## INTERSTATE COMMERCE COMMISSION.

REPORT OF THE CHIEF OF THE BURDAU OF SAFETY IN PE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE NORTHERN PACIFIC RAILWAY NEAR WYMER, WASH, ON AUGUST 25, 1322.

September 14, 1922.

To the Commission.

On August 25, 1922, there was a derail ment of a passenger train on the Northern Pacific Railway near Wymer, Wash, resulting in the death of 1 employee and 2 trespassers, and the injury of 2 mail clerks and 2 employees.

Location and method of operation.

This accident occurred on the Second Sub-Division of the Pasco Division, extending between Pasco and Ellensburg, Wash, a distance of 125.8 miles; in the vicinity of the point of accident this is a single-track line over which trains are operated by time-table, train orders, and an automatic blocksignal system The accident occurred about 2 miles west of Wymer; approaching this point from the east there are several short curves and tangents, followed by a 5-degree 50-minute curve to the right 982 feet in length, the accident occurring on this curve at a point 134 feet from its eastern end. grade is practically level. At the point of accident the track is bordered on the north by the Yakima River, and on the south by a large bluff, about 200 feet in height, which rises abruptly from a point 15 feet from the south rail. On account of the bluffs, the view is very much restricted. The weather was clear at the time of the accident, which occurred at about 3.47 a.m.

## Description.

Westbound passenger train No. 1 consisted of 1 mail car, 1 baggage car, 1 coach, 1 tourist car, 1 dining car, 4 Pullman sleeping cars, and 1 observation car, all of all-steel construction, nauled by engine 2159, and was in charge of Conductor Cooper and Engineman Jones This train passed Wymer, the last open office, at 3 43 a.m., 1 hour and 23 minutes late, and after having proceeded about 2 miles, struck a large rock, and was derailed while traveling at a speed estimated to have been about 25 miles an hour.

The engine truck axle was bent on the left side, causing the engine to be thrown against the bluff after which it crossed to the north side of the track, and came to rest on its right side, down an embankment, about 260 feet beyond the point of derailment. The first six cars were either wholly or partly derailed, but remained upright the mail car coming to rest against the bluff with the left corner of the forward end crushed in a distance of approximately 12 feet. The employee killed was the engineman.

## Summary of evidence.

Investigation developed that a large rock had fallen on the outside of the curve, coming to rest on the south rail Fireman Arnold had just finished putting in a fire and was reaching for the hose to sprinkle the coal when the accident occurred he said Engineman Jones was riding on the seat tox, looking directly anead, with his hand on the throttle, and he was of the impression that he did not see the rock as the rays from the headlight did not extend around the curve. None of the other members of the crew knew of anything wrong until the accident occurred.

The bluff in the vicinity of the point of accident is composed mostly of granite formation. The rock which fell had been located at the top edge of the bluff, and after breaking away, it fell straight down a distance of approximately 75 feet, where it struck softer earth, then slid, finally lodging across the south rail. The fresh break in the ledge, where the rock was originally located, was of fissure formation, and while the rock that fell was solid and very hard; there were crevices through the entire bluff separating other solid bodies similar to this, indicating that it was the original formation ently the supports were weakened by weather conditions to such an extent that they finally gave way. A piece of rock was found beyond where the engine came to rest, indicating that it had been struck by the engine, causing it to break at one of the fissures, and then rolled to that point The larger portion of this rock was struck on the side, having a tendency to push it away from the rail and partially bury it in the ground. It has been about 3 years since any rock has fallen at this point; there is no watchman stationed in this immediate vicinity, but there are watchmen stationed at other points where there is greater danger of rocks falling A track walker had passed this point in the afternoon of the day prior to the accident, and at that time nothing unusual was noticed.

## Conclusions.

This accident was caused by the engine striking a large rock which had fallen from the bluff and lodged on the south rail

The evidence indicates that the rock could not have been seen in time to avert the accident, although apparently Engineman Jones saw the obstruction when only a few feet away, as the throttle was found closed, the independent engine brake applied, and the air brakes were also applied in emergency.

All of the employees involved were experienced men; at the time of the accident they had been on duty less than 10 hours, after having been off duty 29 hours or more.

Respectfully submitted,

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Chief, Bureau of Safety.