

A.A.P. No.

100-1-4

ASSESSMENT REPORT
M. M. E. A. P.
CONFIDENTIAL
OPEN FILETYPE OF
WORK:

Geology

REPORT FILED UNDER	T. McKay	DOCUMENT NO.	062120
DATE PERFORMED	1900-1917, 1913	DATE FILED	July 18, 1913
LOCATION - LAT	64 02 N	AREA	Cement Creek, Yukon
LONG.	135 44 W		
CLAIM NO			
VALUE \$			
WORK DONE BY	H. S. Bestock		
WORK DONE FOR	Geological Survey of Canada		
REMARKS	A brief report on the scheelite discovery east of Dublin Gulch. Assays ranged up to 0.15% W Co ₂ with minor gold and silver. An area amiable to placer mining contained 0.2 : /yd scheelite.		

The discovery of contact altered rock containing scheelite was made in this area by R. M. Thompson September 1st, 1942. At that time he was temporarily in charge of the Geological Survey party. A few days later the party reached Mayo and the prospectors who had been working for the party were discharged from their jobs and paid off. They returned to the area and staked the discovery and much of the surrounding area. The discovery, being on the north side of a ridge above timber, was difficult to prospect as early snow soon covered it and only a small cut was made in the slide rock at the highest point to which the scheelite could be traced before winter set in. Mr. D. W. Cameron of Ventures Ltd. visited the strike in the third week of September. Material brought out from the strike by the owners and by the Geological Survey party, picked from the talus and inspected under the ultra-violet light assayed from 3 to 8.15% WO₃ with a maximum of a little over \$4.00 in gold and silver. When spring came this is all that was known about the discovery. (No one had the strike of the ore right or its thickness.)

When the Geological Survey party reached the locality on June 20th there was little more to see. Mr. T. McKay who had bought the claim covering the discovery from J. J. Winter had just begun to clean out the first cut with the help of one man. As soon as the camp was set which took more time than estimated owing to the straying of the only available horses a detail planetable map on a scale of 400 to 1 inch with 25 foot contour interval was begun of the area immediately surrounding the discovery. The accompanying tracing paper map is a part of this. At the same time a map covering the area containing the granodiorite bodies was begun on a scale of $\frac{1}{2}$ mile to 1 inch with 200 foot contours. In addition the one prospector on the Geological Survey party, a man of 73 years of age, was sent the problem of finding out what areas on and around the granodiorite contained the most scheelite in the soil. It had been intended to get 2 prospectors but another suitable man could not be found. It was also intended to do some trenching to assist in the prospecting for the continuation of the showing but Mr. Ernest Corp, the prospector, was too old for such physical work. He proved to be thoroughly experienced with the pan and he has shown up the presence of an area which contains about 0.2 lb/yd and perhaps containing about 15 to 20 tons of scheelite which could be got out by placer mining. Unfortunately there is very little if any gold with it. His work also shows that the scheelite is confined to a zone in and around the east end of the main body of granodiorite.

The breaking of the knuckle of one of the planetable tripods slowed up the work and necessitated making of the detail map first.

This mapping with the work done by McKay now gives a fair idea of the nature of the contact deposit. It lies in a bay in the north side of the granodiorite body near the east end. This bay is mainly composed of mica quartzite showing bedding only vaguely and when it does the bedding is in places much contorted. In the main, however, it has a strike of 10 to 20 degrees and a dip of about 25 degrees east. Even in good areas of outcrop it is impossible to trace a single bed of quartzite more than a few feet. Most of the area as shown by the map is soil and rock or just slide rock.

