DIAMOND DRILL REPORT
on the
AJAX C.G.
Lot No. 4710
AJAX PROJECT

Kamloop Mining Division
NTS 921/9W

Latitude: 50 35'N  Longitude: 120 30'W

AFTON OPERATING CORPORATION
P.O. BOX 937
Kamloops, B.C.
V2C 5N4

By
Lorne A. Bond
Senior Geologist

Kamloops, B.C.  October 6, 1988
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1. INTRODUCTION

The Ajax property is located some ten kilometers southeast of the Afton minesite, and south of the City of Kamloops (Fig.1A). It is located in the Kamloops Mining Division at latitude 50°35'N and longitude 120°25'W on NTS Map 92I/9W. The property consists of eight crown grants, fifty-two located claims with seventy-four units, and the base metal rights on thirty-one parcels. Total surface area of the mineral claims amounts to some 1,600 hectares (Fig.1).

Much of the area is occupied by rolling grassland with timber only on the higher slopes. Relief is generally moderate with elevations between 800 and 1,100 metres above sea level. Extensive glacial action has created a topography of low rolling hills with local deep accumulations of glacial till on the southeast flanks of larger rock outcroppings.

The low annual precipitation level is reflected in the flora of the area. Bunchgrass, sagebrush, and cacti are abundant on the lower grassy slopes being joined by stands of ponderosa pine at higher elevations. Water is abundant in the spring in numerous small saline ponds and sloughs. However, year-round fresh water is restricted to the Jacko Lake and Edith Lake drainage systems and these sources are heavily committed to irrigation use.
Ranching is currently the predominant land use. Most of the surface rights are privately owned with grazing leases granted on much of the outstanding crown land. The area is close to all forms of infrastructure and is served by a network of roads including the all-weather gravel Goose Lake Road, which traverses the property.

During the period February 18-21, 1988, a diamond drill hole with a total length of 236.2 metres was drilled on the Ajax C.G. to test for the extension of ore grade mineralization below reserves established by previous drilling programs.
2. PROPERTY DESCRIPTION

The property designated as the Ajax-Neptune Claim Group consists of the following:

<table>
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<tr>
<th>Claim Name</th>
<th>Record No.</th>
<th>Expiry Date</th>
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<tr>
<td>Ajax 6 (8 units)</td>
<td>1886</td>
<td>24 May, 1999</td>
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<tr>
<td>Ajax 7 Fr.</td>
<td>1887</td>
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<td>Ajax Fr.</td>
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<tr>
<td>Ajax 200 (10 units)</td>
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<td>Ajax 900 Fr.</td>
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</tr>
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<td>Fox 11 Fr.</td>
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<td>Fox 12 Fr.</td>
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<tr>
<td>Clover 1 (4 units)</td>
<td>979</td>
<td>10 Aug, 1999</td>
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<td>Jacko 4</td>
<td>13932</td>
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<td>Jacko 6 Fr.</td>
<td>13934</td>
<td>2 Sep, 2000</td>
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<td>Pam 18-21</td>
<td>41336-39</td>
<td>22 Jan, 1999</td>
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<tr>
<td>Pam 24</td>
<td>41342</td>
<td>22 Jan, 1999</td>
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<td>Map 2 Fr.</td>
<td>92948</td>
<td>6 Nov, 1999*</td>
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<tr>
<td>Edith 100 (15 units)</td>
<td>1802</td>
<td>9 Apr, 1999</td>
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<td>Tyler 1-4</td>
<td>2297-2300</td>
<td>29 Nov, 1999*</td>
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<td>Hump 100 (8 units)</td>
<td>1799</td>
<td>19 Apr, 1999</td>
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<td>Sam 1 Fr.</td>
<td>2296</td>
<td>29 Nov, 1999*</td>
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<td>Ajax C.G.</td>
<td>Lot 4710</td>
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<tr>
<td>Neptune C.G.</td>
<td>Lot 4712</td>
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* Note: Upon approval of assessment work described in this report and covered in a Statement of Exploration and Development submitted in October 1988.
3. HISTORY AND PREVIOUS WORK

Exploration activity in the Iron Mask area is first noted in government reports in 1896, when over two hundred claims were recorded. By 1900, underground work had been done on several properties in the area including the Wheal Tamar claim. Trenching was carried out on the Ajax claim between 1904 and 1910 and additional underground development and sampling was done in the nineteen-twenties.

