

Inv-2191

INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT OF THE DIRECTOR

BUREAU OF SAFETY

ACCIDENT ON THE

CINCINNATI, NEW ORLEANS & TEXAS PACIFIC
RAILWAY, SOUTHERN RAILWAY SYSTEM

SALE CREEK, TENN.

AUGUST 2, 1937

INVESTIGATION NO. 2191

SUMMARY

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Railroad: Cincinnati, New Orleans & Texas Pacific,
Southern Railway System

Date: August 2, 1937.

Location: Sale Creek, Tenn.

Kind of accident: Head-end collision

Trains involved: Work : Freight-2nd class

Train numbers: Extra 6279 : No. 52

Engine numbers: 6279 : 6329

Consist: 1 dirt spreader, : 19 cars and caboose
10 dump cars,
caboose

Speed: 10-12 m.p.h. : standing

Track: 4^c curve to the right for south-bound
movements; 0.75 percent descending
grade.

Weather: Clear

Time: 2:26 p.m.

Casualties: 3 killed

Cause: Failure of crew of work train to
maintain proper lookout when making a
movement within working limits.

Inv-2191

September 13, 1937.

To the Commission:

On August 2, 1937, there was a head-end collision between a freight train and a work train on the Cincinnati, New Orleans & Texas Pacific Railway, Southern Railway System, near Sale Creek, Tenn., which resulted in the death of three employees.

Location and method of operation

This accident occurred on the Third District which extends between Oakdale and Chattanooga, Tenn., a distance of 83.6 miles. This is a single-track line over which trains are operated by timetable, train orders, and an automatic block-signal system supplemented by an automatic train stop system of the intermittent-inductive type. The accident occurred at a point 4,165 feet south of the south passing track switch at Sale Creek. Approaching this point from the south there is a 1° curve to the left 665 feet in length, then tangent track for a distance of 1,555 feet, followed by a 4° curve to the left 635 feet in length; the accident occurred on this latter curve at a point 450 feet from its southern end. Approaching the point of accident from the north the track is tangent for more than 1 mile, followed by a 4° curve to the left 745 feet in length, tangent track for a distance of 210 feet, and then the curve on which the accident occurred. The grade for north-bound trains is 0.75 percent ascending at the point of accident.

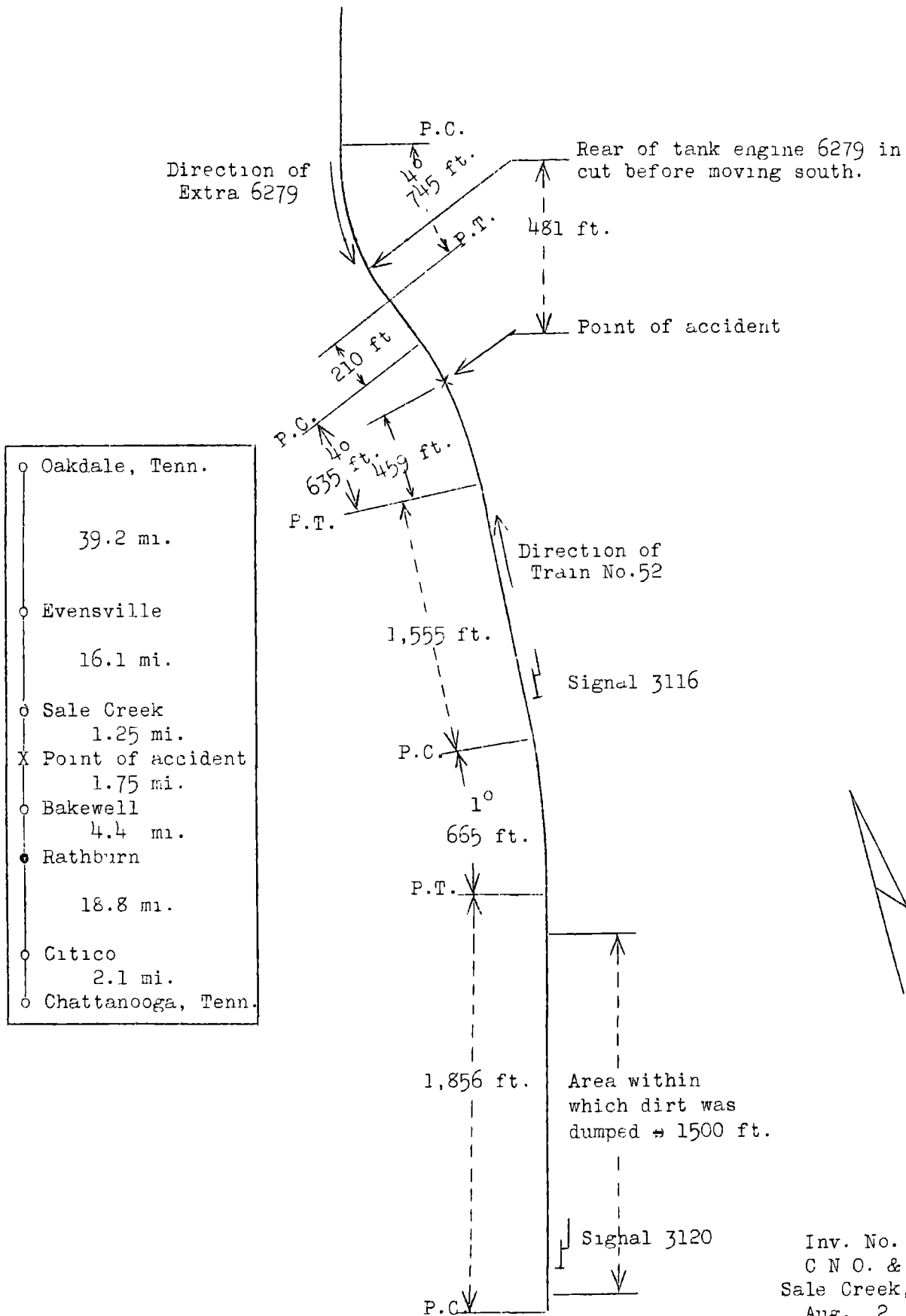
Automatic block signals 3116 and 3120, governing north-bound movements are located 1,686 and 4,360 feet, respectively, south of the point of accident. These are approach lighted signals of the 3-position, upper-quadrant, semaphore type.