A few yards west of trench 1 (on the map) which marks the place of the original discovery the quartzite outcrops with some limestone beds at the bottom of the outcrops. The only other place where such beds outcrop is about 200 lower and down the slope to the north. In both places the bedding is well shown. There is some alteration but no scheelite. Trench 1 shows at the inner or uphill end limy beds with no scheelite for a few feet ending on the inner end with slide rock then $3\frac{1}{2}$ feet of "ore" measured across what seems to be the bedding. (This, however, is uncertain so that the true thickness may be less.) This is followed by 3 feet of barren lime and then 5 feet more "ore" followed by more lime and mica quartzite with no scheelite. This remains the best showing. Sample (1) being sent in for assay is from the outer 3 feet of ore and sample (2) from the inner $3\frac{1}{2}$ feet. They are made up of pieces knocked off as uniformly as possible across these widths but should not be regarded in the strictest sense as channel samples. Sample (3) was taken in the same way.

Southwestward there is no sign in the outcrops or in the loose rock or over the top in float of the continuation of this limy horizon. McKay has, however, followed it eastward down the slope with some success and has picked up some limy rock and ore at 2, but through a block shows that the ore is 3 feet thick here

where this has come from which must be close. He has not got it in place yet. Sample (3) is from the "ore" float here. At trench 3 he has some limy beds but seems to be below the ore horizon but close to it as there is some of the alteration in the beds of this trench typical of that at trench 1. Sample (5) was taken here from a rich seam about 6 inches thick. This trench exposed 80 feet of limy beds with some alteration but only this 6 inches of scheelite bearing rock. At 4, which is about 1,000 feet horizontally from 1, he has found some loose "ore". A piece crushed and panned gave 2.77% scheelite and two good sized colours of gold. This piece of rock was weathered and pitted and the gold may have been a residual concentration. Limy beds at 4 resemble those of 3 and I think he is still under the ore horizon. There isn't any other scheelite bearing contact rock that we could find in float or otherwise in the area covered by the map. There seems to be just this one bed favourable for alteration and mineralization on this hillside. The general lack of suitable rock for this type of deposit is discouraging for this locality yet if the values in trench 1 are sufficient to make ore there it is quite possible that a mineable thickness of this ore may continue down the hill eastward and in toward the granodiorite. To my mind much depends on what samples 1, 2 and 3 give. I think the fault is rather more than a probability as a lamprophyre dyke seems to be cut off by it too but it is awfully hard to tell with such beds and all the slide rock. If there are ore bodies to be found under the slide rock why don't we find more ore float in the slide? There is a good tail of blocks of ore from the discovery showing. This question is the most discouraging one suggesting as it does that the discovery showing is the only one of consequence.

In the granodiorite south and southeast of the little area covered by the enclosed map there are numerous little pegmatites and little fractures and seams with rusty spots along them. I collected chips from a dozen or so and found scheelite in almost all. I crushed, weighed and panned 100 gms and got 0.2% scheelite out of these little pegmatite chips. One can pan scheelite out of this part of the granodiorite area almost anywhere but in the west end of the stock or body (It is quite small, 3 miles long about) the few pegmatites there are carry nothing and the same with the soil. Across the granodiorite SE from the "strike" there is a little scheelite on the other contact but though a man named J. Hawthorne founded and says he has a 2.00 % assay from it there doesn't seem to be much and the beds are cut off on one side by the granodiorite on the other side covered by slide.

