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GREAT PLAINS DEVELOPMENT
COMPANY OF CANADA, LTD.,

MACKENZIE BASIN CARBONATE
SUMMARY REPORT

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INTRODUCTION

The 1974 field season for the Kerr Addison - Great Plains joint venture was completed August 28, 1974. The program consisted of intensive geochemical sampling and prospecting of streams in the Bonnet Plume River and Ogilvie River areas.

As a result of the stream sampling program several claim groups were staked to cover geochemical anomalies. Due to the reconnaissance nature of the program and competitive pressures in the area very little time was used to explain the anomalies. When an anomaly was discovered in a favorable environment, the ground was staked for further work in the next field season.

CLAIM GROUPS

The following claim groups were staked.

		N.T.S.
Jeanette	1-15	106-E-2
Windy	1-14	106-E-2
Yogi	1-16	106-E-2
Bev	1-20	106-E-1
Ken	1-4	106-F-4
YUK	1-20	106-F-4
Jane	1-32	116-H-6

By the Yukon Quartz Mining Act, one person may stake eight claims in one year within a ten mile radius. This restricts the number of claims that a field crew can stake in an area without bringing in outside stakers.

CLAIM GROUP DESCRIPTIONS

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| 1. | Jeanette | 1-15 |
| | Windy | 1-14 |

These two groups were staked next to a claim group staked by Archer and Cathro crews. The latter claims cover a substantial zinc showing which occurs on the west side of Illtyd Creek.

The showing occurs in a Cambrian porous dolomite. Samples assayed as high as 23% zinc. Several different stages of porous carbonate deposition occurred in this area during the Cambrian. The porous carbonates which were deposited in a facies front environment weather in a knobby rounded pattern versus the blocky jointing of fine grained shelf carbonates. Several of these stages may be seen as ledges in the canyons on the claim groups. The shales are not visible and have probably been eroded away.

Portions of the porous carbonate unit which had not been covered by Archer and Cathro crews were staked by Great Plains personnel. Zinc mineralization has been noted on the Jeanette Claims.

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| 2. | Yogi | 1-16 |
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This claim group is on the east side of Illtyd Creek about two miles from the Jeanette claims. The group was staked to cover a geochemical anomaly.

The general rock units are slaty shales, cherts, limestones and alternating algal-hematitic breccias. The breccia fragments consist of chert, jasper, siliceous limestone and iron formation. The siliceous limestones contain bands which may be algal mats. No zinc mineralization could be found but due to the close proximity to the Archer and Cathro find the area was staked.

3. Bev 1-20

The claims cover a geochemical silt and soil anomaly. The rock units consist of yellow dolomite and gray limestone-dolomite overlain by a maroon siltstone of probable Cambrian age. The yellow dolomites are coarsely textured with secondary infilling of secondary dolomite and calcite. The general environment and rock units are very similar to descriptions of the Sekwi Formation to the south. To date there is no positive age determination on the units.

The stream silts carried up to 1600 ppm zinc with high lead and cadmium values. Contour soil sampling analyses produced anomalies of up to 1200 ppm zinc. Zinc oxides were found in the dolomite unit which is exposed, on the ridge which runs down the centerline of the claim group. No sphalerite or galena was found.

4. YUK 1-20

The YUK group was the last area to be staked in the Margaret Lake area before moving camp. The group covers a geochemical anomaly in an area where sphalerite and galena were found in float. The rock units are similar and on strike with rock units underlying the Bev group.

The rock units consist of grey limestones, brownish orange algal limestones, black limestones, red siliceous limestone and yellow coarse dolomite with secondary dolomite infilling. An unconformity probably occurs between the black limestone and the red siliceous limestone. The geochemical anomaly occurs in what may be a facies front. The favourable nature of the environment, the geochemical anomalies and the mineralized float prompted the decision to stake the ground.

5. Ken 1-4

The claims were staked on a zinc carbonate showing which assayed 2.5% zinc. The rock unit consists of a fine grained limestone which has

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been tectonically brecciated. The nature and structure of the bedrock does not indicate that widespread mineralization will be found in the area. A trench dug in the next field season would be sufficient to determine the extent of the mineralization.

6. Jane

1-32

The claims were staked to cover a 2300 ppm zinc analysis in silts. The rock units consist of Lower-Middle Devonian crinoidal limestone overlain by black pyritic shales. A red powdery film of limonite covers the stream bed and banks. The limonite can act as a geochemical fence and precipitate most metals out of water. However, the porous nature of the crinoidal limestone units may indicate the possibility of a favorable environment for lead-zinc mineralization. No zinc mineralization could be found in the area but the area deserves additional work to determine the source of the anomaly.

CONCLUSIONS AND OBSERVATIONS

The results of the 1974 program are under study at present. All of the silt analyses will be processed by computer to find background, threshold and anomalous values. The results will then be plotted on 1 mile = 1 inch base maps. This will be presented with an analysis of the geology in the project yearend report.