BURWASH YELLOWKNIFE MINES LIMITED

SUMMARY REPORT

ON

THE RICH GROUP

by

C. J. BAKER, M.A., C.I.M.M.

BURWASH YELLOWKNIFE MINES LIMITED

Following an examination of your RICH Group which was carried out during a period of twenty-six days, from December 9, 1934 to January 4, 1935, I submit herewith a Summary Report on the property in accordance with your request.

LOCATION

The RICH Group of 24 Mineral Claims is located at the mouth of the Yellowknife River on the North shore of Great Slave Lake, N.W.T. and therefore lies only a few miles from the now well known air route to Great Bear Lake. (See locational sketch map accompanying this Report).

TRANSPORTATION

Aerial The mouth of the Yellowknife River presents an excellent landing ground for both winter and summer.

Canadian Airways machines, operating on the mail route to Great Bear Lake, can land at the property without interrupting their schedule. In a winter operation, food supplies can be purchased at Fort Resolution, 100 miles away, and flown to the property at a cost of only .09 cents per pound.

The present freight rate, from Fort McMurray, at the head of steel, to the property is in

the neighbourhood of .40 cents per pound but a special outgoing rate is obtainable at about .06 cents per pound.

Water — The distance from the head of steel to the property is about one-third of the water route distance to Great Bear Lake. In addition to which there is ample depth of water to permit boats of considerable tonnage capacity to proceed right to the property. The present freight rate from the head of steel is in the neighbourhood of .03 cents per pound. It will be noted that this rate compares very favourably with these of numerous operating properties situated comparatively close to the railroads.

HISTORY

The discovery of mineral in the Yellowknife District was reported as early as the year 1898 but it was not until 1933 that any intensive prospecting was carried out which resulted in the discovery of economic gold values in several locations extending up the river for a distance of about 30 miles.

These discoveries have led to the staking of more than 200 claims to date.

TOPOGRAPHY, CLIMATE etc.

The country in the immediate vicinity of the RICH

Group is characterised by rounded rocky hills rising to a height of possibly 200 feet above the level of the lake. The vegetation is to a large extent confined to the depressions between these rock exposures thereby greatly facilitating prospecting and geological investigation. In the depressions, muskeg and swamp support a growth of spruce, birch, and pine. While a large proportion of the timber is comparatively small and therefore only suitable for fuel it is probable that a certain amount of fairly good sized timber could be located for preliminary mining operations and, in view of the water transportation facilities, it should be possible to economically bring timber from other parts of Great Slave Lake if required.

There are numerous lakes, both large and small, in the area which could be utilized to provide a nearby water supply for mining operations at practically any location.

The Yellowknife Indians occupy a village at the mouth of the River and express themselves as being willing to work on the construction of log camps, road making, fuel cutting and so forth. In view of the fact that they own a number of excellent dog-teams, which could be used to great advantage in hauling logs etc. their services form a definite factor in considering preliminary economic operation.

As is to be expected in this latitude, the winter

climatic conditions are severe, but not sufficiently so as to preclude even surface operations; while the developments in Great Bear Lake have proved that underground operations can be successfully carried out in an even more rigorous latitude.

A few moose are found in the vicinity and large herds of caribou migrate through the area during the winter months so that it is reasonably probable that an arrangement could be made with the Indian hunters for a winter supply of meat and it is practically certain that a large supply of fish could be obtained from them during the summer.

LOCAL GEOLOGY

The latest government geological report on the area was made by Dr. C. H. Stockwell (See Summary Report., G.S.C. Part C. 1931), who established the fact that the Precambrian sediments, which occur along the Yellowknife River, are older than the Precambrian granite batholiths which border this wedge-shaped sedimentary belt.

He notes the fact that the sediments and lavas, older than the granite, are cut by quartz veins, lenses and stringers which are favourable for gold deposition; and, he draws attention to the fact that the geology of these areas of sediments and volcanics is very similar to that of areas elsewhere in the Canadian shield where valuable ores have been found and he points out that it is clear that the strata of this Group may carry ore deposits.

On the RICH Group, which is located in this extremely favourable sedimentary belt, the rocks are essentially greenstone sediments, and those of igneous origin were also noted, represented by pillow lavas and rocks of andesitic texture.

The strike of the sedimentary rocks varies from N 26° W to S 72° W magnetic, the magnetic declination being approximately N 37° E. From this it is seen that the general astronomic strike of the formation is about N 10° E.

