GEOLOGICAL AND GEOPHYSICAL SURVEYS REPORT

ON THE MT AND D CLAIMS

OMINECA MINING DIVISION, B.C.

for

Department of Mines and Mines and Mines and Mines Resources ASSESSMENT REPORT No. 3851 MAP

ATTILA RESOURCES LTD (N. P. L.)

R.H.D. Philp, P. Eng.,

by

September, 1971



AUG 2 5 1972 GOVERNMENT AGENT SMITHERS, B. C.

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REPORT ON

EXPLORATION ON THE MT AND D CLAIMS,

OMINECA MINING DIVISION, B.C.

for

ATTILA RESOURCES LTD (N. P. L.)

INTRODUCTION

The MT and D claims form two groups totalling 52 claims located south of Chuchi Lake in central British Columbia.

Staked in July, 1971, an exploration program was undertaken on both groups during September, 1971. This consisted of prospecting and geological mapping and a claims survey of both groups, plus establishment of a grid (200 by 400 foot pattern) and a magnetometer survey on the MT group.

Work was conducted by personnel of Agilis Exploration Services Ltd under the direction of the writer.

GENERAL

Access to the northern edge of both claim groups is by boat along Chuchi Lake, the eastern end of which is accessible by road. An alternative means of access would be by float equipped aircraft from Fort St. James, 50 miles to the south.

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Topographic relief is low, especially on the D-Group. The MT-Group, which occupies the northerly facing slopes of a small hill south of Chuchi Lake, is mostly covered with thick underbrush, in particular devils-club, making travel difficult.

While summer temperatures and rainfall are moderate, winters are cold and snow is present throughout the winter months.

PROPERTY

The property consists of the following two claim groups, located approximately six miles apart, in the Omineca Mining Division of British Columbia.

MT-Group

MT-Numbers 1 - 40 inclusive, record date - August 11, 1971.

D-Group

D-Numbers 187 - 198 inclusive, record date - August 10, 1971.

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A chain and compass survey was made of both groups. From this survey the D-claims were found to be staked very short, the total area being somewhat less than half that originally anticipated. Locations of the claims in both groups are plotted on the accompanying surface plans.

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WORK CONDUCTED

Exploration on the MT-Group consisted of prospecting and geological mapping, the latter at a scale of 1 inch = 400 feet, establishment of a 200 by 400 foot flagged and/or blazed grid, a magnetometer survey, and a claims survey. For the latter, the claims were tied into the previously established grid. Work on the D-Group consisted of prospecting and geological mapping plus a claims survey, control being provided by chain and compass.

GEOLOGY

General;

In general, the region is underlain by a series of Triassic-Jurassic volcanics, and to a lesser extent sediments, intruded by several granitic intrusives of Jurassic-Cretaceous age.

Regional mapping by the Geological Survey of Canada (MAP 876A) shows the following units as occurring in the Chuchi Lake region.

> Jurassic or Later: Syenite

Upper Jurassic or Lower Cretaceous:

Omineca Intrusions - granodiorite, quartz diorite, diorite and granite

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Triassic and Jurassic:

Takla Group - andesitic and basaltic flows, tuffs, breccias and agglomerates; minor argillite and conglomerate.

In the Chuchi Lake region the Takla Group units trend northeasterly with moderate dips southeast. The Omineca Intrusions occur north and south of the western end of Chuchi Lake while the syenitic rocks have only been reported to the north.

Major northwesterly trending regional faults occur north of the Nation Lakes area. Topographic lineaments, possibly indicative in part of the faulting trend mainly northwesterly, east-northeast, and north-northeast.

Several copper and copper-molybdenum deposits have been discovered and explored within the Nation Lakes region, occurring in both the andesitic and granitic rocks.

Local Geology:

Outcrop is very sparse on both claim groups, occurring mainly in the southern portions, away from the lake. Mapping was carried out at a scale of 1 inch = 400 feet following general prospecting, during which main outcrop areas were noted.

