

ENO Group:

94M

800324

The Eno Group consists of 32 claims staked by location at the head waters of the Turnagain River between Mosquito and Sandpile Creek in the Hidden Valley Creek. Located by lat. $59^{\circ}00'N$ and $128^{\circ}00'W$ long in the Lard mining Division, approximately 65 miles south of Lower Post, B.C. south of the B.C.-Yukon border. This group was formerly known as the Burden Group.

History: Early references on general area

Minister of mines	1894	P. 739
" " "	1897	P. 505, 519, 522
" " "	1899	P. 571
	1906	P. 58
	1908	P. 53
	1932	P. 64
	1933	P. 65
	1935	P. 827
	1937	P. 83
	1939	P. 104
	1951	P. 73
	1956	P. 148

Burden group (specifically)

B.C. Bulletin no. 12	P. 51-52
B.C. Minister of mines	P. 73
B.C. " " "	P. 148

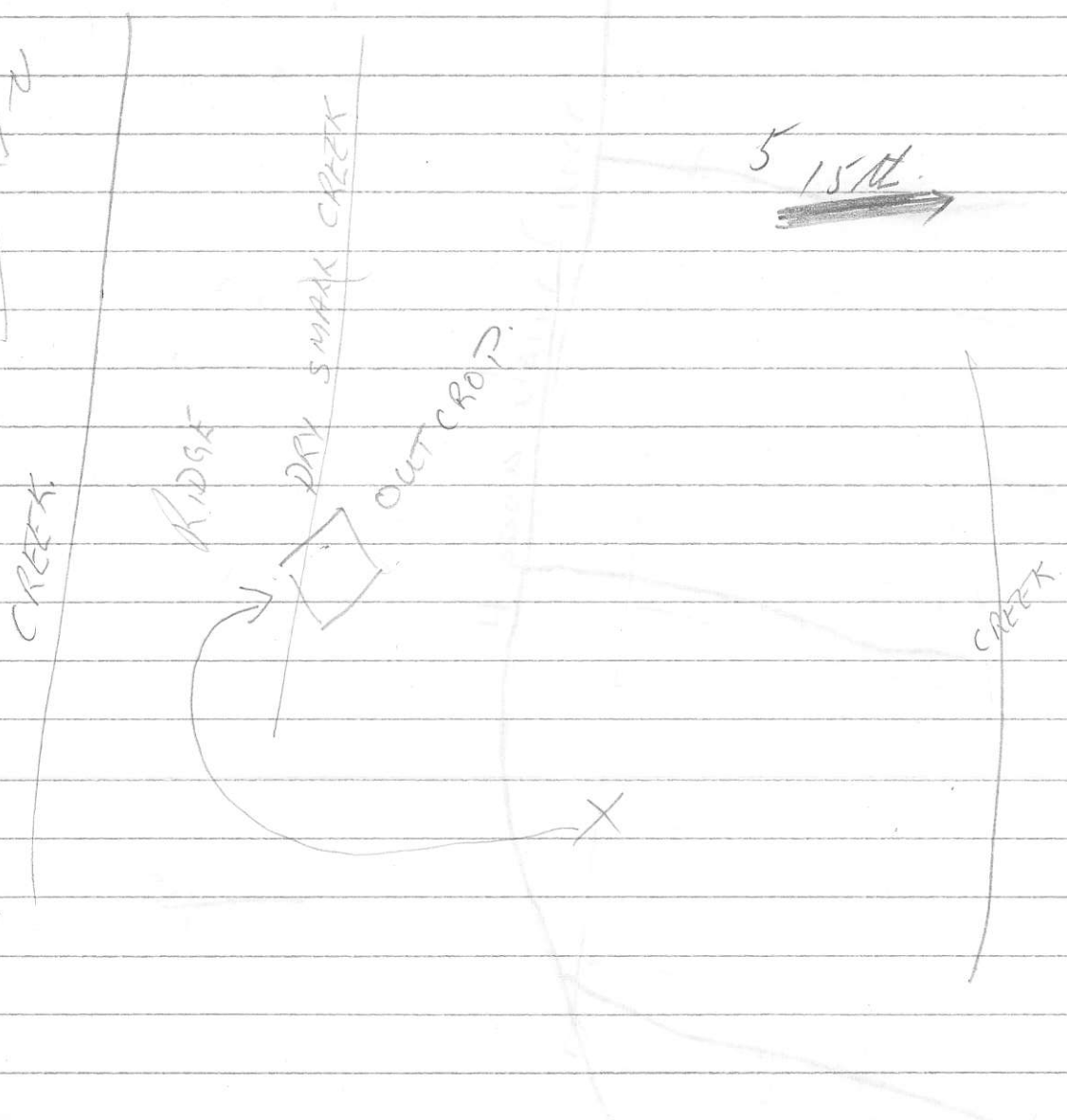
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800324

ENO. Group

The Eno Group consists of 32 claims situated by location at the headwaters of the Tennessee River between Mountain and Sandhills Creek in the Hixson Valley. Located at lat. 29° 00' N and 128° 00' W. In the headwaters of Sandhills Creek, 22 miles east of Lawan Post, 20

H. V. Lee



The area was worked by Comins in the early 1950's under an option agreement. The group was trench by hand by Comins personal and grab samples in the pits were taken. In conversation with Comins, the property was never diamond drilled and not extensively explored. The only work to date is superficial.

