INTERSTATE COMMERCE COMMISSION

WASHINGTON

INVESTIGATION NO. 3096

ST. LOUIS-SAN FRANCISCO RAILWAY COMPANY

REPORT IN RE ACCIDENT

AT ADA, OKLA., ON

APRIL 19, 1947

SUMMARY

Railroad:	St. Louis-San Francisco
Date:	April 19, 1947
Location:	Ada, Okla.
Kind of accident:	Derailment
Train involved:	Work train
Train number:	Work Extra 1263
Engine number:	1263
Consist:	29 cars, caboose
Estimated speed:	5 m. p. h.
Operation:	Timetable, train orders and automatic block-signal system; siding
Track:	Siding; 1°59.5' curve; 0.9 percent descending grade southward
Weather:	Cloudy
Time:	8:45 a. m.
Casualties:	1 killed; 2 injured
Cause:	Obstruction on track

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3096

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

ST. LOUIS-SAN FRANCISCO RAILWAY COMPANY

May 26, 1947

Accident at Ada, Okla., on April 19, 1947, caused by an obstruction on the track.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On April 19, 1947, there was a derailment of a work train on the St. Louis-San Francisco Railway at Ada, Okla., which resulted in the death of one employee, and the injury of two employees.

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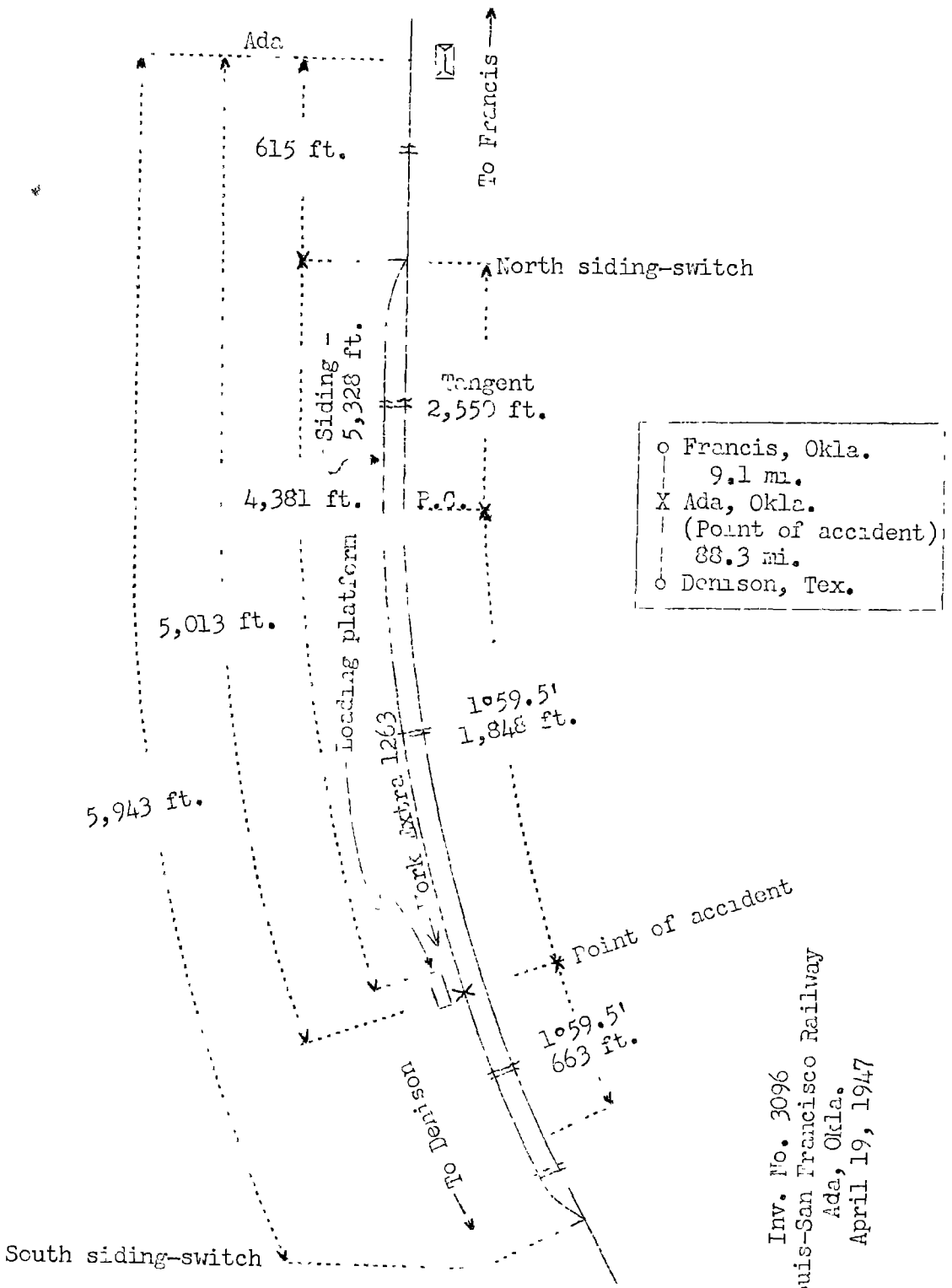
[1] Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Inv. No. 3096
St. Louis-San Francisco Railway
Ada, Okla.
April 19, 1947

