

## CARIBOU CREEK AREA

### General:

DeWitt's contention with respect to this area was that serpentine was present over a fairly large area in the vicinity of the forks of Caribou Creek where the Bulletin No. 39 map shows andesitic tuff breccia. He made no pretense of being able to define the bounds of the serpentine as he did in the instance of the basalt occurrence in the Boulder Butte-Indian Rock area, but he was very positive that the serpentine covered a significantly large sized area insofar as mappability went. Furthermore, he stated that his uncle had once mined chromite from this serpentine and the serpentines' existence was common knowledge amongst the local prospectors with whom he had discussed the situation.

The field work attendant to this phase of this investigation was made by the writer alone. In fact, DeWitt did not know that the writer made this check until after it was finished.

Access to the area was accomplished by hiking. The route traversed started from the forks of Vincent Creek (the first north of the 2nd parallel) and extended westward across the divide to the fork on Caribou Creek. A wide circle was made in the Caribou forks area, and the return to Vincent Creek was effected over a more northerly route than that taken on the trip in.

### Geologic Observations:

Serpentine is present on Caribou Creek as per the DeWitt report. While no attempt was made to trace and map the bounds of this occurrence, a sufficiently large sized traverse was made to establish that the occurrence was of mappable

proportions. It is generally well exposed, and in places conspicuously so.

Although the specific objective of this trip was to check on the validity of the DeWitt contention relative to serpentine in the area named, the trip served to disclose that various other pre-Tertiary formations were also exposed in the region at large. Briefly, argillites and greenstones and the serpentine constituted the exclusive formations observed on all parts of the terrain traversed. These formations are well exposed by both natural outcrops and old prospect pits and trenches which exist in considerable numbers. The soil mantle is for the most part comparatively thin, native to the bedrock and characterized an abundance of fragments thereof. At no time was any andesitic tuff breccia seen in the area traversed although the presence of such is indicated by the Bulletin No. 39 map. In other words, this traverse showed that the pre-Tertiary formations are exposed continuously from Vincent Creek to Caribou Creek, and that the exposure of these rocks is therefore far larger and more complex in nature than was indicated by DeWitt's original criticism.

Subsequent to the writer's field examination of this situation a letter (September 12, 1950) was received from Mr. DeWitt. It stated that Ray Stithem had visited the Caribou serpentine occurrence; that Stithem had traced the serpentine from a point east of Caribou Creek to another west of Little Boulder Creek; that the occurrence is over half a mile wide in Caribou Creek; that the belt as traced measures 2 miles long by the Bulletin No. 39 map scale; and finally, that Stithem found no asbestos during his trip.

It is to be noted that this Stithem report covers territory extending westward from Caribou Creek as contrasted to the terrain covered by the writer, or in other words, that the two sets of observations overlapped only in the Caribou Creek area. It may also be appropriate to note that

at the time he wrote this letter DeWitt did not know that the writer had already made his own visitation to the area. At any rate, since the Stithem report extends the serpentine exposure deep into territory not visited by the writer, and since the writer's investigation has confirmed the presence of serpentine on the Caribou Creek end of the Stithem-described belt, this Stithem report is of material significance to the subject under discussion.

While the writer is not in a position to vouch for the accuracy of the reported situation in the area extending westward from Caribou Creek, there are some considerations with which he is familiar which do serve to contribute a measure of added authority to the Stithem reported findings. Briefly, Stithem is the owner of mining claims covering an occurrence of chrysotile in a body of serpentine and genetically allied rock situated near the head of Big Creek (on the south central portion of the Bulletin No. 39 map). The writer visited these claims earlier this year in the company of Stithem and a field engineer of the Asbestos Corporation of Canada. Incidentally this company has since done some prospect work on these claims and is tentatively planning to do more in the coming spring. It can also be stated that Stithem is owner of other mining property in the area and that he is further to be identified as a resident miner-pro prospector of many years standing. In short, the man is acquainted with at least some phases of the local geology and is familiar with the serpentine family of rocks. His reported findings should therefore merit recognition here, especially so since they were confirmed in the instance of the Caribou Creek end of his described area.

**SUMMARY:**

By way of summarizing this discussion of the CARIBOU CREEK AREA it can be said that this investigation showed that serpentine constitutes the prevailing rock type present in the Caribou Creek valley in the neighborhood of the forks; that other pre-Tertiary formations are exposed in the area extending eastward from the serpentine exposure to Vincent Creek; and finally, that there is reason (in the form of the Stitham report) to believe that the serpentine exposure extends an appreciable distance westward from Caribou Creek.

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**CONCLUSIONS:** This investigation has served to show that the specific criticisms regarding the accuracy of the geologic map under discussion are in all instances valid. It has also served to disclose that the areas of erroneous mapping are larger and more complex in nature than was claimed by the various complainants. That the task of effecting corrective re-mapping is one which will require a very considerable number of days and a very great deal of legwork, is also evident.

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This examination made under directive from Mr. F. W. Libbey  
Report by N. S. Wagner, December 13, 1950.  
Date of Boulder-Indian Rock area examination, August 19-20-21, 1950  
Date of Caribou Creek area examination, September 7, 1950.  
Informants, As named in report.