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REPORT  
ON  
EXPLORATION PROGRAM  
1960 SEASON  
FRASER RIVER FAULT

=====  
New Westminster

MINING DIVISION

Earl Dodson  
Geologist

~~ENGINEER~~

EXPLORATION PROGRAM 1960 SEASON

FRASER RIVER FAULT PROJECT

NEW WESTMINSTER MINING DIVISION

BRITISH COLUMBIA

by

EARL DODSON

INTRODUCTION:

The Fraser River Valley in the vicinity of Hope and Yale was chosen as an area for early season work primarily because of:

Accessibility: The area is just over one hundred miles from Vancouver and the lower slopes are clear of snow by the end of March.

Geology: A large fault hitherto unmapped cuts the rocks west of the Fraser River. These rocks include the Custer granite gneiss, the Coast intrusives and Paleozoic (Carboniferous?) to Cretaceous sediments.

Mineralization: Ultrabasic rocks west of the fault contain the Pride of Emory Nickel deposits presently being worked by Giant Nickel Mines Ltd. In addition a former small but high grade silver producer is located in Cretaceous sediments adjacent to the projection of the fault south of the area on Silver Peak.

PROGRAM:

The area worked is adjacent to the Trans-Canada highway and is crossed by many logging roads. Two to three men were employed from late March to mid April in checking

float in the creeks, traversing the logging roads and generally prospecting the zone adjacent to the fault. Where necessary spot checks were made with the soil-testing kit for anomalous amounts of base metals but no systematic program of soil-sampling was carried out. In this way a strip extending along the west side of the Fraser River from Hope to Alexander Bridge was checked.

GEOLOGY:

At about the time of the conclusion of field work in the Fraser River area, P. B. Read, a student at the University of British Columbia, submitted a thesis for the degree of Master of Science titled "Geology of the Fraser River Valley Between Hope and Emory Creek." This thesis deals with the southern portion of the area here under consideration.

According to Read the Fraser River Valley at this point is a graben. The rocks in the down-dropped blocks form a much-faulted anticline parallel to the Fraser River. The fault marking the west boundary of the graben, Read's "Hope Fault" is our "Fraser River Fault." Field evidence suggests that it is a steep normal fault.

West of the graben the rocks include schists of the Chilliwack group and granodiorite and related rocks of the Coast Intrusives. The trace of the Hope fault itself is largely obscured by glacial and fluvio-glacial sediments, but locally at least it contains small bodies of ultrabasic rock varying from hornblende to serpentized peridotite.

Throughout much of the area a narrow band of Lower Cretaceous Jackass Mountain Group conglomerates lie directly east of the fault. These conglomerates appear to overly unconformably the Custer granite gneiss which lies again to the east.

The Custer granite gneiss is a much-sheared, highly-banded, sometimes pegmatitic gneiss believed to represent an older intrusive. The gneiss is the oldest rock in the sequence as exposed in this area.

#### ECONOMIC GEOLOGY:

In choosing the area it was assumed that the fault and its subsidiaries might have acted as either ore-channels or actual loci of deposition. To date no mineralisation of consequence has been discovered. However, the ultrabasic bodies found in the fault locally carry minor amounts of short-fibre chrysotile of good quality but nowhere in sufficient quantity to be of value. Further, large masses of mariposite-bearing carbonate rock are developed in several places. Little quartz is associated with these and precious metal values are low or lacking. Several small showings of lenticular quartz-veins occur in schists of the Chilliwack group west of the fault. These locally contain very low values in precious metals.

Andalusite and kyanite are developed in the schists but nowhere in sufficient concentration to indicate a potential source of ceramic material.

RECOMMENDATIONS:

In view of information on hand at this time no further work is recommended in the immediate area of the 1960 work. Beyond the boundaries of the original area some further work seems advisable.

Southeast of Boston Bar at an elevation of about 4000 feet a body of granodiorite is shown within the belt of serpentine rocks. This warrants at least a cursory examination to determine the probability of asbestos development in the serpentines. A preliminary check of this area could perhaps be combined with an examination of a reported iron prospect on Ainslie Creek nine miles north of Boston Bar.