SECONDARY ZONES OF MINERALIZATION

Although the RICH Group has not yet been subjected to any intensive prospecting there are six mineralized zones which have already been located.

It will be seen, from the sketch plan of RICH Group accompanying this report, that at two of these locations, on Claims Nos. 20 and 23, grab sample assays have indicated gold values.

A very interesting showing occurs near the boundary line between Claims Nos. 13 and 21. This showing, which outcrops in low ground, has now been stripped over a width of 50 feet and for a length of approximately 150 feet and occurs in schisted greenstone striking about E - W magnetically with vertical dip. The whole of the exposure is capped with a rusty gossan and where it was possible to break out fresh rock it was found to be well mineralized.

A grab sample taken last September from this showing assayed 108.49 ounces of silver. Two channel samples were

taken during the examintion which is the subject of this report, across 4.2 feet and 3.0 feet but the results from these did not give silver values. This however is not surprising when considering the 50 foot width of the mineralization across all of which it could scarcely be expected that the high grade values would persist.

THE MAIN SHOWING

This showing occurs on Claim No. 4 and consists of a quartz vein in greenstone. The snow was cleared away and overburden removed to trace the vein for a further distance of about 85 feet towards the South.

The fracture in which this vein occurs strikes approximately N 10° E astronomically with practically vertical dip, and was traced for a total distance of 285 feet across a small hill which rises to a height of about 45 feet.

At the North exposed end, the vein follows the slope of the hill into a valley where it becomes heavily covered by small timber and overburden. A picket line was run on the strike of the vein and cut across the valley to the opposite hillside where at a distance of approximately 20 feet from this strike line, a similarly quartz filled fracture was located beneath the snow. It is interesting to note that a number of other quartz stringers, composed of similar blue quartz, were located on this hillside.

Approximately parallelling the main vein and at a distance of about 150 feet to the west of it a 6" wide quartz

vein was discovered which is composed of the same type of blue quartz and carries similar mineralization. This vein has not yet been stripped or properly sampled.

The fracture in which the main showing occurs is well defined over its exposed length and appears to be a true fissure. Following the injection of the quartz a number of minor faults displaced the vein. Fracturing of the quartz with the subsequent injection of secondary quartz is observable throughout. Sulphide mineralization consisting of pyrite, arsenopyrite and galena together with the gold apparently accompanied this secondary quartz and the fractured nature of the vein forms a very suitable locus for gold concentration.

The wall rock has in places been seen to contain very finely disseminated sulphides, and this, in conjunction with its nature and the fact that free gold has been found at the actual junction of the vein and wall, presents the possibility that some gold values may be found to be present not only in the quartz vein itself but also in the walls. This possibility has to some extent been borne out by the present assay results of channel samples, across 2 foot widths of the wall rock, which in all instances show some values and, in one instance (see sample No. 3581) runs over a dollar.

One hundred and seven channel samples were taken and the locations, widths and assay results are shown on the accompanying Assay Plan.

A study of this plan will show that, while enormously high values are concentrated in the intensely faulted zone,

no sampled section of the vein is barren and, in fact, at a distance of about 150 feet from this zone, there is a section which would normally be considered high grade were it not for the inevitable comparison with the grade of the ore found elsewhere in this vein. This fact alone definitely points to the depth possibility of values persisting along the length of the vein, enhances the possibility of a large parent body of ore, and indicates that the faulted zone is not the sole factor relating to the enrichment.

