REPORT ON THE ADD CLAIM GROUP

CLINTON CREEK AREA, YUKON TERRITORY

FOR MONTANA RESOURCES LTD. (MRL)

AUGUST, 1973

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of $4,023.02.

Resident Geologist or Resident Mining Engineer

Considered as representation work under Section 52 (4) Yukon Quartz Mining Act.

Commissioner of Yukon Territory

AGILIS ENGINEERING LTD.
CONSULTING ENGINEERS & GEOLOGISTS
107 - 325 HOWE STREET, VANCOUVER 1, B.C.

OCT - 1 1973
WHITEHORSE
Yukon Territory
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MAPS

Scale

Geological and Claim Survey 1" = 400 ft.
Magnetometer Survey - Values Map 1" = 400 ft.
   - Contour Map 1" = 400 ft.
Location Map 1" = 50 miles (approx.)
REPORT ON THE ADD CLAIM GROUP, CLINTON CREEK AREA, YUKON TERRITORY FOR BONTROG RESOURCES LTD. (M.I.)

1-30 INTRODUCTION:

A series of ultrabasic intrusives have been located in the Clinton Creek area in which varying amounts of chrysotile asbestos fibre occurs. One of these deposits, the Clinton Creek Mine, was brought into production in 1968. The Add Claim Group lies on a similar intrusive 2 miles north of the Clinton Creek Mine. All magnetic surveys were flown in the general area by Asbestos Corporation and this company drilled two diamond drill holes on the Add Claims in June, 1970.

During the period of August 23 to September 14, 1972, geological mapping, ground magnetometer survey and line cutting was completed on the Add 1-3 under supervision of Mr. G. Hawley, geologist.

From July 1 to July 4 the above surveys were extended on the Add 9-12, which are relocation of the Plate 1-2 mineral claims under the direction of the writer.

This report summarizes the results of both, the 1972 and 1973 work program.

2-30 LOCATION AND ACCESS:

The Add Claim Group is located approximately 2 miles north of the Clinton Creek Mine and immediately east of the north end of the airstrip which services the mine, at longitude 140°43', latitude 54°29'. The area lies 45 miles NW of Dawson City and is accessible by about 60 miles of gravel road from Dawson.
3-00 PHYSIOGRAPHY:

The claim group is at an elevation of approximately 2,000 feet. The area is one of very gentle relief and is covered with small second growth evergreen and some small deciduous growth. Winters are severe and surface exploration is possible from early June to about the end of September.

4-00 CLAIMS DESCRIPTION:

The Add Group consists of 12 contiguous mineral claims located in the Dawson Mining District, Yukon Territories. The Add 9-12 claims are relocation of the Flute 1-4 claims and were staked by J.C. Needoba on July 1, 1973 and recorded in Dawson City on July 4, 1973. The Add 1-8 claims were staked by D. Reinke on August 17, 1972 and recorded in Dawson City on August 23, 1972. Record numbers are as follows:

<table>
<thead>
<tr>
<th>Claim Number</th>
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<tbody>
<tr>
<td>Add 1-8</td>
<td>Y65626-Y65633</td>
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<tr>
<td>Add 9-12</td>
<td>Y61727-Y81730</td>
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All claim posts were located during the latest survey.

5-00 HISTORY:

It is reported that Asbestos Corporation had flown aeromagnetic surveys of the general area prior to 1959. Aeromagnetic map sheet (40 mile, Map 4270G), of the Geological Survey of Canada, records government aeromagnetic work in this area.
In June of 1959, Asbestos Corporation drilled two diamond drill holes totalling 990 feet in length on the Add 7 and 12 claims. These are recorded in Geological Survey of Canada Paper 65-19, 1964, by Dr. L.H. Green, Page 27.

No signs of previous ground surveys, other than the drilling, were noted.

6-00 GEOLOGY:

6-10 REGIONAL GEOLOGY:

Rocks of the Lower Paleozoic or Pre-Cambrian Yukon Group, consisting of quartzites, gneisses and schists with minor crystalline limestone, slates, phyllites and andesites, underlie most of the Clinton Creek area. These rocks are locally intruded by small, generally concordant, ultrabasic masses. These usually strongly serpentinized intrusions, which are the most rocks for widespread chrysotile asbestos occurrences, are readily outlined by aeromagnetic and ground magnetic surveys, due to characteristic magnetite content.

To date the only economic occurrence of asbestos is that of the Clinton Creek Mine, 2 miles south of the Add claims.

