Consulting Geologist

1410 Wende Road Victoria, B.C. V8P 3T5 (604) 477-0419

August 16,1988

Mr. William Clancey
President
Multinational Mining Inc. Joint Venture
795 - 885 Dunsmuir Street
Vancouver, B.C.
V6C 1N8

Dear Mr. Clancey:

Re: Progress Report - Chappelle Project Toodoggone River Area, B.C.

The following includes a brief review of the current status of the Chappelle project and recommendations for a second phase diamond drilling program.

Work to date has included 1,941 feet of diamond drilling on the B Zone and geophysical and geochemical surveys over five other potential gold-silver zones in the western property area.

Estimated program costs to date are in the order of \$150,000.

Phase I Diamond Drilling - B Zone

Phase I drilling commenced July 2 and was completed July 14. Seven inclined holes were drilled from six sites for a total of 1,941 feet.

The first five holes were designed to test for a northeast extension of B Zone at shallow depths. Little quartz vein material was intersected and only low gold and silver grades were encountered. Results obtained suggest that economic grades are restricted to below the 1750 metre level within the B Zone structure.

Two short holes were drilled to test the upper part of the main B Zone mineralized shoot. One of these holes encountered poor core recovery and gold-silver values were low. The second hole intersected 7 ft. grading 0.162 oz/ton gold and 1.08 oz/ton silver which interval included 1.8 ft. assaying 0.519 oz/ton gold and 3.44 oz/ton silver.

### Geophysical Surveys

An electromagnetic survey, utilizing an EM-34, was carried out over the C Vein by Quest Canada Exploration Services Inc. Areas of higher resistivity and conductivity were indicated in the area of the exposed vein structure and in the northwest part of the grid area.

An Induced Polarization survey, conducted by Quest over the known B Zone yielded only limited response and as a consequence, a decision was made to curtail this part of the program.

#### Geochemical Surveys

Soil and rock sampling has been carried out over C Vein, West Chappelle, B Zone, North Cuartz, New Zone and the Cirque area east of B Zone (see attached sketch map). 233 soil and 65 rock samples had been shipped to Min-En Labs for analyses as of August 10. Results to date are as follows:

### C Vein

Hand trenching of this northeast striking, northwest dipping vein structure in the 1970's exposed some 300 feet of strike length. Widths range from 5 to 10 feet and detailed chip sampling in the central part of the exposed vein yielded average values of 230 pph gold and 9.3 ppm silver.

Two 1981 holes, drilled to test the southwest end of the zone, intersected gold and silver values, the best being 4.2 ft. grading 0.026 oz/ton gold and 3.35 oz/ton silver. Vein widths apparently increase with depth.

Soil and rock geochemistry over a 2 km grid (25 metre stations along 50 metre spaced lines) indicates highest values for gold, silver, copper, lead and zinc centred on the exposed vein (see attached diagram) but with anomalous values also upslope in the hangingwall. These geochemical results are coincident with higher EM-34 resistivity values as well.

A second area of anomalous gold values (+90ppb) is in the northwest part of the grid which is also coincident with higher resistivity.

More detailed soil and rock sampling has been carried out in both anomalous areas: results should be available shortly.

## West Chappelle

Limited soil and rock sampling has been carried out in the

N.C. CARTER, Ph.D., P.Eng. CONSULTING GEOLOGIST

area of this strong vein structure in the southwest property area. Previous trenching exposed vein widths of up to 20 feet over a strike length of 300 feet.

This vein is developed along a fault zone separating limestone from Takla volcanics and the vein in part replaces limestone.

# Cirque Zone

Soil and rock samples were collected from several contour lines over an area of Takla volcanics bounded by granitic rocks on the south and a fault contact with Toodoggone volcanics on the northeast.

Three samples collected in the central part of the cirque have strongly anomalous gold values of 348 and 523 ppb and one rock sample from the same area yielded 144 ppm silver (4.2 oz/ton). These three samples are within an apparent 100 metre long eastwest zone and more detailed sampling will be undertaken.

## North Quartz Zone

Several soil contour lines were run north and east (downslope) from the North Quartz Zone. These were designed to extend previous Kennco surveys carried out in the early 1970's.

Results to date indicate anomalous gold-silver values in the vicinity of newly discovered quartz veins and additional sampling is underway. Of interest is the indication of northeast trends for the quartz veins, similar to A Vein and B Zone on trend to the south

Some backhoe trenching is scheduled for these veins.

#### New Zone

Detailed prospecting and soil/rock contour lines were carried out in the area of quartz float discovered late last season 1,000 feet east of the North Quartz zone.

A 4 to 7 ft. wide, northeast striking quartz vein with pyrite and base metals sulfides was hand trenched over a 70 ft. strike length. Results of four chip samples are awaited and backhoe trenching of this zone is currently underway.

### B Zone

Results of a soil geochemical sampling program are shown on an attached sketch map. Anomalous gold and silver values in the

southwest grid area reflect the known B Zone.

Of interest is an apparent offsetting of the anomalous zone northeast of line 50E (coinciding with the termination of better drill hole intercepts). Two anomaous zones are apparent along lines 100E,150E and 200E including one in the northern grid area and an easterly trending zone of coincident anomalous gold and silver values in the central grid area which is open to the east and requires follow-up work.

Drilling has been carried out within and adjacent to both of these anomalous areas with no conclusive results.

#### Conclusions and Recommendations

Recent surface work has extended the areas of interest in the vicinity of several previously known zones and has identified at least two new areas of potential gold-silver mineralization.

As noted, backhoe trenching is underway on the North Quartz and New zones and a Phase Two program of diamond drilling is recommended for these and other other areas as follows:

## North Quartz

One -60° hole at 320° is recommended to further test a possible northeast striking vein structure as indicated by hole M87-21 (0.008 oz/ton gold,1.58 oz/ton silver, 1.9% lead, 2.5% zinc over 5.2 ft.) and hole 75-15 (0.014 oz/ton gold, 0.23 oz/ton silver over 13 ft). This hole would also test for a recently identified northeast vein below the known North Ouartz zone.

The one hole would be of 450 ft. length.

#### New Zone

Two inclined holes from the same set-up should be drilled in a southeasterly direction through the central part of the exposed vein (depending on current backhoe trenching). Pending results, additional holes could be drilled east and west of the first two holes for a total of 1300 feet.

### C Vein

Two inclined holes from three set-ups 100 feet apart are recommended to test the C Vein at depth. This would involve 2,500 feet of drilling and one mile of road is needed to access this zone.

# West Chappelle

Two -60° holes are recommended to test this zone at deeper levels than previous holes for a total of 650 feet.

#### B Zone

Not including possible targets as a result of recent geochemical sampling, two targets remain within the B Zone. Both are at depth including the apex of a possible shoot at the 1600 metre level northeast of the defined shoot. Further testing would involve hole depths of 750 to 1,000 feet.

The zone may continue in the direction of A Vein southwest of a quartz feldspar porphyry dyke - potential mineralization would be below the proposed adit level.

Excluding B Zone the proposed Phase Two drilling program would total approximately 5,000 feet. It is recommended that the program first test the North Quartz and New zones to take advantage of nearby water supply which has run out in the past two years around the end of August. Drilling these areas first would also allow for road construction to access C Vein.