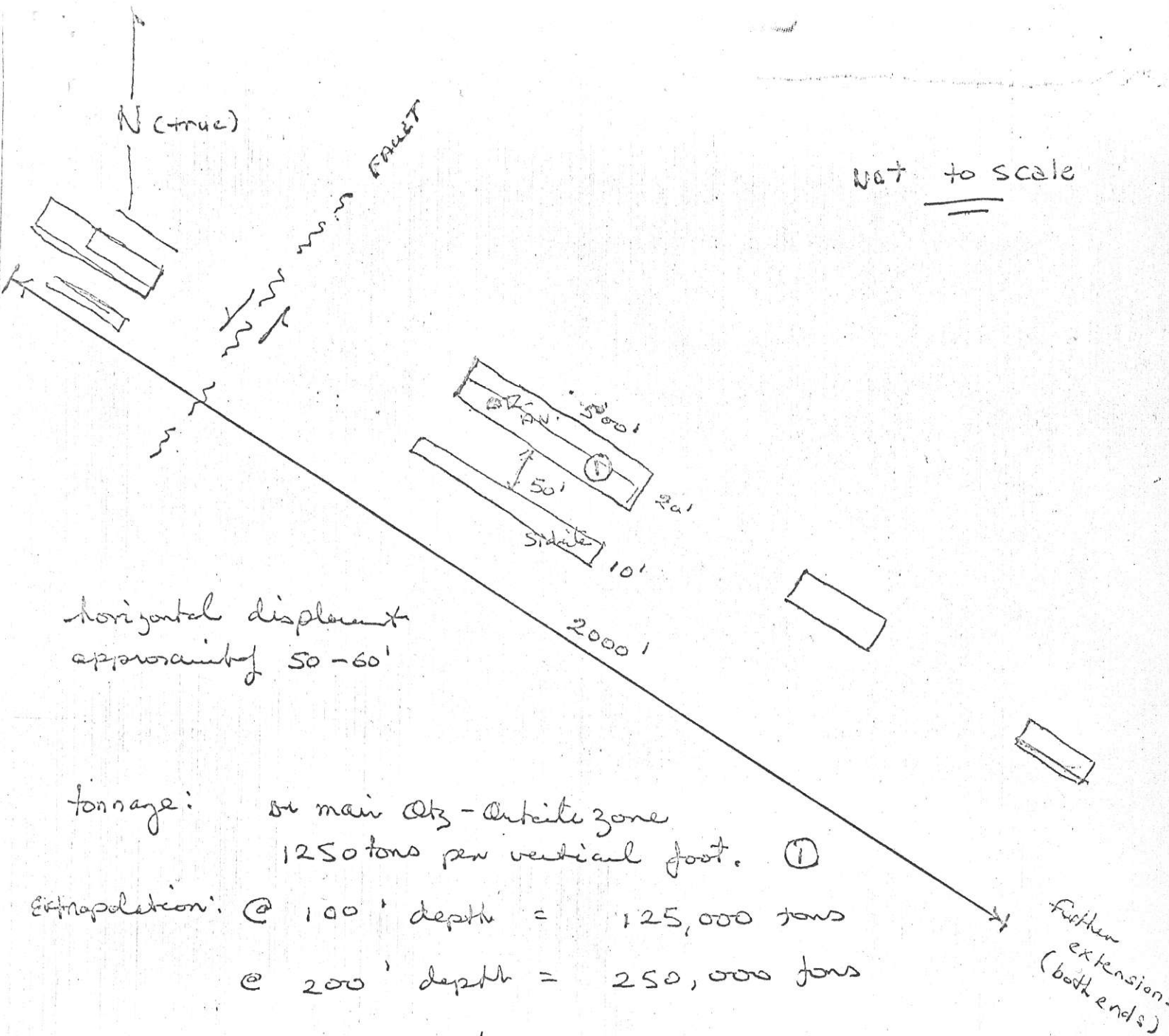
Geology: favourable calcareous sediments.
striking NW - SE
Veins & zones parallel beds.

mineralization: Chalcopyrite occurs in veins, two long zones (1) Qtz - Ankerite vein (2) Siderite vein which are parallel and have a strike distance of 2000' that has been traced and open at both ends.

Results of surface work by Comins showed the following results:

- (1) Qtz - Ankerite vein 11' x 250' trenched analyzed 1.46%
- (2) extension of Qtz - Ankerite 8' x 250' trenched analyzed 1.00%
- (3) Siderite vein 8' x 300' long trenched analyzed .97%

odd samples taken on main zone assayed:
2.60% cu } Qtz - Ankerite vein
2.70% cu } " " siderite vein
5.20% cu }
~~0.70% cu~~ ~~Siderite vein~~



The main zone & sideite zone are both open at the ends and the possibilities of more parallel veins are very favourable (Cominco).