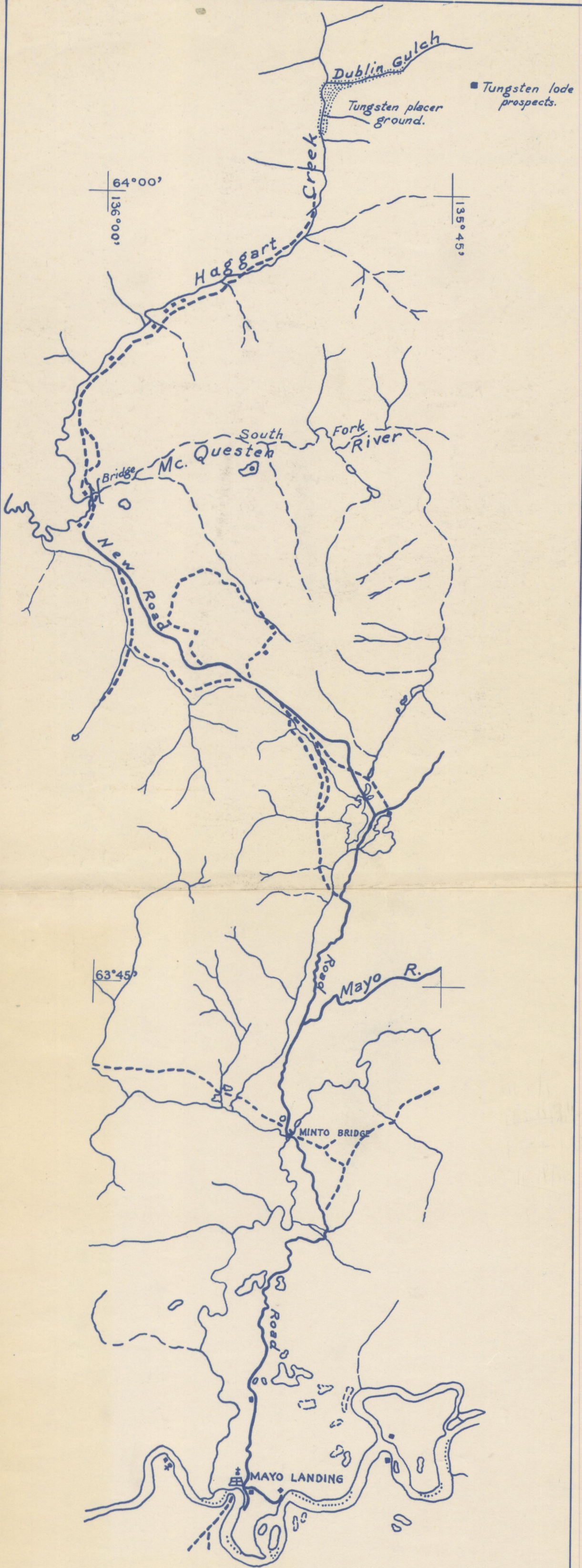
I omitted to say that pyrrhotite is the chief sulphide and a little chalcopyrite and molybdenite are also present in the "strike" ore.

There is undoubtedly a fair amount of scheelite in the soil and down the gulches but not as much as at Dublin Gulch area and it would be much harder to work. Only the small area mentioned which contains perhaps 100,000 cu. yds. at about 1/8 lb./yd. could be called workable by normal placer methods. The rest of the ground would require considerable expense to work. There is very little gold with the scheelite in this area.

On Hight Creek which heads near the granodiorite one placer miner Ed. Bleiler is saving some scheelite but has not brought any out yet.

There is scheelite all down Johnson Creek into which Scheelite gulch or creek runs. For an emergency some of the ground along it might be worked for it but it does not appear to be nearly as good or as extensive as the ground bearing scheelite along Dublin Gulch and the lack of gold would make a great difference.

"Hugh S. Bostock"
July 18, 1943.



Traced from Plan
 by
 Dr. H.S. Bostock
 1941
 Scale - 2 miles = 1 Inch.