Location of Accident and Method of Operation

This accident occurred on that part of the Southwestern Division extending between Francis, Okla., and Denison, Tex., 97.4 miles, a single-track line in the vicinity of the point of accident, over which trains are operated by timetable, train orders and an automatic block-signal system. At Ada, 9.1 miles south of Francis, a siding 5,328 feet in length parallels the main track on the west. The north and the south switches of this siding are, respectively, 615 feet and 5,943 feet south of the station. The accident occurred on the siding at a point 5,013 feet south of the station. From the north on the siding there is a tangent 2,550 feet in length, then a 1°59.5' curve to the left 1,848 feet to the point of accident and 663 feet southward. At the point of accident the grade is 0.9 percent descending southward.

The track structure of the siding consists of 85-pound rail, 33 feet in length, laid on an average of 21 ties to the rail length. It is single-spiked and provided with 4-hole angle bars. About 50 percent of the ties are provided with tieplates. It is ballasted with a mixture of chat and cinders to a depth of about 10 inches. In the immediate vicinity of the point of accident there is a wooden loading platform, 21 feet 2 inches long and 10 feet 3 inches wide. The top surface of the platform is 3 feet 6 1/2 inches above the level of the tops of the rails of the siding. The distance between the east side of the platform and the west rail of the siding is 6 feet, and the distance between the north end of the platform and the north siding-switch is 4,381 feet.

Operating rules read in part as follows:

DEFINITIONS

* * *

Restricted Speed--Proceed prepared to stop short of train, obstruction, or anything that may require the speed of a train or engine to be reduced.

103. When cars are pushed by an engine, * * * a train man must take a conspicuous position on the leading car * * *

105. Trains or engines using a siding or yard track must proceed at restricted speed.

* * *

Rules governing the maintenance-of-way department read in part as follows:

SECTION FOREMEN

317. Obstructions. They must give special attention to points where obstructions are likely to occur, examining the slopes of cuts, and promptly remove all earth, trees, rock or anything likely to fall or slide upon the track, or any condition that might endanger the passage of trains; reporting such conditions to the roadmaster.

Description of Accident

Work Extra 1263, a south-bound work train, consisting of a caboose, 29 empty gondola-type cars and engine 1263, headed north, in the order named, was moving southward on the siding at Ada at an estimated speed of 5 miles per hour when the caboose and the car next to the caboose were derailed at a point 16 feet south of the north end of the loading platform.

The caboose stopped practically upright, about 60 feet south of the point of derailment and at right angles to the siding, with its north end on the siding and its south end about 20 feet west of the siding. Both trucks of the caboose were detached. Part of the derailed equipment struck the twenty-eighth car of a north-bound freight train, which was standing on the main track, and the rear truck of this car was derailed.