I was not able to obtain the maps ~~and written~~ results from Cominco other than verbal results.

E. J. Bond

F.G.A.C.

NOTES ON METAL MINES

ATLIN*

FOURTH OF JULY CREEK (59° 133° N.W.)

*Silver-Lead-Zinc***Atlin Ruffner
Mines (B.C.)
Limited**

Company office, 302 Bay Street, Toronto; mine office, Atlin. H. T. Steers, manager. Capital: 3,000,000 shares, \$1 par value. The property is about 10 miles up Fourth of July Creek from the highway joining Atlin to the Alaska Highway. Several adits were driven on the property in the past, most of the work being done prior to 1933. In May, 1951, the present company started a programme of development. The road to the property was improved, camp buildings were rehabilitated, and an assay office was installed. Four of the old adits were reopened and two raises were driven. Surface stripping was done with a bulldozer. Geological mapping, sampling, and some diamond drilling were done. Work was suspended in January, 1952, but the company planned to resume development work in a few months. The number of men employed averaged nineteen.

Production: Ore shipped, 44 tons. Gross content: Gold, 7 oz.; silver, 5,343 oz.; lead, 36,197 lb.; zinc, 5,829 lb.

[Reference: *Minister of Mines, B.C., Ann. Rept., 1925, pp. 115-117.*]

BOULDER CREEK (59° 133° N.E.)

*Tungsten***Black Diamond
(Black Diamond
Tungsten Limited)**

J. A. Wilcox, manager. This company was formed by Transcontinental Resources Limited to develop the property at the head of Boulder Creek, about 10 miles northeast of Atlin. The claims are between 4,000 and 5,500 feet elevation. The company reports that the property comprises fifty-two claims and fractions. Several vein zones contain the tungsten mineral wolframite, but only No. 5 zone is at present being developed. Stripping by bulldozer in the summer gave encouraging results so a winter camp was built. Two prefabricated steel buildings were erected above timberline, and equipment for underground work was taken in. It is proposed to drift on No. 5 vein zone.

The road up Boulder Creek was extended by the company to the camp. The average number of men employed was fifteen.

[Reference: *Minister of Mines, B.C., Ann. Rept., 1950, pp. 72-73.*]

TURNAGAIN RIVER (59° 128° S.E.)*

Copper

Burden (The Consolidated Mining and Smelting Company of Canada, Limited).—This property is on Hidden Valley Creek, a tributary of Turnagain River, 10 miles east of the south end of Deadwood Lake. Five men were employed from June 15th to August 15th in geological mapping and surface trenching. The company dropped its option.

* By J. H. Bennett.

1951

geology (general area)

LITTLE EAGLE, GOLDFAN, AND TURNAGAIN (LITTLE MUDDY) RIVER AREAS.

This area lies to the east of Dease lake and is reached by trail from Dease Landing at the head of Dease lake. Horses for operations in this area may be hired from several people at Telegraph Creek, including R. Hylands, Bill Elder, and George Ball.

There are no accurate maps covering the area east of Goldfan creek, the existing maps which cover this area being dangerously inaccurate and unreliable. The Resident Engineer carried out a compass traverse of his entire journey and the map accompanying this report is the plotting of this traverse; it makes a map with some degree of accuracy.

Provisions and supplies can be secured from the Hudson's Bay stores at either Telegraph Creek or Dease Landing (*see* page 56, 1931 Annual Report). Moose and caribou are generally plentiful throughout the area and in some sections willow-ptarmigan and grouse. In the Turnagain River area, grayling, arctic and rainbow trout, pike, suckers, and arctic whitefish occur in quantity. Grizzly and brown bear, mountain goat and sheep are also frequently seen. The area is generally a game paradise and mosquitoes and black-flies are plentiful.

The climate is typical of the Interior Plateau dry belt, with a moisture precipitation of about 30 inches per annum. Snow precipitation is light and does not exceed an average of 3 to 4 feet. Winter temperatures are low, with probably an extreme average of about 20° F. below zero, but the ground is not permanently frozen. Only a few small glaciers occur in the area. During the summer months the temperature is high during the day, with generally cool nights.

The low-level slopes are openly wooded with spruce up to 18 inches in diameter, and pine, poplar, larch, and birch, in patchy distribution. In the valley-bottoms and swampy areas are alder and willow.

Superficial Geology.

The area occupies part of the great interior elevated upland plateau of about 3,500 to 4,500 feet general altitude above sea-level. Rising above this to altitudes of from 6,000 to 7,500 feet above sea-level are the bare crests and ridges of the Cassiar mountain range.