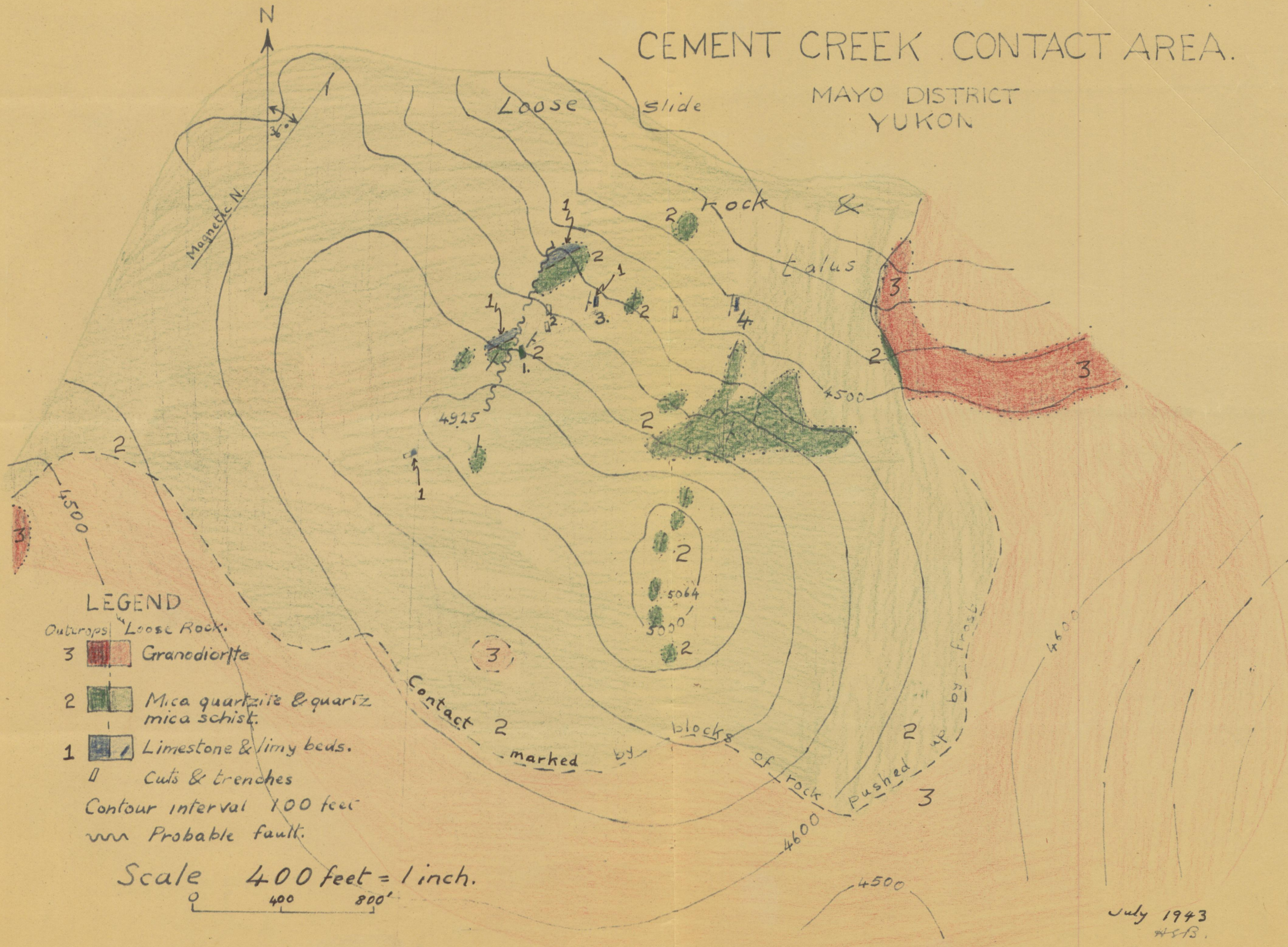
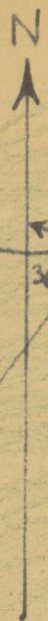
CEMENT CREEK CONTACT AREA.

MAYO DISTRICT
YUKON

Loose slide

Rock & talus

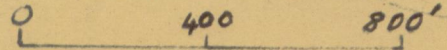
Magnetic N.



LEGEND

- Outcrops
- 3 Granodiorite
- 2 Mica quartzite & quartz mica schist.
- 1 Limestone & limy beds.
- ▮ Cuts & trenches
- Contour interval 100 feet
- ~ ~ ~ Probable fault.

Scale 400 feet = 1 inch.



July 1943
H.S.B.