

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2735
THE WESTERN PACIFIC RAILROAD COMPANY
REPORT IN RE ACCIDENT
NEAR ARCHIE, CALIF., ON
OCTOBER 26, 1943

SUMMARY

Railroad: Western Pacific
Date: October 26, 1943
Location: Archie, Calif.
Kind of accident: Collision
Trains involved: Cut of cars : Freight
Train numbers: : Extra 209 West
Engine numbers: : 209, 203
Consist: 28 cars : 67 cars, caboose
Speed: Standing : 25 m. p. h.
Operation: Timetable and train orders
Track: Single; 1^o curve; practically level
Weather: Cloudy
Time: About 8:31 p. m.
Casualties: 1 killed; 5 injured
Cause: Runaway cars occupying main track

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2735

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS
UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910.

THE WESTERN PACIFIC RAILROAD COMPANY

December 4, 1943.

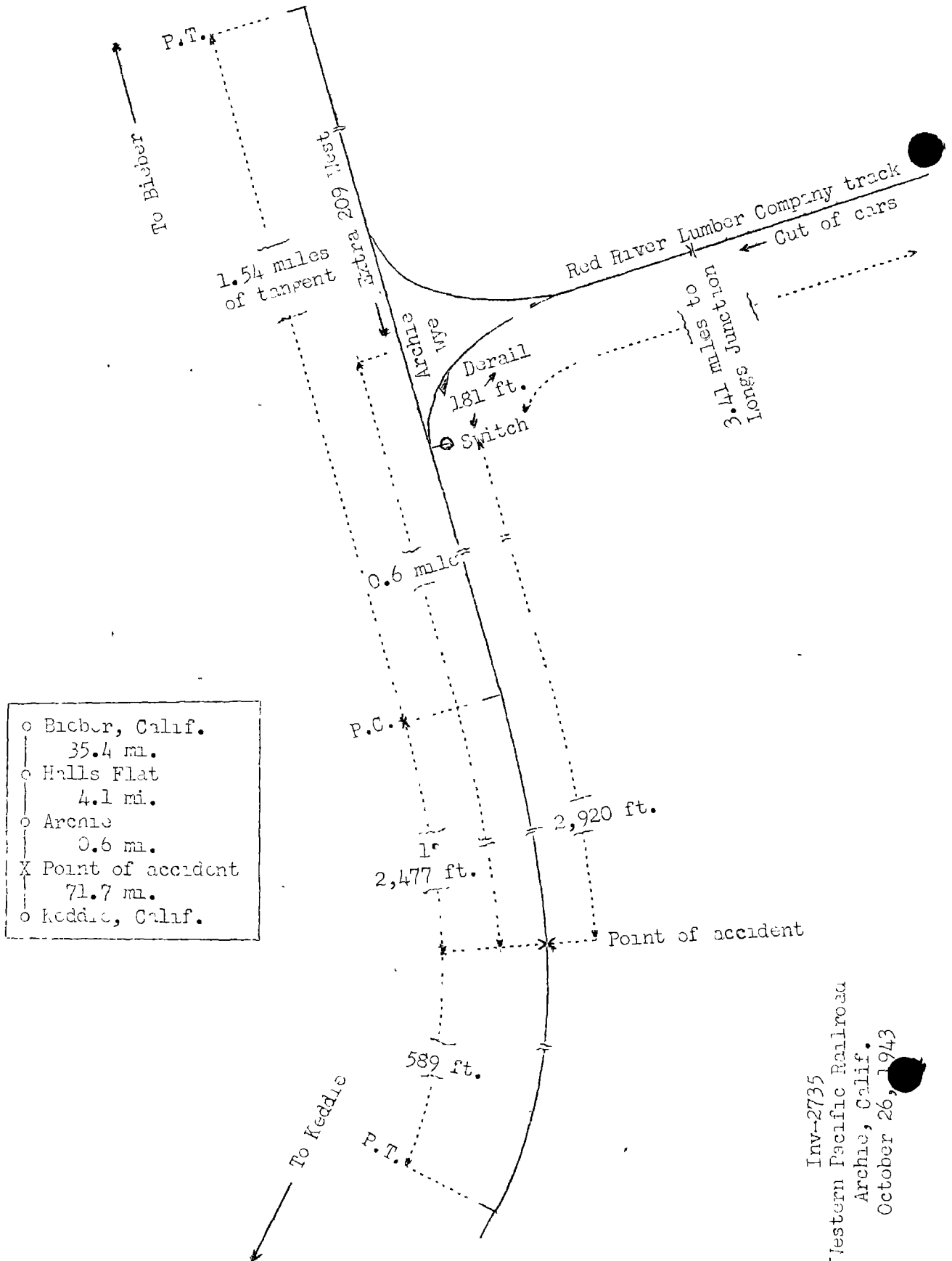
Accident near Archie, Calif., on October 26, 1943, caused
by runaway cars occupying main track.

REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On October 26, 1943, there was a collision between a
cut of runaway cars and a freight train on the Western
Pacific Railroad near Archie, Calif., which resulted in
the death of one employee and the injury of five employees.

¹Under authority of section 17 (2) of the Interstate Com-
merce Act the above-entitled proceeding was referred by the
Commission to Commissioner Patterson for consideration and
disposition.



Inv-2735
 Western Pacific Railroad
 Archie, Calif.
 October 26, 1943

Location of Accident and Method of Operation

This accident occurred on that part of the Western Division designated as the Fourth Subdivision and extending between Bieber and Keddie, Calif., 111.8 miles. This was a single-track line over which trains were operated by timetable and train orders. There was no block system in use. The accident occurred about 0.6 mile west of the telephone booth at Archie. From the east there were, in succession, a tangent 1.54 miles and a 1° curve to the right 2,477 feet to the point of accident and 589 feet beyond. The grade for west-bound trains varied between 0.70 and 1 percent descending about 2 miles, then there was a vertical curve 704 feet to the point of accident, where the grade was practically level.

About 2,920 feet east of the point of accident the west leg of a wye connected with the main track. Entry to the main track from this leg was made through a trailing-point switch for west-bound movements. A track used by the Red River Lumber Company connected with the tail track of the wye and extended generally southward to Longs Junction, 3.41 miles. Throughout this distance there were numerous sharp curves and tangents. The west leg of the wye was 900 feet long, and the curvature was 12°.

At Longs Junction and throughout a distance of 1,200 feet immediately south of the wye at Archie, the grade was 3 percent descending northward, and between these stations the grade was generally descending northward.

A hand-operated block-derail was located on the south rail of the west leg of the wye at a point 181 feet east of the main-track switch and 3,101 feet east of the point of accident. The normal position of this derail was for derailing. A deflector rail, about 25 feet in length and placed diagonally between the running rails, extended from a point near the gage side of the north rail to a point near the gage side of the south rail, and its receiving end was about 4 feet west of the derail. The switch was provided with a switch lamp located on the south side of the main track.

The maximum authorized speed for the freight train involved was 25 miles per hour.

Description of Accident

An engine of the Red River Lumber Company was assembling cars at Longs Junction when a cut of 28 empty logging flat cars was detached. Immediately afterward these cars ran away on the descending grade, broke the derail on the west leg of the wye at Archie, 3.41 miles distant, ran through the switch, and stopped on the main track of the Western Pacific, with the east end of the cut standing 2,920 feet west of the switch. Soon afterward the cut of cars was struck by Extra 209 West.

Extra 209 West, a west-bound freight train, consisted of engine 209, 9 loaded cars, engine 203, 55 loaded and 3 empty cars and a caboose, in the order named. At Bieber, 39.5 miles east of Archie, a terminal air-brake test was made, and the brakes functioned properly en route. This train departed from Bieber at 5:15 p. m., departed from Halls Flat, 4.1 miles east of Archie and the last open office, at 8:15 p. m., and while moving at an estimated speed of 25 miles per hour it collided with the cut of cars.