With the exception of a small section around the headwaters of the Tanzilla river draining to the Pacific ocean, the area traversed by the Resident Engineer lies on the arctic slope and is drained by two main rivers, the Little Eagle river draining into the Dease river and the Turnagain river draining into the Liard river. The broad valleys of the main drainage-troughs are drift-filled, in places planated, and possess a low average gradient. In places, especially along the central section of the Turnagain river between Falls creek and the confluence of the Turnagain with its South branch, a distance of about 33 miles, high morainal hummocks with a maze of picturesque and placid lakes and sloughs within their confines constitute a remarkable and fascinating feature of the broad river-trough. High gravel benches also form a feature of this area. On the divide to the Tanzilla river, in the central section of Falls creek and around the headwaters of Flat creek, terraced benches are found.

The lateral creeks draining to the main river-troughs are drift-filled in varying degree, but are generally marked by prominent terrace-benches around their mouths. This characteristic is also noticeable near the head of Falls and Flat creeks. Generally the area has been subjected to widespread glacial action during the glacial period, when the main ice-mass occupied what is now the main valley of the Turnagain river. In places there is evidence of lateral ice-tongues having extended along side-valleys, now occupied by lateral creeks. This is evident along Flat creek and across the divide of that creek to the South branch of the Turnagain river. In other cases, however, lateral creeks appear to occupy sites at an angle to the main ice-movement and consequently they have received some protection from intense glaciation. In some cases, however, tributary creeks have their sources in pronounced cirques, possess very steep gradients, and show evidence of having been subjected to active lateral glacial action, and are consequently unfavourable for placer-gold deposits.

Although some intrusive granitic outcrops were observed, such are comparatively scarce, and any main batholithic mass extending from either the Coast batholith to westward, or the Cassiar batholith to eastward, is probably deeply buried by a thick roofing of slate, limestone, schist, and older volcanic rocks. At the head of Falls creek a small granitic contact area was noted, and between Palmer and Flat creeks two granitic monadocks feature the generally subdued topography of the Turnagain valley.

Outcrops of quartz veins were noted in several places, but pronounced structural breaks are not much in evidence and lode-deposits would generally tend to those of low-temperature type.

(geology - general area)

Possibilities for placer-gold deposits are present in inter- and post-glacial concentrations of the drift-filled valleys, especially in those sections showing evidence of planation by subsequent water-flow. The best possibilities for placer-gold concentrations, however, exist in the valleys lateral to the main ice-movement. These possibilities are indicated on the accompanying map and are evident from the citation of topographical features. On the map likely creeks for prospecting are indicated. In general the area has been subjected to extensive glacial action during the Glacial period and the occurrence of old Tertiary or pre-Glacial gold-bearing channels is not likely, except in patches or sections of creeks topographically protected from intensive glaciation. In such sections the old channels would most probably occur more or less deeply buried beneath glacial drift. Inter- and post-glacial placer-gold deposits resulting from reconcentration of glacial gravels may occur in several sections of the area.

Accessibility.

The trail into the area is marked on the map and the route is characterized by extensive swamp areas. These swamp areas are numerous on the divide to the Little Eagle river, between the headwaters of Goldpan creek and the divide to the Tanzilla river, and between Burnt Timber camp and the headwaters of Falls creek. In these sections extreme caution is required to prevent horses from being inextricably mired. Between Burnt Timber camp and the headwaters of Falls creek the trail follows along the valley-bottom of the Turnagain river and was probably originally located along game-trails. It would seem that in this section a better trail could be located higher up the ridge and along the timber-fringe. Generally, the trail followed into this area is haphazardly located and the route could be considerably improved in many places.

Prospecting.

With the exception of placer on Goldpan creek, which was located in 1924, the area has only received the attention of a few prospectors during the last three years, and only very cursory prospecting for placer gold has been carried out on a few creeks. On the majority of creeks looked at by the occasional prospector the work done consisted of merely scratching superficial gravels and bed-rock was not reached. In some instances also, prospecting has been carried out by apparently "greenhorns" on glacial moraine accumulations of gravel where there is no chance for placer-gold concentrations. Successful and efficient prospecting in this area must be dependent on a knowledge of glacial effects and the ability to discriminate between favourable and unfavourable topography. Whereas some sections are clearly unfavourable, others, especially areas in troughs at right angles to the direction of movement of ancient glaciers, are favourable. Particular attention should be paid to V-shaped lateral creek-troughs in preference to the typical U-shaped glaciated valleys. Several unprospected creeks of the first type were noted in the area. On the accompanying map, features of topography that may assist prospectors are noted.

In prospecting this area the section lying between Dease lake and the Little Eagle river should not be neglected. The upper reaches and tributaries of Hotel creek, draining into Dease lake, are worth prospecting, as also are the lateral creeks draining into the Little Eagle river on its west side, especially the creek directly opposite Goldpan creek. Attention is also directed to a small creek (Bonanza creek) forming what appears to be the headwaters of the Tanzilla river at Caribou pass. Rough prospecting by the Resident Engineer, in the short time available, disclosed coarse colours in shallow and light gravel. The creek contains three to four sluice-heads of water and could be conveniently prospected by the use of a rocker. There is, however, no timber in the vicinity of this creek and for sluicing lumber would have to be brought in. Towards the headwaters of the North fork of the South branch of the Turnagain river and on its south side a favourable creek for prospecting is noted on the map.