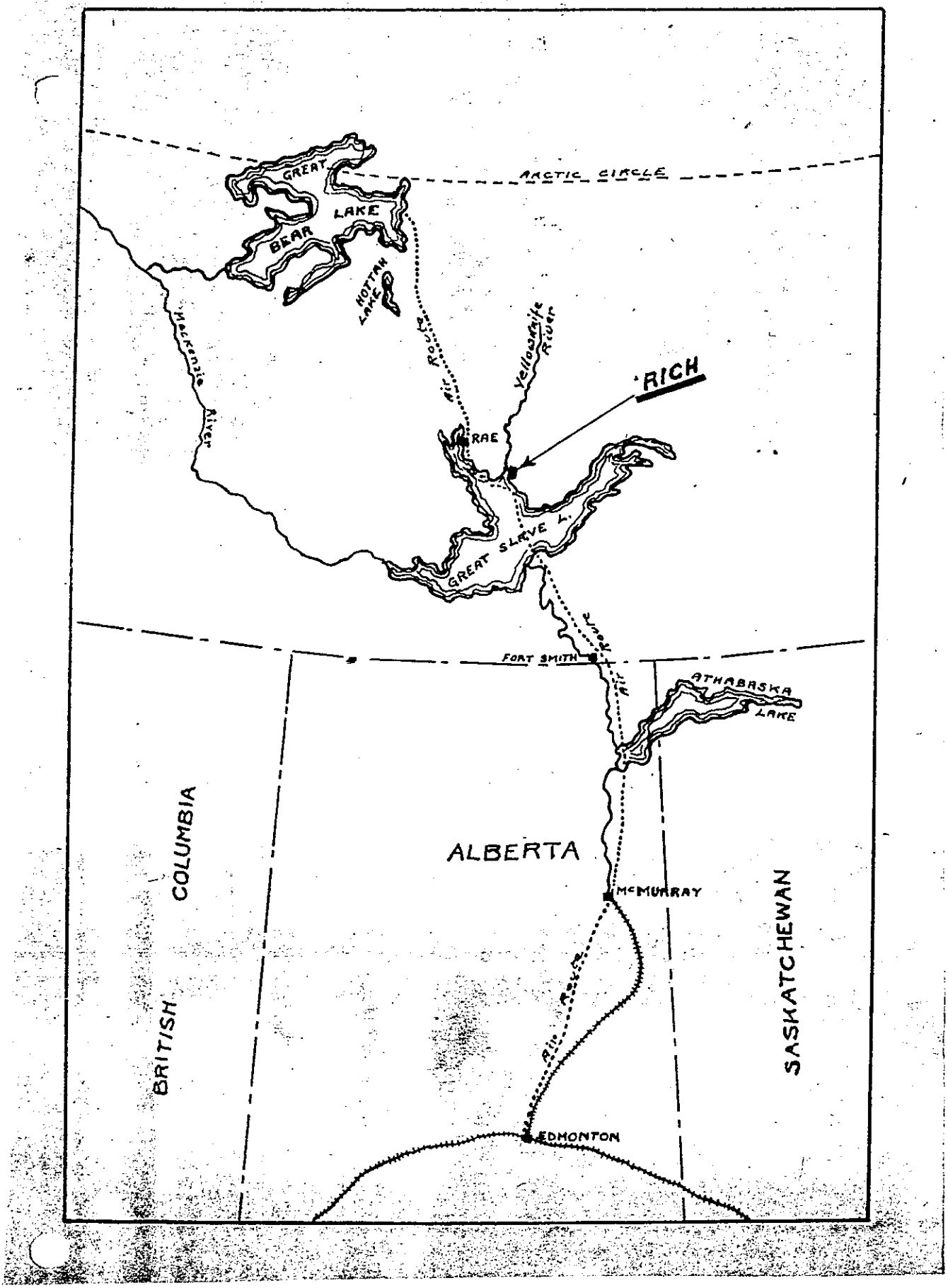
An interesting point in connection with the examination of this vein is the fact that a considerable number of samples, along the North exposed 60 feet or so, were carefully panned and tailings were such as to indicate a considerably higher grade of ore than that obtained from the assays. As is well known it is no unusual experience to find that the milled grade of ore proves to be higher than channel samples would indicate and, from the foregoing, it is clear that such a possibility is present in this instance.