In 1929, the Consolidated Mining and Smelting Company trenched and sampled the area and drilled ten holes from surface. Berens River Mines Limited (Newmont) optioned the property in 1952 and drilled on a narrow high grade shear zone on the Monte Carlo claim.

In 1954, Cominco again optioned the four original crown grants together with adjacent crown grants and staked additional ground. Exploration work proceeded on an intermittent basis until 1980.

In 1980, under a joint venture agreement with E & B Explorations Limited, a major exploration program was initiated and continued through 1981. With these expenditures, E & B Explorations Limited acquired a thirty percent interest in the property. Results of the program indicated a large low grade deposit with open pit potential.
In 1986, an agreement was reached between Cominco, E & B Explorations, and Afton Operating Corporation under which Afton acquired controlling interest in the Ajax property in respect of certain expenditures and ultimately placing the property into production. During 1987, Afton carried out an extensive drilling and evaluation program.

The 1987 program is described in assessment report numbers 17198 and 17199. The net result of that program was the delineation of open pit reserves in two separate zones on the Ajax property. Open pit reserves of 20,200,000 tons at .47% Cu and .010 oz/t Au were outlined in the West Zone on the Ajax-Neptune Claim Group. On the Wheal Tamar Claim Group, 7,000,000 tons at .44% Cu and .010 oz/t Au were proven up in the East Zone.
4. CURRENT PROGRAM

The purpose of the 1988 drilling program on the Ajax-Neptune Claim Group was to test for the extension of ore grade mineralization beneath the open pit reserves outlined in the West Zone by previous work.

To that end, D.D.H. 88-1 was collared on Section 8.5W in the center of the West Zone and drilled under mineralization cut by D.D.H. 87-85 (Figure 2). The hole was drilled during the period February 18-21, 1988. Core size was NQ. Total length of the hole was 236.2 metres (775 feet). Copies of the geological log and assay results are included in the appendix.

Core from the program was transported to the Afton minesite for processing. All core was geologically logged. Recovery and RQD measurements were taken and the core photographed. Rock strength testing was performed on selected pieces of core from all rock types. The core was then split and one-half retained for core storage. The other half was bagged, generally in three metre samples, and sent to the property analytical lab for copper, gold, and silver assays. Some selective analyses for other elements were done as well. Afton personnel supervised the program, processed the core, and provided survey control in the field. All core from the program is stored at the Afton minesite. Connors Drilling Limited was the contractor for the drilling program.
In the lab, core samples were crushed in two stages utilizing a jaw crusher and a cone crusher. Sample volume was reduced to 250 grams using a Jones riffle. This smaller sample was then pulverized. Reject material from the splitter was bagged, labelled and stored.

Assays for copper were performed by dissolution followed by atomic absorption spectrophotometry analysis. Gold assays were performed by fire assaying with atomic absorption analysis of the resultant bead in a methyl isobutyl ketone medium. Silver assays were carried out by acid dissolution followed by atomic absorption spectrophotometry analysis.

Geological, assay and survey data from the program were stored on computer files using an in-house HP9000 Series computer and Geomin software. This data base was then available for computer generated plans and sections, statistical analyses, compositing, ore reserve modelling and pit optimizations.
5. RESULTS OF THE PROGRAM

The geology of the Ajax property and the West Zone are extensively described in Assessment Report No. 17199 submitted by Afton Operating Corporation.

Ajax property mineralization is hosted by intrusive units of the Triassic Iron Mask Batholith. The Sugarloaf Diorite unit is a younger intrusive phase of the batholith and is directly associated with emplacement of copper mineralization on the Ajax property.