As is the case with the entire Cassiar, this area requires experienced and persistent prospectors, men who are not afraid to work. The country is no place for "greenhorns," nor for those who wait for somebody else to show up something. For the right type of prospector this area offers a favourable field, which as yet is practically unprospected and of great extent.

Goldpan Creek.

This creek is about 18 miles east of Dease Landing. The trail is very muddy and swampy in places, especially on the divide to the Little Eagle river, and requires to be uncheoned and in some sections relocated. Goldpan creek is about 4 miles long and flows into the Little Eagle

the discoverer of Walker Creek) and a companion, prospecting for the C. C. R. Company (the Cassiar Central Railway Company). They have found some good prospects of both gold and copper in quartz."

Furthermore, in the Annual Report, Minister of Mines, British Columbia, 1906, it is recorded that a party of prospectors set out from McDame and travelled about 80 miles south-eastward into the Turnagain section. Some claims were staked and recorded and it is stated that the quartz assayed well in gold, silver and copper but nothing further is known.

A copper deposit is reported to have been staked years ago on the lower Gataga River, and in 1940 a copper discovery was made and staked in Hidden Valley Creek, tributary to Turnagain River between Mosquito and Sand Creeks. Neither of these deposits was seen, but a verbal description of the discovery on Hidden Valley Creek was obtained.

No mineral deposit was seen in the Rocky Mountains, and little evidence of quartz veining. Copper is reported to occur east of the Finlay River, far to the south of the region, but in general these mountains have not proved to be well mineralized. Throughout the Rocky Mountains there is fairly widespread and prominent veining by calcite, for the most part in small and discontinuous stringers, and a few of these veins contain a minor amount of quartz that is not mineralized. A few quartz veins were seen east of Gataga River in the lower 10 miles, and a few east of Gataga Mountain, but no mineral was seen in them. A search was made in this section for the reported copper deposit but without success.

In many parts of the Cassiar Mountains quartz veins were seen, almost exclusively in the non-calcareous rocks. Most veins contain ankerite, or rusty-weathering carbonate.

Glassy white quartz veins are numerous in the coarse-grained schist about Ludwig Creek. Irregular veins containing pyrite occur in the crumpled rocks of Member 5 on Rainbow River. Float containing pyrite and a little chalcopyrite was seen near the mouth of Rainbow River, and in parts of the range to Frog River, and one small vein containing chalcopyrite was seen on the mountain north-west of Paddy Lake. Quartz veining containing pyrite, chalcopyrite and ankerite was found 7 miles south-west of the mouth of Denetiah Lake. Quartz veins were seen south-east of the lakes at the head of Sand Creek and also copper float below the mouth of Sand Creek on the Turnagain. Some quartz float was seen west of Jackstone Creek.

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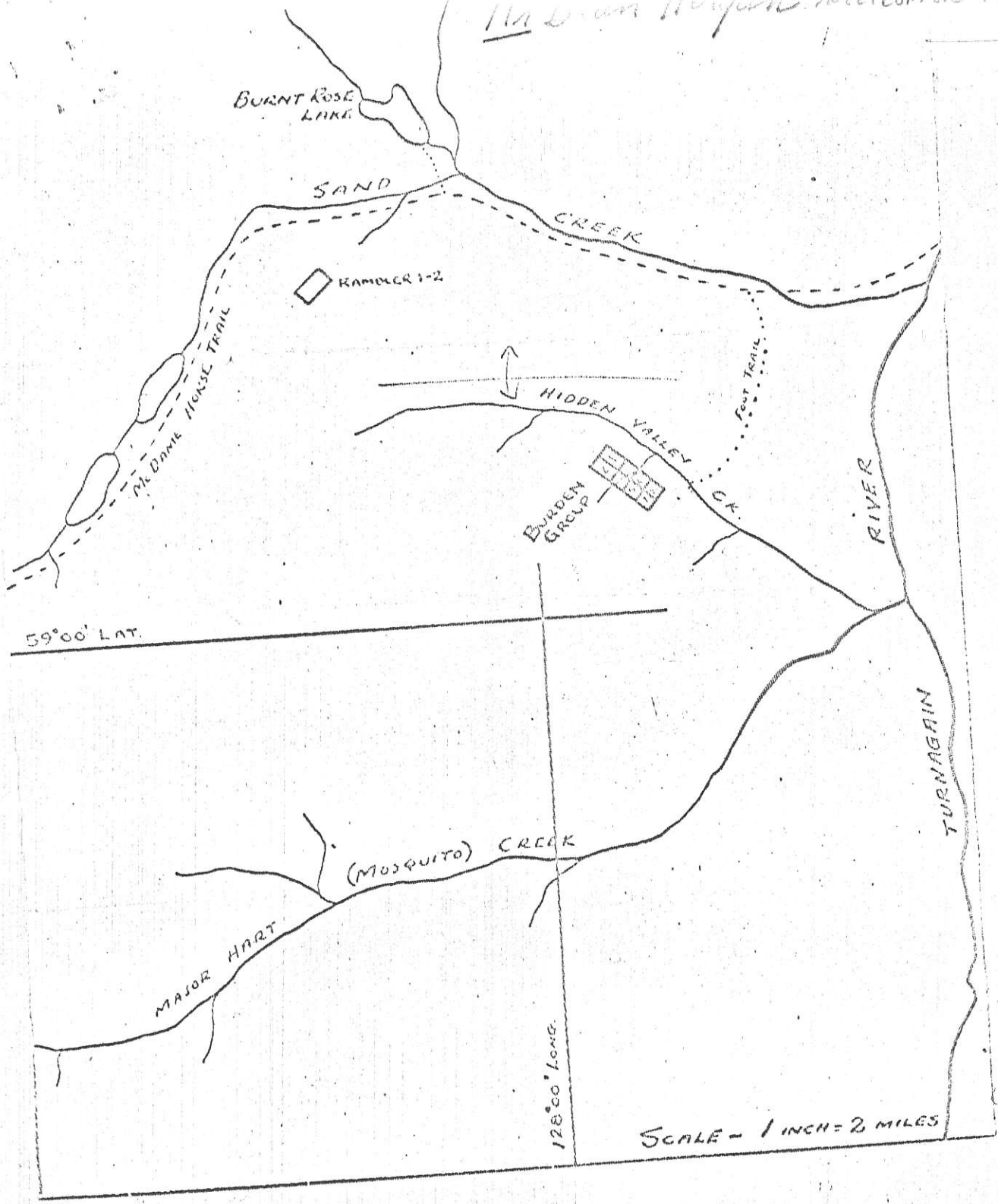
(B.C. Beallham)