The weather was clear at the time of the accident, which occurred about 2:26 p.m.

Description

Work Extra 6279, consisting of engine 6279, and a caboose, and in charge of Conductor Powell and Engineman Helton, left Citico, 26.2 miles south of Sale Creek, at 7:35 a.m., according to the train sheet, the crew having in its possession a copy of train order 10, form 31, reading in part as follows:

Engs 6457 and 6279 work extra 601 six
naught one am until 6:30 six thirty pm between



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Citico and Evensville protecting against second and third class trains.

At Rathburn, 7.4 miles from Sale Creek, 10 dump cars and 1 spreader were picked up and the train from north to south then consisted of a caboose, 10 dump cars and 1 dirt spreader, shoved by engine 6279 headed north. The train left Rathburn at 8:25 a.m. and proceeded to a cut south of Sale Creek to perform work which consisted of moving dirt from the cut southward about 1 mile where it was dumped and spread. In the course of one of these southward movements the train had moved about 480 feet from the loading point when it struck Train No. 52 while running at a speed estimated to have been 8 or 10 miles per hour.

Train No. 52, a north-bound second-class freight train, consisted of 19 cars and a caboose, hauled by engine 6329, and was in charge of Conductor Bradshaw and Engineman Housley. At Citico, the crew received a copy of train order 10, form 31, previously quoted. This train departed from Citico at 1:33 p.m., according to the train sheet, 2 hours 48 minutes late. At Rathburn the train was stopped by a flagman of Work Extra 6279 and the engineman read and signed flagging instructions 1, on form 895, which read

All second, third-class and extra trains will approach between Rathburn and Sale Creek very carefully expecting to find Work Extra 6279. Work Extra 6279 will clear at Sale Creek. Drive in at Sale Creek.

This train departed from Rathburn at 2:16 p.m., 2 hours 54 minutes late, and after passing Bakewell, 3 miles south of Sale Creek, the train was brought under control and proceeded at a very low rate of speed until an approaching train was seen when it was brought to a stop, and while standing the head end was struck by Extra 6279.

Train No. 52 was driven back about 17 inches, and the engine truck and the front and intermediate driving wheels were derailed; the front end of the engine was badly damaged. None of the remaining equipment in this train was derailed or damaged. The tender of engine 6279 was derailed but remained in general line with the track and the cistern telescoped the cab and boiler head. Neither the engine nor any of the remaining equipment of Work Extra 6279 was derailed or damaged. The employees killed were the engineman and fireman of Work Extra 6279 and a bridge foreman riding on that engine.

Summary of evidence

Conductor Powell, of Work Extra 6279, stated that the air brakes on his train were coupled and had operated satisfactorily during the day. A flagman was left at Rathburn with flagging instructions on the proper form which instructed second and third-class, and extra trains to move through the flagging limits very carefully. Under the work order which he held, his train was allowed to move in either direction within the limits and he had instructed Engineman Helton to run safely and look out at all times. He had also advised Engineman Helton of the flagging instructions he had issued and of the lineup, and their train had cleared for several trains during the course of their work of loading and dumping dirt between Sale Creek and Bakewell. At the time of taking on the last load he was on the eighth car from the engine, and from that point he gave a signal to the engineman to back up and dump the loads. When the train had proceeded about 4 or 5 car lengths his attention was directed to the head end of the train and he saw Train No. 52 approaching; he jumped off and as he straightened up the engines collided. When his train started southward he noticed the engineman leaning out of the window looking southward, but he was unable to see the fireman due to the curve. At the time of the collision his train had proceeded a distance of about 13 rail lengths, and the speed was 8 or 10 miles per hour. Conductor Powell said that he was working alone with his train and did not think it was necessary for him to go to the head end of the train when making a movement with the locomotive leading. It is the duty and the practice of engineman and fireman to keep a lookout ahead. Conductor Powell further stated that he did not hear any whistle signals sounded by Train No. 52.

