67 | | |
| SCALE: 1" = 40' | FEB. 1, 1968 | |



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| JEAN ADIT | | |
| DIAMOND DRILLING | | |
| COMPLETED DURING THE PERIOD APRIL 1 /67 TO SEPT. 27 /67 | | |
| SCALE: 1" = 40' | FEB. 1, 1968 | FIG. |

