Jarvis Clark Co. Ltd. (Author to be announced)

2:00 p.m. SESSION 11, Geology, with PAUL W. RANSOM or alternate

Paper 36—2:00 p.m.
Geostatistical Parameters of the Afton Copper-Gold Orebody, Kamloops, B.C.
ALAN J. REED, Afton Mines Ltd.

The distribution of copper, gold and silver in the Afton orebody is described by means of grade contours, histograms and variograms.

Paper 37—2:30 p.m. Cinola Resources = 896 formerly AW
The Cinola Gold Deposit.
K.G. SANDERS, D. BAIN and S. LACY, Consolidated Cinola Mines Ltd.

The Cinola gold property on the Queen Charlotte Islands was first discovered by prospecting in 1970. After a surface high-grade showing was privately worked, the claims were optioned successively from 1971 to 1975 by Kennco, Cominco, Umex and Quintana, all completing extensive geochemical surveys, trenching, surface mapping and diamond drilling.

Consolidated Cinola Mines Ltd. obtained the claims in 1977 and a drill program totalling 60,000 feet continued until the middle of 1980 to delineate the entire mineralized zone and to establish the size and grade of a potential open pit. Ore in situ is now estimated at 50 million short tons with an average grade of 0.056 oz gold per ton and a cut-off grade of 0.025 oz per ton. Significant amounts of silver are also present with similar grades.

The orebody is situated within a knoll composed of pebble conglomerate with minor interbedded sandstone and sandstone-siltstone units dipping gently to the east and unconformably overlying a shale sequence. Poor sorting, coarse clastic nature, high carbon content and rapid lithologic changes all suggest an alternating nearshore marine and alluvial plain - braided river environment of Tertiary age. Current work indicates that the intrusion of a rhyolite dyke along the shale-conglomerate unconformity provided the energy for a geothermal system which moved gold, silver, mercury and arsenic into the area. The orebody contains both high-grade gold in quartz veins and lower-grade gold throughout the entire sedimentary pile. Associated wall-rock alteration has produced a halo effect with a higher-grade silicified core, a lower-grade surrounding zone and a perimeter of barren argillitically altered material. The body and dyke were cut by a northwest-striking fault which dips to the northeast. It is now suggested that the hanging wall moved down and southeast in relation to the footwall. Assaying has shown that some of the footwall rhyolite has good gold values and may be close to the roots of the intrusion. This could be the basis for a new drill program to the east and north of previous areas.

Development of the original zone involves the erection of a 50-ton-per-day pilot mill and a 500-metre adit for "fine tuning" the mill process and upgrading the ore. Testing should begin by the end of the year.

Paper 38—3:00 p.m.
Exploration for Tungsten.
L.A. DICK, Chevron Standard Ltd.
(To be confirmed.)

Paper 39—3:30 p.m.
Lead Isotope Investigations of Shale-Hosted Deposits in the Northern Cordillera.
C.I. GODWIN, University of British Columbia.
(To be confirmed.)

Paper 40—4:00 p.m.
Operations-Related Geology at a B.C. Mine.
(To be confirmed.)

Author Index, With Paper Numbers

Anderson, N. 3
Bain, D. 37
Berdusco, R.J. 24
Blusson, S. 28
Born, A.L. 5
Britch, C.I.K. 8
Brown, C. 32
Carter, T.G. 19
Cheng, K. 18
Church, Neil 11
Dick, L.A. 38
Dwarkin, L.M. 22
Erola, Judy 1
Forgaard, K.A. 31
Goldsmith, L.B. 12
Godwin, C.I. 39
Harrison, A.J. 20
Hodgson, C.J. 14
Hoy, T. 10
Irwin, W.W. 7
Janssens, J. 6
Kosmak, B.F. 9
Labadie, B.M. 15
Lacy, S. 37
Lane, D. 24
MacIntyre, D.G. 25
MacLean, D.R. 34
McKay, D.L. 4
McLelland, R.L. 2
Morganti, J. 27
Mular, A. 18
Parker, E.G. 16
Percival, P. 6
Pighin, D.L. 13
Reed, A.J. 36
Roberts, M.A. 13
Roberts, W. 26
Russell, W. 21
Sanders, K.G. 37
Scholtz, H.A. 17
Sharma, D.P. 22
Shaw, D.R. 14
Sinclair, A.J. 12
Skall, H. 13
Skinner, J. 23
Teindl, H. 33

1st Provincial Meeting, Kimberley.