

SUMMARY REPORT COVERING A DETAILED GEOLOGICAL SURVEY UNDERTAKEN ON THE PAN GROUP OF MINERAL CLAIMS LOCATED IN THE ANUK RIVER AREA OF NORTH WESTERN BRITISH COLUMBIA.

#### INTRODUCTION

The Pan Group of mineral claims held in trust for Triana Exploration Limited by Mr. G. M. Radisics are located in the Coast Mountain Range in the Cassiar District of British Columbia. This group was acquired by staking early in the spring of 1956.

At the time of the staking of this group of claims a deep blanket of snow covered all the higher slopes. For this reason and because of the extreme ruggedness of the terrain, it was not possible to run centre lines or to erect posts in the manner prescribed by the Regulations. The method of staking was to erect cairns at two locations approximately 3,000 feet apart at the head waters of the Anuk River from which points all the claim corners of the group were established by placing witness posts. This method of staking was accepted by the Nining Recorder at Victoria, British Columbia, where the claims were eventually recorded.

## LOCATION AND ACCESSIBILITY

The Pan Group of claims are located in the Coast Mountain Range in the Cassiar District of British Columbia; they lie at the headwaters of the Anuk River which drains westward for a distance of approximately eight miles into the Stikine River. This juncture with the Stikine is about 56 miles south of Telegraph Creek. The mouth of the Anuk at this point is approximately sixty miles upstream from the Town of Wrangell on the Alaskan Coast. During some parts of the season the Stikine is navigable by flat bottomed craft between Wrangell and Telegraph Creek. A scheduled number of trips are made each week between these two settlements so that arrangements can be made from either of these places to reach the mouth of the Anuk by boat. A well cut trail leads off from this point to the property.

Float equipped aircraft can readily land (during the summer months) on the Stikine at the mouth of the Anuk.

Charter based aircraft are located at Atlin, British Columbia, which is the closest point of departure to the property. Air services are also available at Watson Lake and at Whitehorse in the Yukon.

From the point of view of dependability of service and the number and types of aircraft available, Whitehorse is possibly the best point of departure to the property. (unamed cases?)

The trail which leads off from the mouth of the Anuk is not marked out over the first quarter of a mile or so but follows along the sandy clay and boulder strewn bed of the creek to a point upstream on the right bank. The stream is fast flowing and there are numerous rapids and falls throughout its entire course and the river cannot be bridged without considerable difficulty even at this lower point. Tall trees close to the bank can be dropped so as to reach a point of rocky shoals about midstream; from here the north shore of the stream is readily reached by wading across the shallow rock strewn stream.

It is very doubtful that the stream can be bridged anywhere, at any time, during the flood season. For this reason, it is also unlikely that any previously constructed bridges would remain intact for more than one season.

From the first crossing point the trail leads up a steep precipitous slope nearly paralleling the north bank of the creek; here a higher altitude must be gained in order to clear the north canyon wall which bounds the Anuk for some distance along this lower stretch. The trail leads over a steep spur of a mountain along this north bank for possibly a distance of some two miles, until the second point of crossing of the Anuk is reached. Here a crossing can be made over a natural ice bridge.

This ice bridge was undoubtedly formed as a result of glacial jamming of the creek bed with ice and snow and subsequent undercutting by the creek itself during the flood season. Its structural strength has been increased by the inclusion of numerous bits of twigs, driftwood and other debris.

From this point the trail follows along the south bank of the Anuk to its juncture with Glacial Creek. By exercising a certain amount of caution, Glacial Creek can be crossed by wading at a point approximately 100 yeards upstream from its juncture with the Anuk. The trail then continues on from this point roughly following the flood plain of the Anuk <sup>ON</sup> the right bank for over a distance of approximately 2 miles to its headwaters.

#### NUMBER OF CLAIMS, AREA, ACRES

The Pan Group consists of thirty-two (32) mineral claims, bearing designations of Pan No. 1 to No. 32, both inclusive, and recording numbers 228368 to 228399, again both inclusive. Total acreage involved is about 1600 acres.

## **TOPOGRAPHY**

The south boundary of the Pan Group lies roughly along the headwaters of the Anuk River over a distance of four claim lengths.

In a longtitudinal direction the property extends from this south boundary over the steep slopes of a glaciated mountainous area, the peaks of which reach elevations of upwards to 6,000 feet.

The central and northern parts of the property are largely covered by glaciers. This glaciated area is drained towards the Anuk by numerous fast flowing creeks all of which have their origin at the glaciers.

Where, on the lower slopes, several streams have coalesced to form larger ones, naturally resulting in the flow of a greater volume of water, the slopes have been deeply incised so that steep walled canyons are fairly numerous.