Along the southern extension of the fault some effort will be made to locate any points of intersection with other major breaks. This will be done by stereoscopic examination of air-photos in conjunction with work on project Owikene.

Vancouver, B. C.

January 15th, 1961

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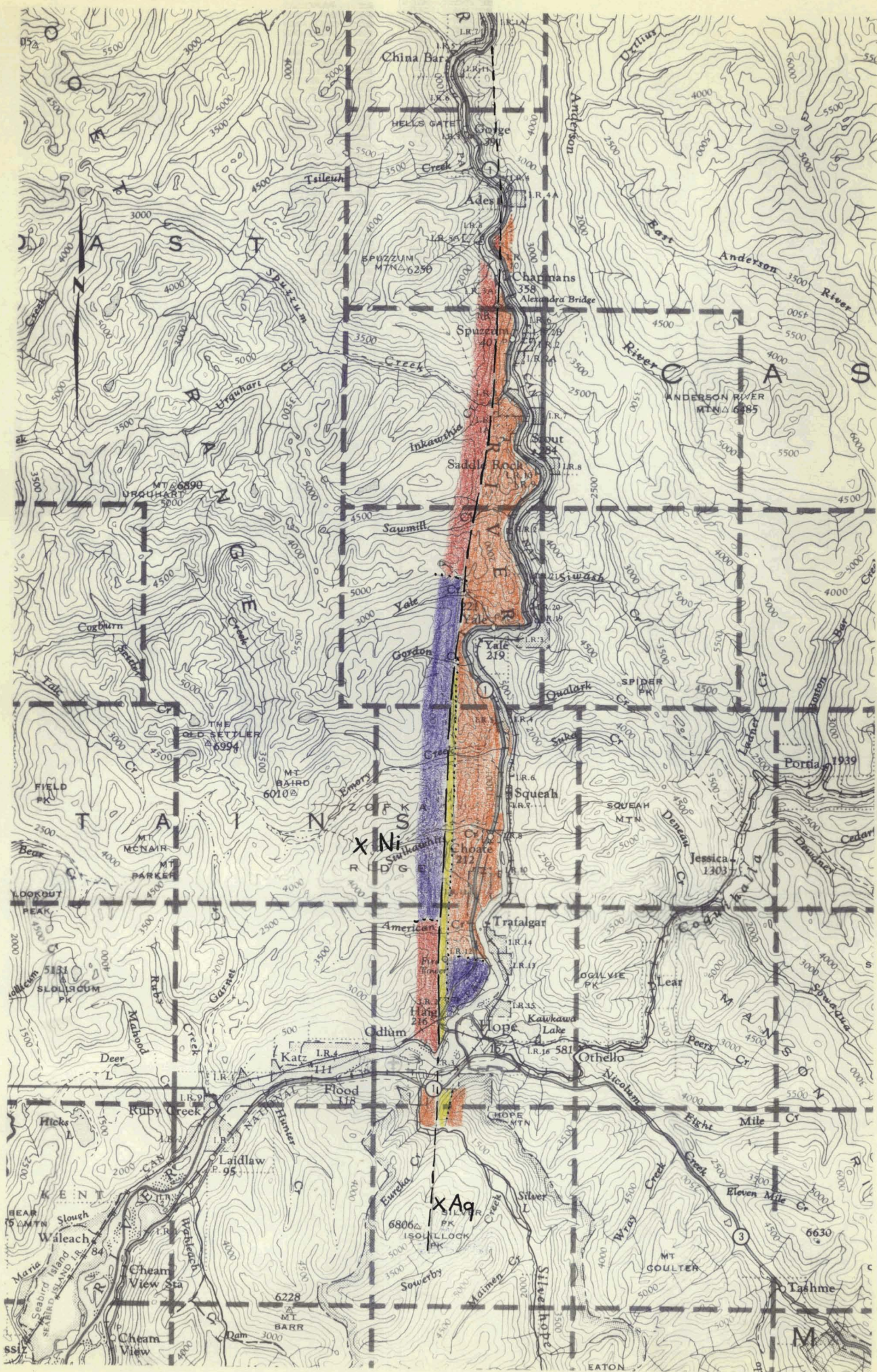
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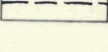
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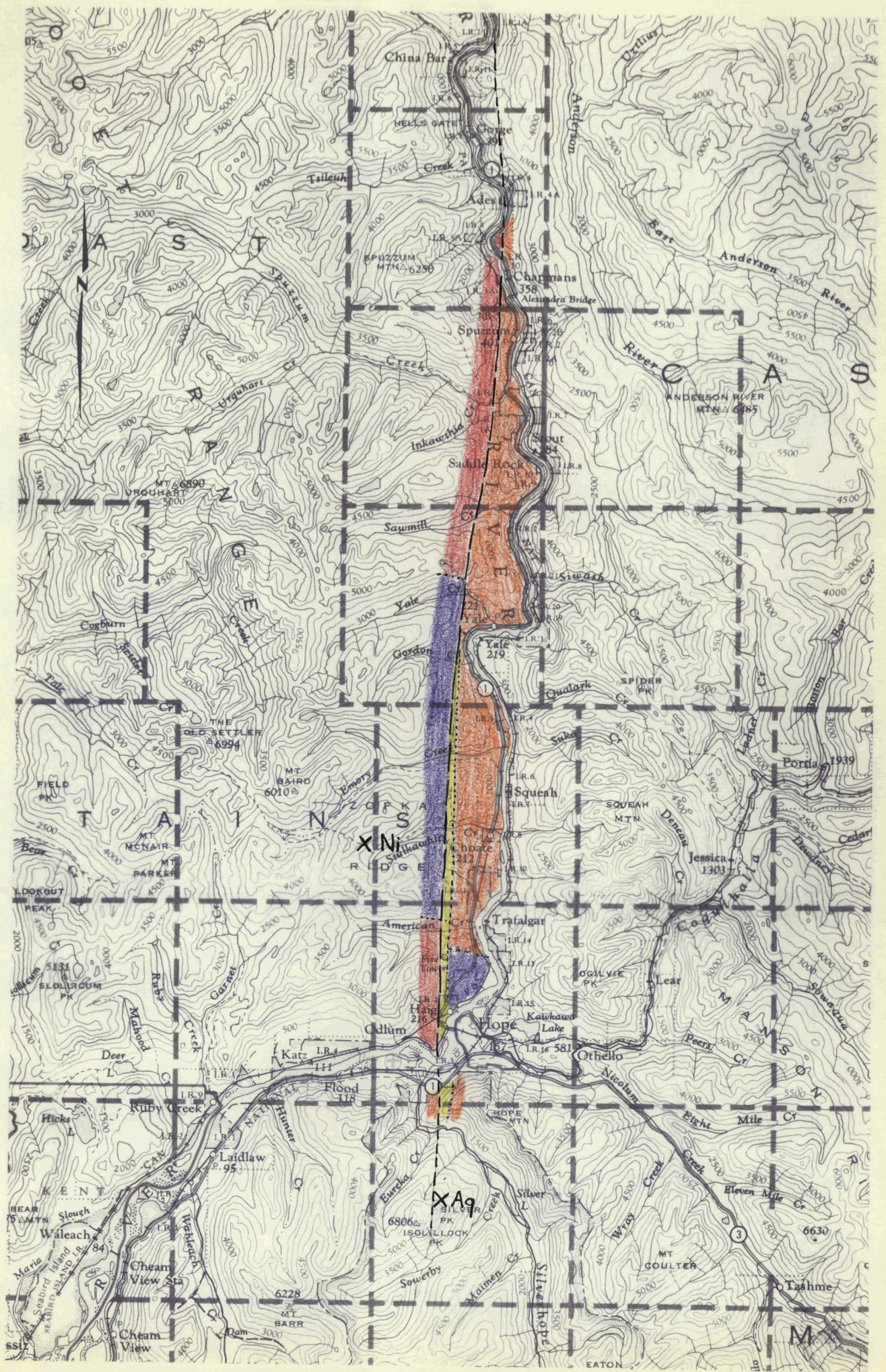
Earl Dodson