MT-Group

Most abundant rock type on the MT-Group consists of intermediate to basic volcanic flows of the Takla Group. These consist of fine-grained dark green to black andesites and basalts, often partially chloritized and locally weakly to strongly pyritized. Monzonite, generally light grey and medium grained, occurs in the southwestern and southeastern portions of the property, being more widespread in the southwestern section. Here, it appears to extend east to MT 19 and 20. In the southeastern section it was noted in only two areas on MT 9 and 10.

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The only other rock type noted was a fine-grained, light colored dacite occurring near the southern boundary of MT # 16.

Pyrite, while widespread, is most abundant in the south-central portion of the group occurring in both the andesite-basalt and dacite. Due to the paucity of outcrops it is not possible to say whether there is a relationship between the pyritization and the monzonitic intrusives.

A highly porous, silicified and pyritized fragmental volcanic forms a significant portion of the beach debris although this was not found in place on the property.

Air photographs reveal several lineaments possibly indicative of faulting. The strongest trend is north-northeast with secondary trends northeast and northwest. The southwestern corner of the property is bounded by a very pronounced northwesterly trending lineament.

The significance of these lineaments is that they may indicate shear or fault zones with which copper-molybdenum mineralization might be associated.

D-Group:

The only rock type noted within the D-claims is a monzonitic intrusive. This is a medium grained, light grey rock of intermediate composition and was noted near the shoreline on D 197 and 198 and in the southeastern portion of the group.

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Andesite-basalt plus coarser gabbro-pyroxenite occur immediately south of the group, the contact between these Takla Group volcanics and the intrusives trending westerly. No mineralization was noted in the intrusives although the units to the south are pyritized to varying degrees and contain traces of chalcopyrite.

No strong linear features are evident on this group. Several east-west lineaments likely indicative of glaciation occur in the north portion and weak northwest trending lineaments lie in the southwest portion of the group. Air photographs indicate the intrusive-volcanic contact lies near the southern boundary of the claim group.

MAGNETOMETER SURVEY

Control Grid:

An east-west base line was established and north-south cross lines run at 400 foot intervals. Adjacent lines were tied together at their outer ends or to the lines and to the base line. Lines were marked in part by blazing and by colored flagging with stations established at 200 foot intervals. All lines were established by chain and compass.

In conducting the claims survey and for mapping on the D-claims the claim line was surveyed by chain and compass starting from the final posts for D197 and 198.

Instrument:

The instrument used during the survey was a Sharpe Model MF-1 Fluxgate magnetometer. This is a hand held, self orienting instrument requiring only coarse levelling.

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Range of the instrument is plus or minus 100,000 gammas on the highest scale; sensitivity is plus or minus 20 gammas on the most sensitive or 1000 gamma scale, with a readability of 5 gammas.

Both high latitude and fine adjustments permit zeroing of the instrument for the area being surveyed.

Field Procedure:

Initially, base stations were established every 400 feet along the base-line, being the average of 2 readings taken in closed loops for which necessary diurnal corrections were made.

Following this, readings were taken in loops at 200 foot stations on all cross-lines, each loop beginning and ending at a base-station. The survey was conducted over all but the eastern 5 lines of the grid, the instrument not functioning properly during the survey of this portion.

Corrections:

The instrument has been compensated for normal temperature variations and the only corrections required are for diurnal changes which were applied to each loop. This variation is assumed to be linear and the correction to be applied to any station in a loop is the ratio of the time elapsed when the reading is taken at that station divided by the total elapsed time for the loop, multiplied by the total diurnal variation for the loop.

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Maximum tolerable diurnal variation is taken as I gamma per minute of elapsed time for a loop.

Results:

Magnetic susceptibility throughout the surveyed area varies over a range of 3610 gammas, between + 350 and + 3960 gammas.

In general, values are fairly uniform throughout the central and northwestern areas with a greater variation in the southwestern and eastern sections.