The conductor of Work Extra 1263 was killed, and the front brakeman and the flagman were injured.

It was cloudy at the time of the accident, which occurred about 8:45 a. m.

The caboose of Work Extra 1263 is of steel-underframe and wooden-superstructure construction. It is 30 feet in length over end-sills, and is provided with two 4-wheel trucks spaced 20 feet between truck-centers. It has a door at each side and at each end, and is provided with narrow end-platforms and a cupola. The distance between the top surface of the longitudinal running board and the level of the tops of the rails is 11 feet 7-1/2 inches. The trucks are provided with two elliptical springs on each side of each truck. The outer ends of the springs and the outer edges of the journal boxes extend, respectively, 30 inches and 17 inches outside the gage side of the rails. The ends of the springs and the bottom surface of the journal boxes are, respectively, 14 inches and 10 inches above the level of the tops of the rails. The caboose

is equipped with a combination back-up valve and alarm whistle. The back-up valve is so arranged that the air brakes of a train can be applied by venting brake-pipe pressure at the back-up valve.

Discussion

Work Extra 1263 consisted of a caboose and 29 cars, which were being pushed by the engine. The engine was in backward motion. This equipment was moving southward on the siding at Ada at a speed of about 5 miles per hour on a 1°59.5' curve to the left when the caboose and the first car were derailed. During the movement the conductor was on the top running board of the caboose. The flagman was on the south platform adjacent to the back-up valve, and was maintaining a lookout ahead. The enginemen were on the engine, and were maintaining a lookout to the south. The front brakeman boarded the caboose at the side door a short distance north of the point of accident, then proceeded to the south platform. Immediately before the derailment occurred the front brakeman observed an accumulation of cement obstructing the siding in the immediate vicinity of the loading platform, and he called a warning to the flagman. The flagman attempted to stop the movement by the use of the back-up valve, but the accident occurred before he could open the valve. The brakes of this train had been tested and had functioned properly. The conductor was thrown from the roof of the caboose, and was killed. The engineer said no signal was given by the conductor prior to the derailment to indicate that the conductor had observed the presence of the obstruction.

The investigation disclosed that during a period of about 30 days immediately preceding the day of the accident a paving company had used the platform located adjacent to the siding to unload bulk cement from box cars. Bantam-type tractors equipped with front-end shovels were used to transport the cement from the cars and across a gangplank to the platform. Considerable spillage had resulted and loose cement had accumulated between the west rail of the siding and the platform. This pile of cement was about 2 feet high at the platform and sloped eastward and downward across the west rail of the siding. It extended practically the full length of the platform. Several days prior to the day of the accident there was considerable rainfall, and the spilled cement became hardened. Marks in the cement at a point 9 feet south of the north end of the platform, 1 foot west of the west rail of the siding and 8 inches above the level of the tops of the rails indicated that some part of the caboose had struck the hardened cement. Marks on the west journal boxes of the trucks of the caboose indicated that they had been in contact with the cement. Immediately south of the first mark in the cement, flange marks extended diagonally outward across the top of the head of the west rail and on the ties outside the rail a distance of about 11 feet. There was a considerable amount of hardened cement covering the top surface of the west rail. Apparently, the accumulation of cement on the

top and against the gage side of the west rail of the siding was sufficient for the right wheels of the caboose to be raised high enough for the flanges to mount the rail, and then the wheels continued on top of the rail to the point where they dropped outside the rail.

The roadmaster and the section foreman who were in charge of the track in the territory involved said they had not observed any dangerous condition at the point of accident. The section foreman had operated his track motor-car on the siding two days prior to the accident, and at that time he did not consider the accumulation of loose cement at the platform sufficient to be dangerous.

Cause

It is found that this accident was caused by an obstruction on the track.

Dated at Washington, D. C., this twenty-sixth day of May, 1947.

By the Commission, Commissioner Patterson.

W. P. BARTEL,

(SEAL)

Secretary.