# FRASER RIVER FAULT

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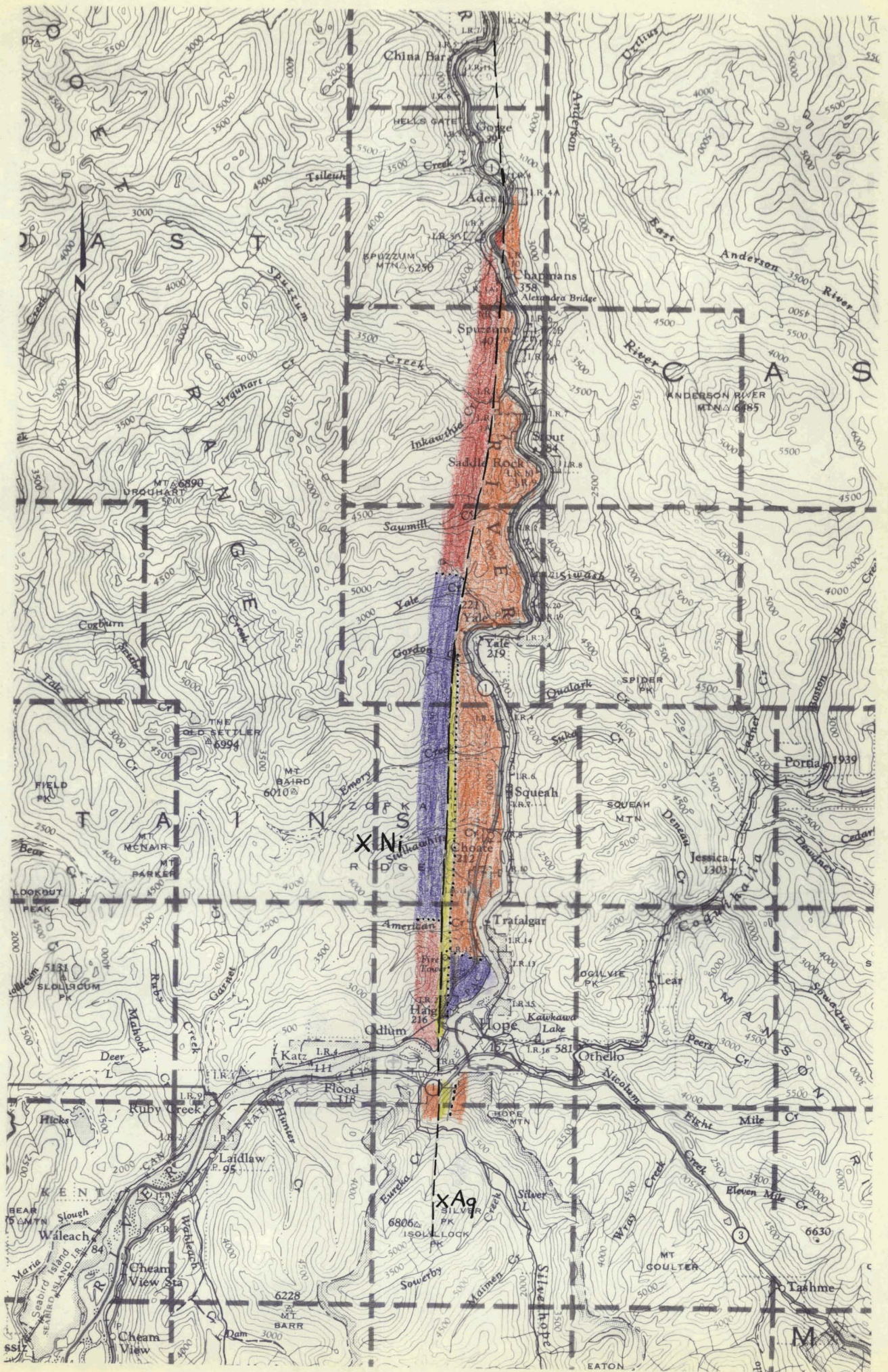
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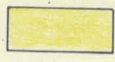