These lower slopes are for the most part covered with a thick undergrowth of alders, devil's club, wild rhubarb, berry bushes and ferns. On the higher slopes outcrops are fairly numerous and because of the steepness of the slopes are generally followed by slide debris and <u>fel-</u> senneer immediately below.

## GENERAL GEOLOGY

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Several pieces of gossan float were obtained along the narrow boulder strewn flood plain of the Anuk from its headwaters to the Stikine River. Most of this float material examined is composed of a very fine grained buff coloured rock of possibly volcanic origin, which is impregnated by extremely fine grained disseminated pyrite. The pyrite is present on freshly broken surfaces in remarkably well formed cubes that have a steel whitish colour.

Some float was observed towards the headwaters of the Anuk which contained appreciable amounts of chalcopyrite. The host rock containing this mineralization is also believed to be of volcanic origin. A goesan zone was observed on the east wall of a canyon near the southeast boundary of the property. It is possibly 100 feet in length and from 4 to 5 feet in width. A number of smaller less significant gossan zones were also observed on this vertical wall; these occur in an echelon pattern striking parallel to the trend of the canyon in a general southeasterly direction.

From the same location from which the gossan zones on the canyon wall are viewed, there can be seen what appears to be another gossan zone on strike with these several miles to the southeast. It appears that this zone is just outside the Triana boundaries to the in a southeasterly direction and would therefore be located on some part of the Conwest property, which adjoins the Triana claim holdings east. The zone is located near the foot of a large glacier which descents on a steep slope towards the Anuk Valley. Unfortunately, because of the inaccessibility of these occurrences, they could not be examined in detail by the writer.

Several very small and insignificant gossan zones were observed on the Pan No. 5 claim near the foot of a large talus slide. Those which were seen are the result of the weathering of a small amount of disseminated pyrite.

The rock exposures examined on the property of Triana on the south slope are composed of a medium to dark grey rock which has a moderately coarse texture. The rock is believed to be a granodiorite of Triassic Age. Many of the exposures examined have had a sheared and gneissic texture so that considerable alteration has taken place in the formation. Near contacts the rock exhibits a fine grained texture.

The exposures examined at the north extremity of the property are believed to be composed of rocks which are primarily of volcanic origin; minor amounts of sediments, however, are also present. A distinct schistosity was observed in these formations at several localities.

The strike of these formations is predominantly to the northeast with dips being recorded in the order of 45° and steeper to the southeast.

Small intrusive masses in the form of dykes were observed in several localities. Some of these appear to have a dioritic texture but on the whole are mainly light coloured and have a fine grained composition. It would appear that minor gossan zones composed principally of pyrite occur most frequently at the apex of folds where some slight shearing and more intense fracturing has taken place. Rather tight folding was observed in several localities where these minor gossan zones occur.

# STRUCTURAL GEOLOGY

The intense folding observed in nearly all the formations examined on the property, particularly on the north group of claims, is perhaps the most pronounced structural feature of the Pan Group of claims.

This feature is possibly more apparent in the volcanic and sedimentary members which underlie the most northerly claims of the Pan Group. All these formations have been intensely deformed and are cut by dykes and other small bodies of igneous rocks that are largely fine grained in character.

The shattered condition of some outcrops in this area as well as the prevalence of near vertical scarps would make it seem highly probable that some minor faulting also accompanied a latter period of igneous activity.

It has been pointed out previously that the most intense fracturing took place at the apex of these folds , indeed several of the minor pyritized zones on the south slopes are believed to be related to this type of structure.

The formations underlying the southerly part of the property have not been so intensely deformed as those to the north. Folding of a less intense nature was observed however in several localities where the rocks are well exposed on the face of canyons.

#### RECOMMENDATIONS AND CONCLUSIONS

The Pan Group of mineral claims lie within a well mineralized belt that has increased in importance during the past few years because of highly significant mineral discoveries which have been made by various larger mining companies, such as The Hudson Bay Mining & Smelting Company, American Metals, and others. These occurrences to date have received only cursory exploration and development due to the rugged topographical features prevailing in the area.

Within the district of these discoveries the Triana property is believed, from a geological and structrual point of view, to be very favourably located, meriting further exploration and development.

In view of these facts it is, therefore, the writer's sincere opinion that these claims should be retained and further more detailed geological and possibly geophysical examinations be performed on these holdings. If results of these undertakings show further encouragement, a more extensive exploration programme should be inaugurated.

All of which is respectfully submitted.

Toronto, Ontario, January 8th, 1957