On the eastern shore of Dall Lake a small bluff at water's edge is composed of intensely silicified limestone and contains many small stringers of chalcopyrite.

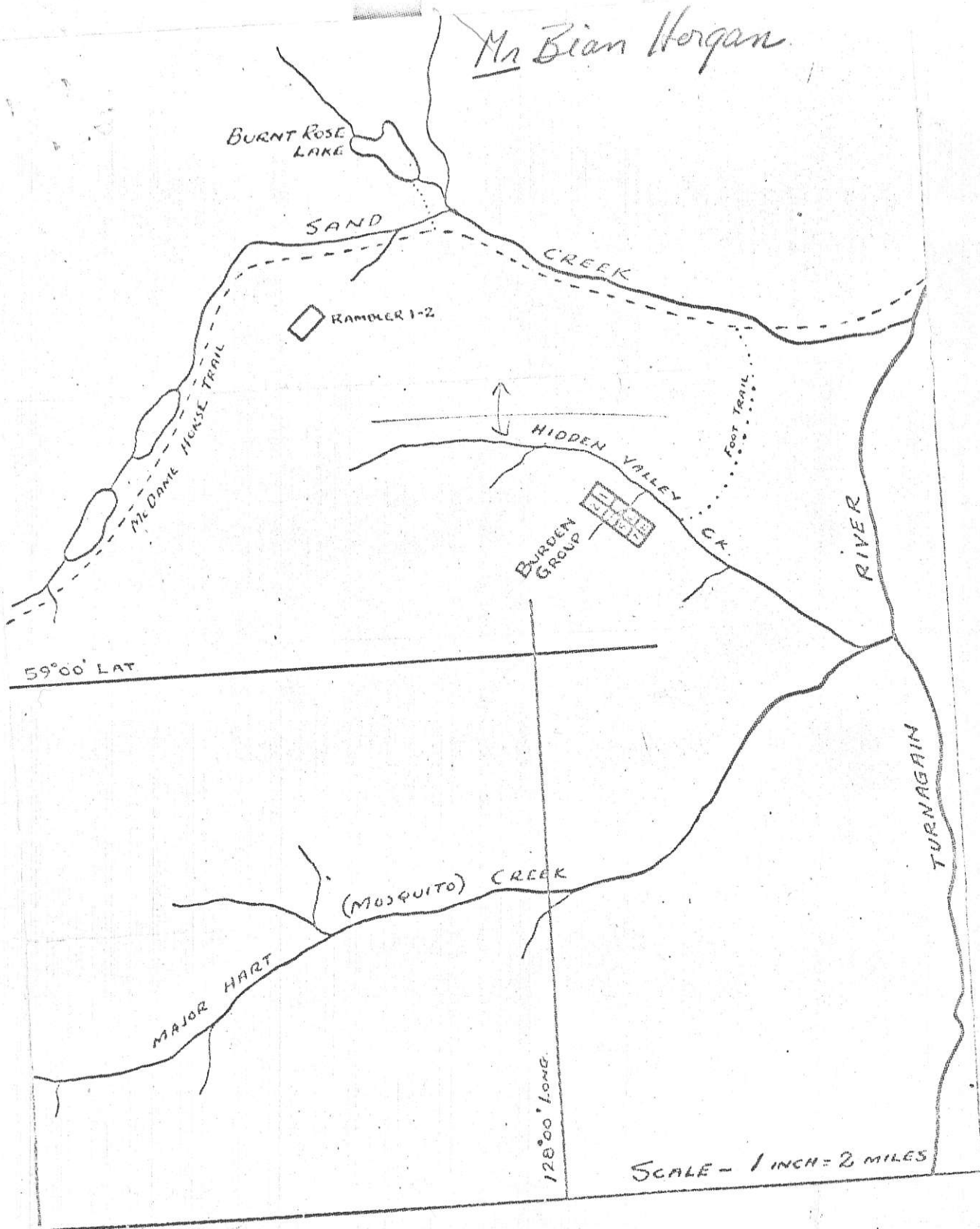
The discovery on Hidden Valley Creek is reported to consist of chalcopyrite mineralization across widths as great as 40 feet, and traceable for 2000 feet. The gangue appears to consist of ankerite and quartz, and a little galena occurs locally. No further data are available.