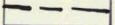
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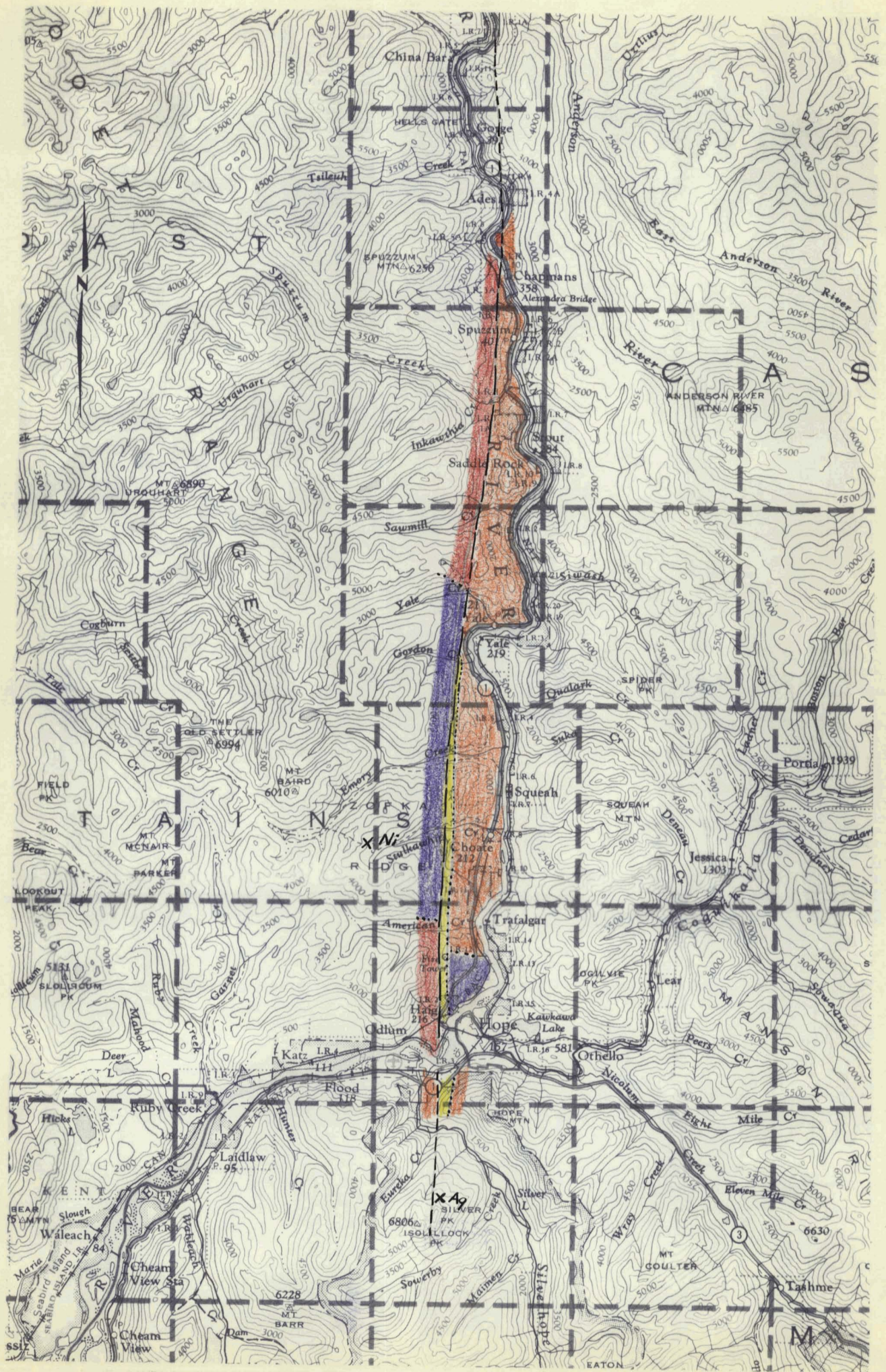
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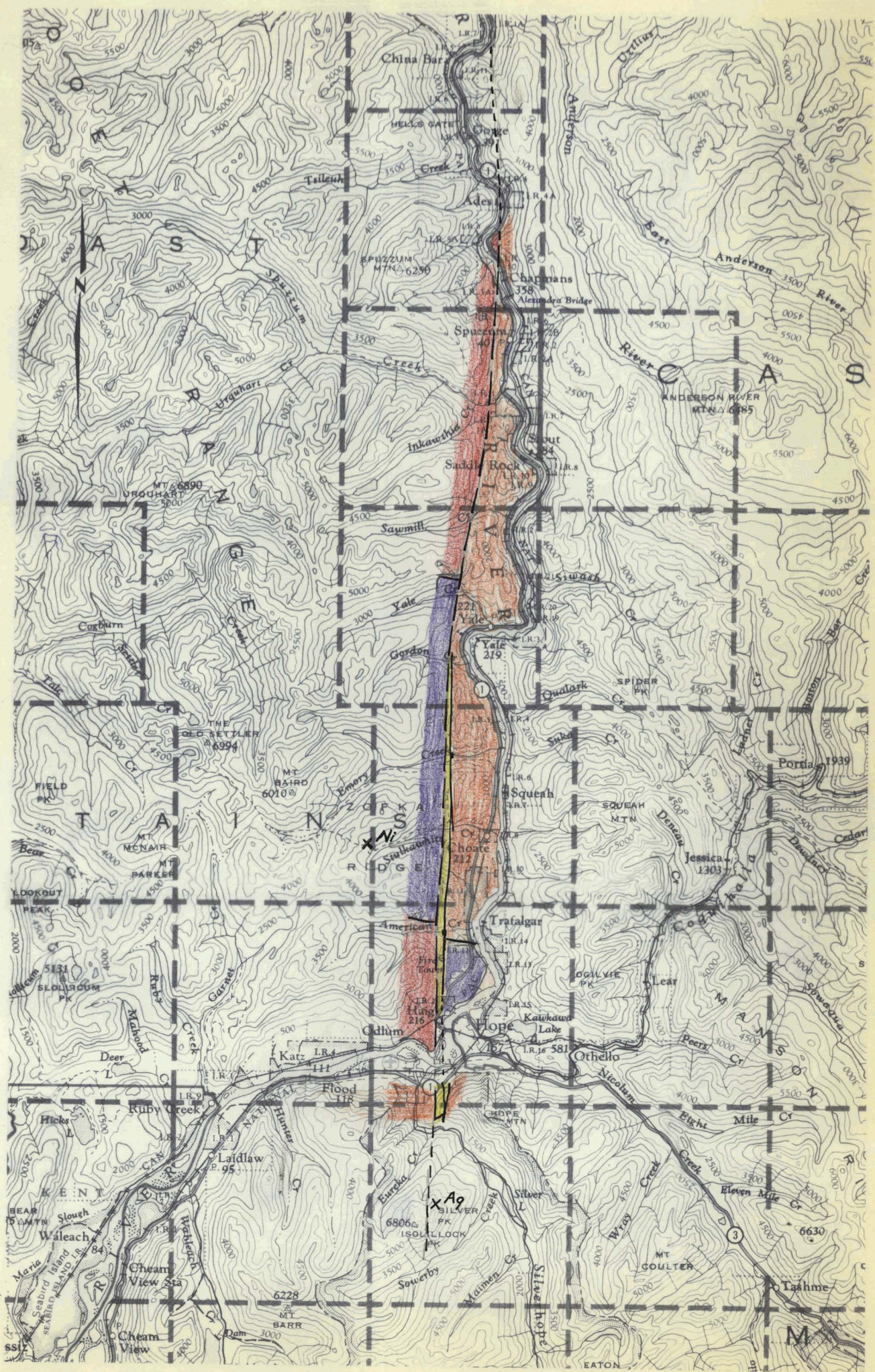


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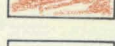
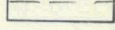
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