Approximately 15,000,000 tons of moderate group four fibre were indicated as ore reserves as of September, 1969. The cross fibre chrysotile asbestos, associated with magnetite, is developed within a thick tabular mass of serpentinized ultrabasic rock which has been traced for at least 4,500 feet. The ore zone, which is some 1600 feet in strike length, is separated by a 20 to 100 foot thickness of quartz-carbonate alteration from the intruded argillites.
A series of ultrabasic intrusives, indicated by magnetic anomalies, with and E-W trend, extend for several miles west of the Add Claims and for several miles to the east of the Clinton Creek Mine. Regional faulting may explain the offset in this ultrabasic belt northerly from the Clinton Creek Mine to the Add claims.

6-20 PROPERTY GEOLOGY:

6-21 GROUND CONTROL:

A total of 75,200 feet, or approximately 15 miles, of picket line, including 6,000 feet of base line, were cut. The base line was established and cross lines turned off every four hundred feet. Pickets were sighted in rather than using compass and stations established by chaining every 100 feet on the cross lines.

6-22 GEOLOGY DISCUSSION:

No outcrops were found on the property. However, since the region has not been glaciated, areas of exposed rock chips are a good indication of the underlying geology. These areas are not frequent on the property and consist entirely of light tan to reddish phyllites with abundant quartz.

Drill results indicate that at least 70' of shallow dipping chloritic phyllites, or as in DDH-0-2, black argillites, overlie the ultrabasic body.
Strong fracturing in parts of the core indicate the possibility of faulting.

**6-30 Core Logging (Diamond Drill Holes, 1959):**

The core for both holes is located and was examined on the property. The actual site of hole 6-1 was not found but is probably near the core rack at the camp, situated 26° + 50E, 30S. The core and vertical drill set up for hole 6-2 is located at 35° + 25E, 35N on the present grid.

Box markings were faded and much of the core displaced or spilled and only an approximate log could be obtained. The logs are as follows:

**DDH-6-1:**

0-70' - Schistose grey rocks with rusted fractures and foliation at 45° to core, grades to fractured, serpentinized ultrabasic at 70 feet.

70-500' (approx.) - Serpentinized ultrabasic intrusive, exhibits strong fracturing near 200 feet, and contains frequent magnetite as fracture fillings and disseminations. Scattered pyrite and several veinlets or chrysotile fibre 0.1" in width were seen to occur.

**DDH-6-2:**

Represented by 59 boxes or core having no legible numbers, and covering approximately 480 feet. Apparent 1st box contains black argillite fragments with foliation 90° to core and some quartz sections. Balance of core consists of serpentinized ultrabasic with little or no fibre and scattered veinlets of magnetite.
7-00 MAGNETOMETER SURVEY:

7-10 INSTRUMENT:

A Sabre Mark III Magnetometer was used. This instrument is a direct reading vertical component Magnetometer measuring the total magnetic field.

7-20 FIELD METHOD:

Base stations were established by taking three readings at each station. These were averaged and corrected for diurnal change. Readings were taken at 100 foot intervals along the cross lines. Base stations were checked approximately every hour to get an accurate estimate of drift and short term field variations. All readings were corrected for diurnal changes before plotting and contouring.

7-30 RESULTS:

The magnetics have outlined an anomalous area, approximately 3,000 feet x 2,000 feet, covering most of the Add 10 and 12 claims. This area has a magnetic relief of from 1500 to over 3000 gammas.

A weaker zone, approximately 600 feet x 3,000 feet with a relief of roughly 1000 gammas, strikes NW from the north part of the main anomaly to the NW part of the claim group.

8-00 CONCLUSIONS:

A series of serpentinized ultrabasic intrusives in the Clinton Creek area are known to be host rocks for chrysotile asbestos occurrences. One of these, at the Clinton Creek Mine,
has produced an economic body of asbestos. Drilling and
magnetics have outlined a serpentinized ultrabasic intrusive,
overlain by argillites and phyllites, on the Add Claim
Group. The geological setting is strikingly similar to
that at the Clinton Creek Mine 2 miles to the south. There
is a possibility that the ultrabasic belt has been offset
in the area of this property by regional faulting. Barren
zones have been found within the Clinton ore body and it
is felt that the two drill holes are not sufficient to
explore a body of the size of that outlined on the Add claims.

9-CC RECOMMENDATIONS:

It is recommended that further work be carried out
on this property. This should take the form of a trenching
program to further establish the underlying geology and
aid in selecting drill sites, and a follow-up program of
further drilling.

Respectfully submitted,

J. Needoba, Geologist

Endorsed by:

F. Holcapek, P. Eng.

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**Legend:**
- **Claim point**
- **Diamond drill hole**

**Professional Surveyor:**

**Agilis Exploration Services Ltd.**

**Montego Resources Ltd. (NPL)**

**Add Claim Group - Clinton Creek Area**

**Dawson Mining District, Y.T.**

**Magnetometer Survey**

**Values in Gammas**

**Scale:**
- 1:1000000
- 1:40000
- 1:400
- 1:80

**August 1973**