The first 16 cars at the east end of the cut were demolished. The rear trucks of the seventeenth and twenty-seventh cars were derailed. Engine 209 stopped upright, 550 feet west of the point of collision, about 30 feet north of the track and parallel to it. The tender stopped upright at the rear of the engine and at an angle of 45 degrees to it. The first 9 cars were derailed and stopped, badly damaged, at various angles to the track. Engine 203 stopped upright and diagonally across the track, with its front end 175 feet east of engine 209. Both engines were badly damaged. The first 4 cars to the rear of engine 203 were derailed.

From the right side of a west-bound engine the view of the flat cars in the reflection of the headlight was restricted to about 200 feet at the point where the accident occurred, because of track curvature.

It was cloudy at the time of the accident, which occurred about 8:31 p. m.

The front brakeman was killed. Both engineers, both firemen and the swing brakeman were injured.

Discussion

A cut of 34 logging flat cars had been standing on the spur track of the Red River Lumber Company at Longs Junction, 3.41 miles south of the connection with the Western Pacific Railroad at Archie. About 8 p. m. an engine of the lumber company coupled to the south end of this cut of cars. The

front brakeman applied hand brakes on the seventh to eleventh cars, inclusive, to the rear of the engine, then released the hand brakes on the first 6 cars. The conductor gave a lantern signal for the engine to bunch the slack against the seventh car, and two movements were necessary before the conductor was able to uncouple the sixth car from the seventh. Soon afterward the crew discovered that the cut of 28 cars was running away on the descending grade. No member of the crew was on these cars. The cut of 6 cars was placed on another track and the engine proceeded in backward motion toward Archie. Members of the crew thought these cars would stop before fouling the Western Pacific track. It was dark; therefore, the engine proceeded slowly, and the crew maintained a lookout. However, the cut of cars continued toward the junction, entered the west leg of the wye at Archie, struck the derail with such force that it was torn loose from its fastenings, ran through the main-track switch, proceeded westward on the Western Pacific main track, and stopped on a 1-degree curve to the right at a point 2,920 feet west of the switch and 2,477 feet west of the east end of the curve. A few minutes later the cars were struck by Extra 209 West.

As Extra 209 was approaching Archie, the speed was about 25 miles per hour, the headlight was lighted, and the enginemen were maintaining a lookout ahead. As the train passed Archie, the engineer made a 10-pound brake-pipe reduction to control the speed on the 1-percent descending grade, and, when the engine was a short distance east of the point where the accident occurred, he moved the brake valve to release position. Immediately afterward he observed by the light of the headlight the cut of flat cars about 200 feet distant, and moved the brake valve to emergency position. Before this brake application became effective the collision occurred. No other member of the crew of this train was aware that a collision was imminent until after it had occurred.

After the accident, it was found that the derail in the wye track was broken and torn loose, and the deflector rail was marked by a flange at its receiving end. The switch had been run through and the switch rods were bent so that the south switch-point did not fit against the stock rail; however, the switch lamp was not turned sufficiently to display a red aspect toward a train moving on the main track. Between the derail and the switch frog, flange marks appeared on the switch structure outside the north rail and inside the south rail. Marks indicated that derailed wheels had mounted the frog then dropped off to the south of the main-track rails at a point 10 feet west of the switch. Similar marks continued intermittently inside the north rail and south of the south rail

to the point where the second car from the west end of the cut stopped. After the accident no wheel of the most westerly car was derailed, but the rear truck of the second westerly car was derailed. Marks on the track structure indicated that the first car was derailed at the derail and became rerailed at the frog. Since the derail was torn loose from the ties it is evident that the cars struck it with considerable force.

Not more than 5 of the hand brakes of the runaway cars were applied at the time the separation between the sixth and seventh cars was made. After the accident, tests made at Longs Junction of hand brakes of 28 similar cars disclosed that the application of 5 hand brakes was not sufficient to hold the cars on the 3-percent descending grade at that point. The investigation disclosed that the Red River Lumber Company had issued no definite instructions about the number or location of hand brakes to be set, but had depended upon crews to apply enough hand brakes to hold cars from running away under conditions similar to those in the present case.

Cause

It is found that this accident was caused by runaway cars occupying main track.

Dated at Washington, D. C., this fourth
day of December, 1943.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.