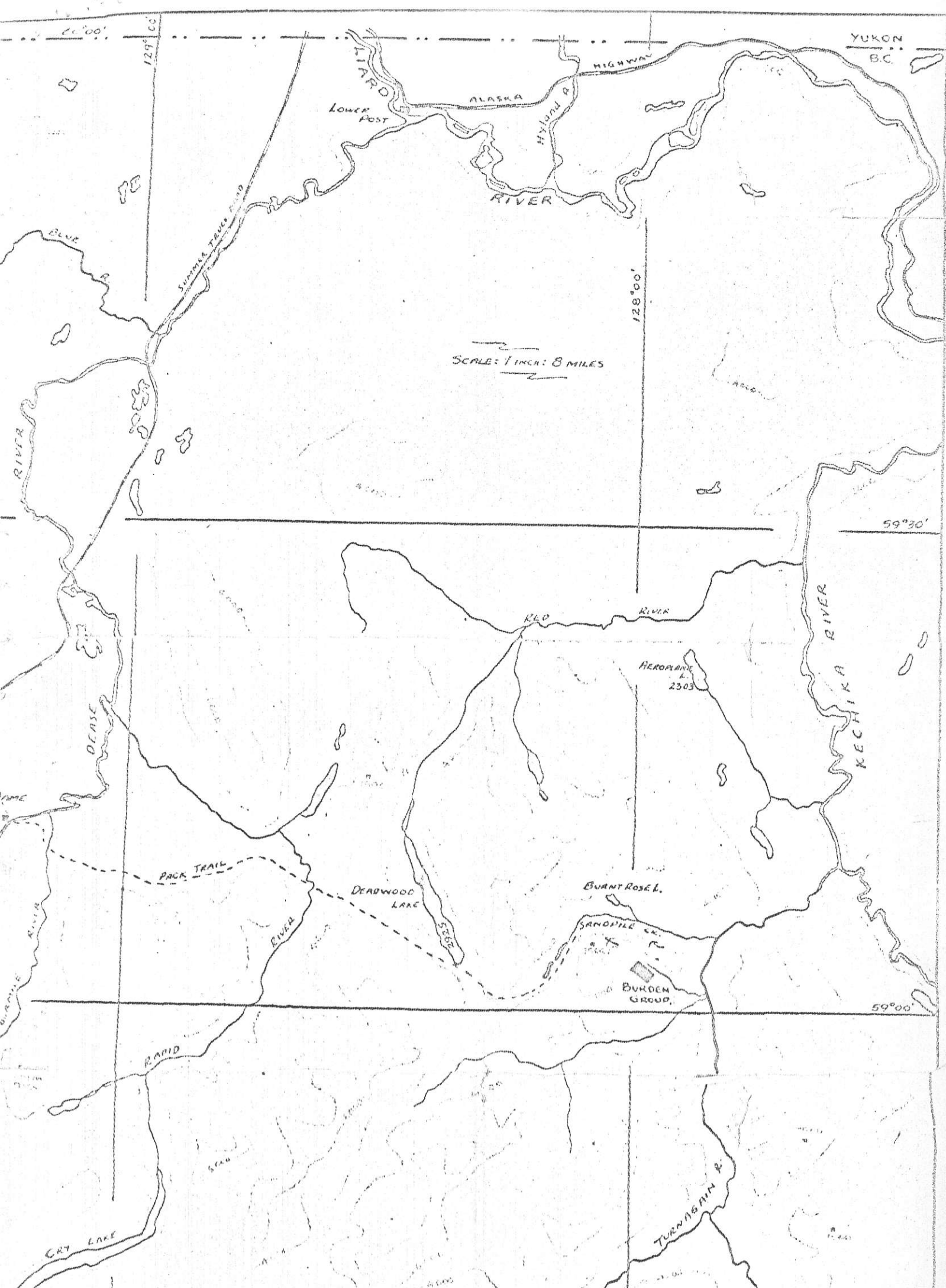
It should be noted that the batholithic contact makes a sharp bend abreast of Dall Lake. The country adjacent to or radial to this bend should make good prospecting ground for some miles, particularly as there is in it a considerable diversity of rock types and structures.