In the Ajax West Zone, a linear body of Sugarloaf Diorite, with a northwest-southeast axis and steep southerly dip, has been emplaced along the contact between Nicola Volcanics and Hybrid Diorite (Figure 3). The Sugarloaf unit has stoped out and assimilated substantial areas of Hybrid Diorite creating a contact area with undulating embayment features. Hydrothermal solutions associated with the Sugarloaf intrusive have extensively altered both the host diorite and the bounding Hybrid Diorite. Both the Sugarloaf Diorite and fractured and altered sections of Hybrid Diorite are hosts for ore grade chalcopyrite mineralization. Drillhole 88-1 was collared to the south of the ore zone and drilled north easterly from hanging wall to footwall (Figure 4). The first 100 metres of the hole cut basaltic rocks and short sections of more andesitic volcanics which constitute the south contact or hanging wall of the intrusive units. Minor alteration and trace sulphides were noted in these rocks. The remainder of the hole was completed in varieties of the Sugarloaf Diorite or albitized equivalents.
The main mineralized zone was encountered at 119 metres down the hole. The host rock unit is an intensely albitized and brecciated Sugarloaf Diorite to 204 metres succeeded by fresher, less altered diorite to the end of the hole. Significant chalcopyrite mineralization was present from 119 metres to 212 metres. It was concluded that a mineralized, albitized and brecciated zone exists to depth under the center section of the West Zone.
FIGURE 3 - WEST ZONE 870 EL. GEOLOGY
REFERENCES


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<th>Description</th>
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<td><strong>Diamond Drilling</strong></td>
<td>$9,832.92</td>
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<td>5 days @ $25 per day</td>
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<td>L. Tsang, Exploration Geologist, logging core, supervision 5 days @ $185 per day</td>
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<td>S. Porter, core splitter</td>
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<td>3 days @ $115 per day</td>
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<td>L. Bond, Senior Geologist</td>
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<td>program planning, report writing 2 days @ $225 per day</td>
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<td><strong>TOTAL COST</strong></td>
<td>$12,857.52</td>
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STATEMENT OF QUALIFICATIONS

I, Lorne Allan Bond, of the City of Kamloops, British Columbia do hereby certify that:

1. I am a qualified, practising Geologist.

2. I am a graduate of Loyola College (University of Montreal), with a B.Sc. (1967) in Geotechnical Sciences.

3. I have practised my profession since 1967 while employed with Sherritt-Gordon Mines Ltd., Cominco Ltd., and Afton Operating Corporation.

4. This report describes a diamond drilling program performed under my supervision from February 18 through February 21, 1988.

Lorne A. Bond
Senior Geologist
Afton Operating Corporation
October 6, 1988
STATEMENT OF QUALIFICATIONS

I, Louis Hee-Choi Tsang, of the City of Kamloops, British Columbia do hereby certify that:

1. I am a qualified, practising geologist.

2. I am a graduate of the University of British Columbia with a B.Sc. (1972) in Geology and Geophysics.

3. I have practised my profession since 1972 while employed with Granisle Copper Ltd., Highmont Operating Corporation and Afton Operating Corporation.

4. I have logged the drill core from the diamond drill holes in this program during the period February 18 through February 23, 1988.

Louis H.C. Tsang
Exploration Geologist
Afton Operating Corporation
October 6, 1988
APPENDIX
AJAX PROJECT

KEY TO GEOLOGICAL LOGS

Dist. - distance in feet
Rec. - recovery in percent
Rqd. - rock quality designation in percent

Cu grade - in percent
Au grade - oz. per short ton
Ag grade - oz. per short ton

ROCK
ALBU - Albitized Unit
CHCR - Cherry Creek Unit
HYBR - Hybrid Unit
NICL (NVOL) - Nicola Group Volcanics
OVEN - Overburden
SUGL - Sugarloaf Unit
ULMF - Ultramafic Unit
VOLC - Volcanics

LITHOLOGY
ALBT - Albitite
BREC - Breccia
DIOR - Diorite
DYKE - Dyke
HORN - Hornfels
MDIO - Microdiorite
MONZ - Monzonite
SYEN - Syenite
TILL - Till
VOLC - Volcanics

A1 - A4 ALTERATION MINERALS
AB - albite
CH - chlorite
CL - calcite
CY - clay
EP - epidote
GY - gypsum
HM - hematite
KA - kaolinite
LM - limonite
MG - magnetite
PF - pink feldspar
QZ - quartz

M1 - M5 ORE MINERALS
AZ - azurite
BN - bornite
CC - chalcocite
CP - chalcopyrite
CU - native copper
MC - malachite
MO - molybdenite
PY - pyrite
### BASIC DRILL DATA FOR HOLE 88-01

#### HOLE 88-01
- **Lithology:** East
- **Flow Length:** 018
- **Inc. Leas.:** C
- **Rev. Leas.:** C
- **Leas.:** C
- **Dist. Azin Dip:** 0001
- **Dist. Azin Dip:** 0001
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- **Flow Length:** 018
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- **Dist. Azin Dip:** 0001
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