Magnetic highs of over +2000 gammas in the south western section correspond fairly well with the areas of known monzonite outcrop. In addition to being indicative of the intrusive they may also indicate more strongly magnetic contact phases of the volcanics adjacent to these intrusives.

A correlation between the magnetic highs in the eastern portion of the property and the monzonite intrusives is not possible due to the paucity of outcrop. However, the known intrusive outcrops occur within the magnetically high area and on the basis of the correlation to the southwest it is probable that the magnetically high area is also indicative of intrusives and possibly contact features related to these. No strong linear features such as possible fault structures were noted by the survey, although the magnetic highs tend to show a weak correlation with topographic linear trends.

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CONCLUSIONS AND RECOMMENDATIONS

Overburden cover is extensive on both the MT and D claim groups thus seriously limiting the available geological information.

Mapping indicates that the MT Group is underlain mainly by andesitic and basaltic volcanic rocks with monzonitic intrusives in the southwest and southeastern portions. Only monzonite was noted on the D-Group.

Various degrees of pyritization are common on the MT-Group although it has not been possible to determine the relationship, if any, between this and the intrusives.

The source of an altered and pyrifized fragmental volcanic commonly found in the beach debris has not been determined.

The magnetometer survey showed two areas of relative magnetic highs, one in the southwestern and the other in the eastern portions of the MT-Group. These highs appear to be indicative of the monzonitic intrusive rocks and possibly more highly magnetic contact features in the adjacent volcanics.

It is recommended that the exploration program as outlined in the writer's report of August 25, 1971 be continued. To complete Stage 1 this will consist of re-establishing the camp, establish a grid and magnetometer survey on the D-Group, and geochemical surveys on both groups. Second stage will be as outlined in the earlier report with the estimated total costs for the balance of the program to be approximately \$52,000.00.

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Respectfully submitted,

R.H.D. Philp, P.Eng.,

Agilis Exploration Services Ltd.

September, 1971 Vancouver, B.C.

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DOMINION OF CANADA:

PROVINCE OF BRITISH COLUMBIA.

To WIT:

In the Matter of the geological, magnetometer and geochamical surveys on the MT and TM GROUPS.

ł. B. Talbot.

c/o 107-325 Howe Street, Vancouver 1, 8. C. of

in the Province of British Columbia, do solemnly declare that the following personnel were employed and costs incurred in conducting the surveys.

- . . . **.**

<u>PERSONNEL-1971</u> : R.PHILP - Supervision R.POTTER - Geologist,field office T.MORGAN - Helper E.WARNER - PARTY CHIEF	- 2 days @ \$125.0 - 19 days @ \$125.0 - 4 days @ \$125.0 - 19 days @ \$ 39.0 - 15 days @ \$ 52.5	0 \$ 250.00 0 \$ 2.375.00 0 \$ 500.00 6 \$ 755.44 0 \$ 787.50 \$ 4,667.94
DISBURGEMENTS-1971: MEALS & SUPPLIES TELEPHONE CONTRACT DRAUGHTING, PRINTS TRUCK BOAT RENTAL TYPING MISC. MAGNETOMETBR CAMP EQUIPT.RENTAL	283.7 16.2 150.3 380.0 155.9 77.9 220.0 180.0	3 0 5 0 5 0 0
CAMP CHARGES -53 MANDAYS @ \$10/day	530.0	1994113
PLUS 10% SERVICE CHARGE		199.41
	TOTAL	\$ 5,861,48

TOTAL

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

J. B. Salbot Declared before me at the City , in the Nan couver of Province of British Columbia, this 23 day of August 1972., A.D. A Commissioner for taking Affidavits for British Columbia or A Notary Public in and for the Province of British Columbia. Sub-mining Recorder









	LEGEND
	ANDESITES AND BASALTS - fine grained, dark
	DACITE - fine grained
5	MONZONITE INTRUSIVE
6	DISSEMINATED PYRITE
	CLAIM POST
/	MAJOR TOPOGRAPHIC LINEAMENTS (from airphotos)