1/2 D. W. H. H. Helicopter from Wash. LA



Mr Brian Horgan



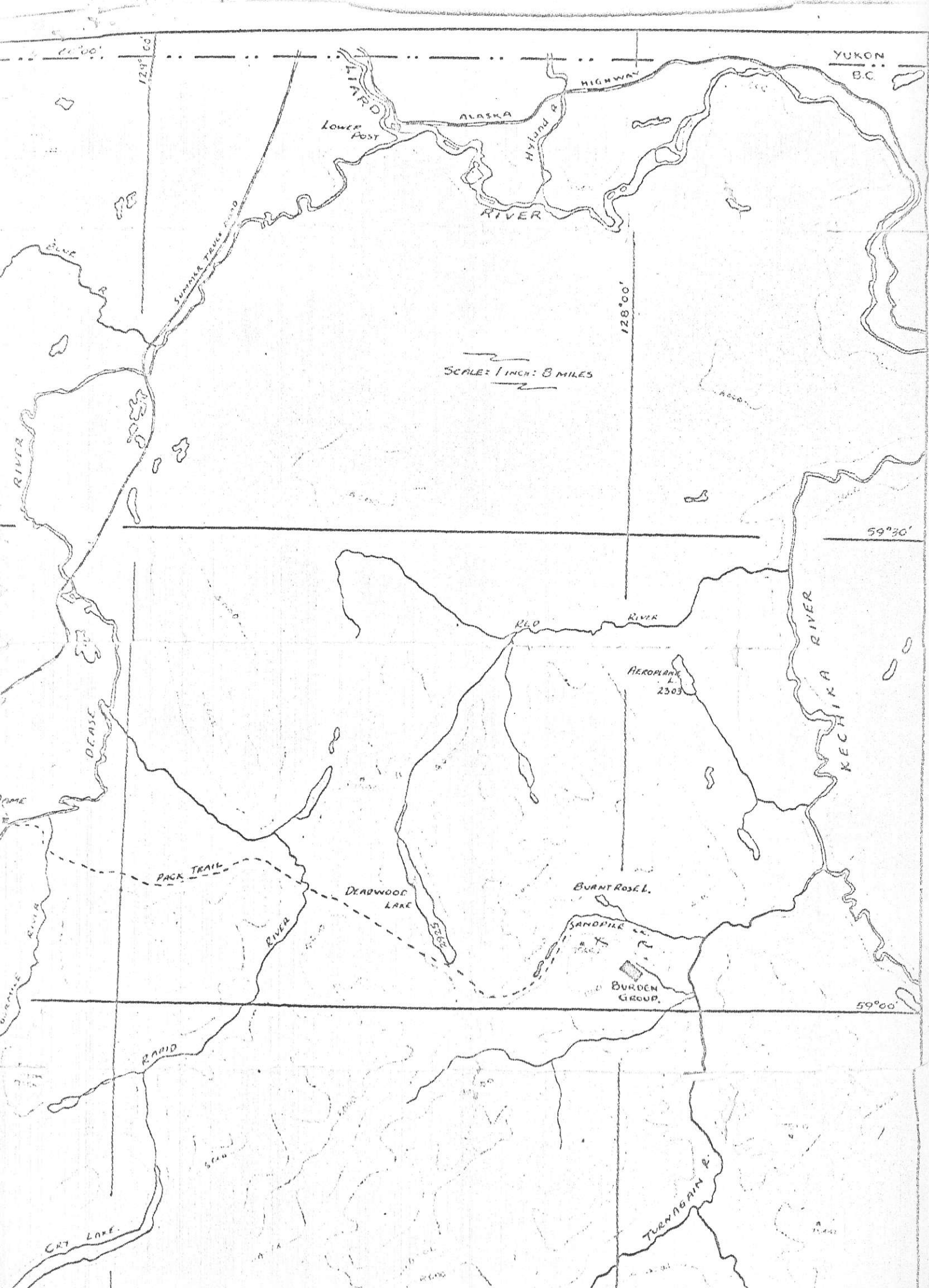


DRAWN BY		TRACED BY G.M. MOORE	
REVISED BY	DATE	REVISED BY	DATE

THE
**CONSOLIDATED MINING &
 SMELTING CO.**
 OF CANADA LTD.

PROPERTY:
BURDEN GROUP
 LOCATION & CLAIM MAP.
 SCALE AS SHOWN

AREA: STIKINE RD. B.C. DATE: Oct. 31/50 | PLATE 1



DRAWN BY		TRACED BY G. M. MOORE		THE CONSOLIDATED MINING & SMELTING CO. OF CANADA LTD.	PROPERTY: BURDEN GROUP	
REVISED BY	DATE	REVISED BY	DATE		LOCATION & CLAIM MAP:	
				AREA: STIKINE M.D. B.C.	SCALE AS SHOWN	
					DATE: Oct. 31/50	PLATE No. 1