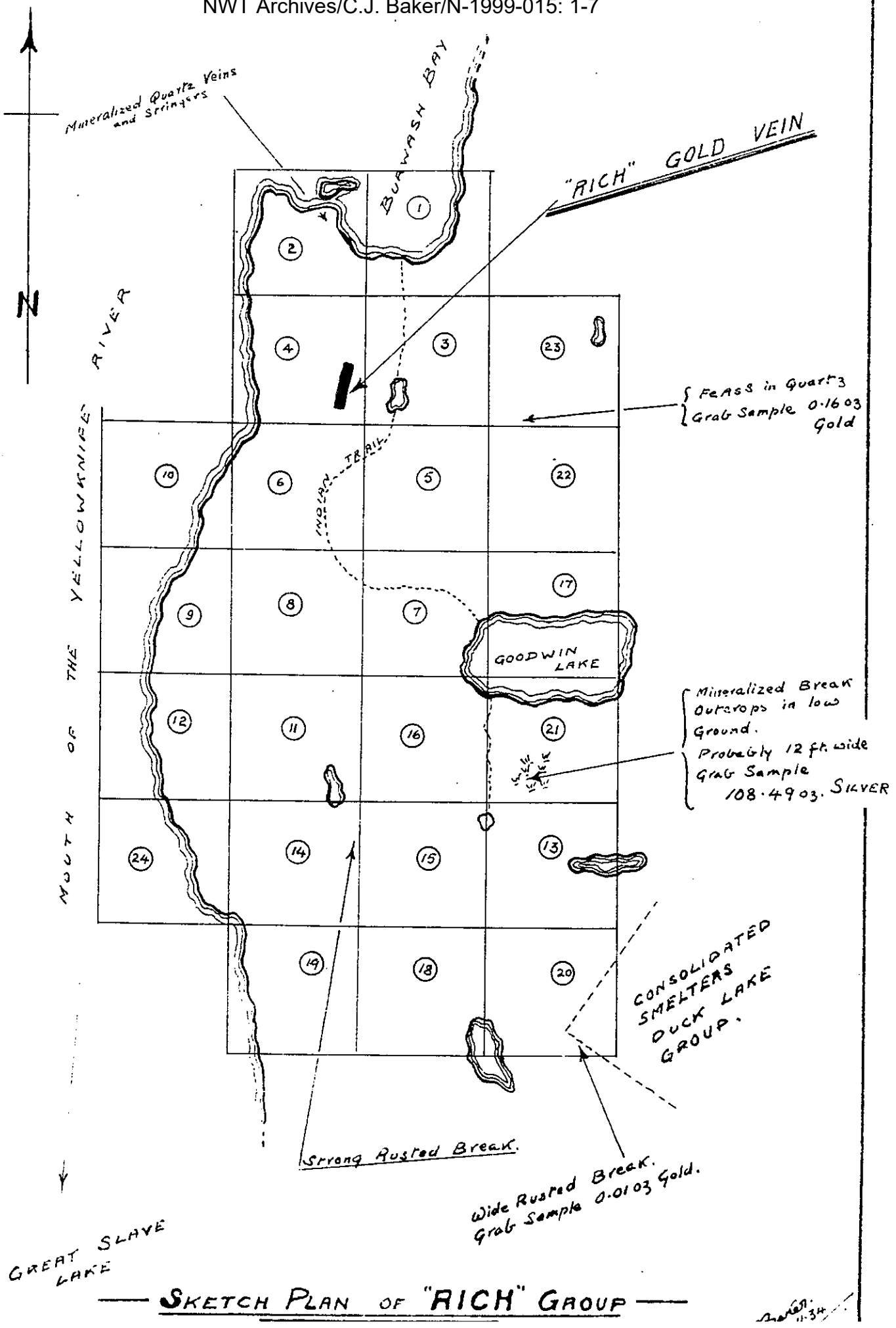
On completion of the surface sampling the vein was blasted out to a depth of about two feet at the South zone of concentrated enrichment and at several other points. It is interesting to note that in no case was the vein found to narrow and in fact that a definite widening tendency was in evidence. On examination of the accompanying assay plan it will be seen that a narrower width is recorded after blasting between Sample Nos. 4053 and 3558. This is not a narrowing of the vein but is due to the surface exposure having been an overflow. In fact it will be seen that immediately

North of this section the vein has widened by almost a foot.

In considering this zone of concentrated enrichment alone it is apparent that with a 22 ft. length of an average grade of 13.6 ounces across 1.1 ft. there would be a yield of approximately $960. per foot of depth; or, presuming that this zone persists in depth, as there is every reason to suppose, the 40 foot height of this hill alone would yield in the neighbourhood of $38,000.00.

C. J. Baker, M.A., C.I.M.M.


GREAT
BEAR
LAKE
ARCTIC CIRCLE
NOTTAN LAKE
Mackenzie River
Air Route
Yellowknife River
RICH
RAE
GREAT SLAVE L.
FORT SMITH
ATHABASKA LAKE
ALBERTA
McMURRAY
EDMONTON
BRITISH COLUMBIA
SASKATCHEWAN



SKETCH PLAN OF "RICH" GROUP