Brakeman McMahon, of Work Extra 6279, stated that he gave the flagging instructions on form 895 to Engineman Housley, of Train No. 52, at Rathburn, who read them aloud and then signed and returned them. In answer to the engineman's query as to where he thought the extra was working, Brakeman McMahon told him he supposed the extra would be loading dirt between Bakewell and Sale Creek.

Brakeman Lawson, of Work Extra 6279, was at Sale Creek with flagging instructions and knew nothing concerning the accident.

Engineman Housley, of Train No. 52, stated that a test of the air brakes on his train had been made and they had operated satisfactorily during the trip. He thoroughly understood the train order received at Citico relative to Work Extra 6279,

and also the flagging instructions received at Rathburn. As his train reached Bakewell he brought the train under control and on passing the signal which was displaying a stop indication, located at the north end of the passing track, he reduced the speed to 4 or 5 miles per hour and forestalled an automatic application of the air brakes. The speed was then increased as he could see for a distance of about one-half mile to the next signal; this signal was also in the stop position and he again forestalled an application of the air brakes and passed it. When his train was about 0.2 mile from the point of curve on which the accident occurred, his fireman called his attention to the work train in the cut, and he himself could see the smoke of that train. He further reduced speed and approached this cut under absolute control and when the fireman told him that the work train was moving toward them fast he applied the air brakes and stopped his train a few seconds before it was struck by the work train. It had taken about 4 minutes to go less than a mile just prior to the collision. He had sounded the whistle almost continuously after leaving Bakewell, as there are several road crossings in that territory, and had whistled a warning to the work train when it was about 50 feet from his engine. He further stated that Engineman Helton told him after the accident that he did not see or hear Train No. 52 approaching. He found the throttle open on engine 6279, but the brake valve, and reverse gear were torn off.

Fireman Lehman, of Train No. 52, stated that he first saw the work extra when it was about one-fourth of a mile distant, and at no time did he see any one looking out from the engine cab or any one on the cars. He estimated the speed of that train to have been 10 or 12 miles per hour at the time of the accident. His own train had stopped and he had alighted when the accident occurred.

The statements of Head Brakeman Lancaster, Conductor Bradshaw and Flagman Moore, of Train No. 52, brought out nothing additional of importance.

Helper Fitzgerald, of Bridge Gang No. 11, stated that he was standing on the east bank of the cut near the engine when the work train started southward. He saw a bridgeman and the engineman in the cab and the engineman was looking southward. After the train started he saw the freight train approaching and he immediately called to the men on the spreader and the conductor. He estimated the speed of the work extra to have been about 10 miles per hour. Helper Fitzgerald also stated that he heard the warning whistle sounded by Train No. 52.

Mechanic Heath, of the B. & B. Department, who was with Helper Fitzgerald when the work train started southward, stated that when he saw Train No. 52 approaching it was about five or six rail lengths from the work train; he thought that the freight train was moving at the time of the accident. The whistle was being sounded by that train at the time of the accident.

Nurses Hazel Wilson and Elsie Gadd, at Dr. Broyle's Hospital at Dayton, Tenn., who attended Engineman Helton before he died, stated that he made the remark "It was all my fault, I didn't look back, but if I had I couldn't have seen anything." He was conscious at the time he made this remark.

Trainmaster Brosnan was en route to Sale Creek at the time of the accident and arrived at the scene about 15 minutes after its occurrence. He stated that there were skid marks 17 inches in length on the rails north of the driving wheels and tender truck wheels of Train No. 52 which indicated that the train was standing with the brake applied and had been driven back by the impact. Trainmaster Brosnan further stated that he had examined the members of the crews of both trains involved on train rules during January and February, 1937. The safe operation of work trains was discussed and it was made clear that a work extra must move at all times within its flagging limits under absolute control, prepared to stop within one-half the distance seen to be clear, expecting to find trains moving against them in accordance with their flagging instructions. It was stressed that freight trains passing through the flagging limits of work trains, must move under absolute control, expecting to stop within one-half the distance seen to be clear. These men were told that this, along with proper lookout, was the essence of safe operation of work trains.

After the accident, tests were conducted to ascertain the range of visibility at the point of accident. The cut within which Work Extra 6279 had been standing was deep, and with an engine of the same type as engine 6279, it was found that from the point where the work train stood while loading the view had by the engineman southward was obscured by the walls of the cut, and only the cross-arms of the telegraph poles could be seen by the fireman for a distance of about 1,500 feet. With the engine about 50 feet farther south, however, an approaching train could have been seen from the fireman's side for a distance of about 1,500 feet.

Discussion

Under the train orders and the flagging instructions in effect at the time of this accident Train No. 52 was permitted to proceed within flagging limits under absolute control, expecting to stop within one-half the distance seen to be clear, and Work Extra 6279 was required to move at all times within its flagging limits under absolute control, expecting to stop within one-half the distance seen to be clear and to find trains moving against them in accordance with their flagging instructions. The evidence indicated that when Work Extra 6279 started to make the southward movement the engineman was looking southward, but due to the deep cut and the curve he was unable to see the approaching train. After the train had moved about 50 feet the fireman had a clear view of the track for a distance of 1,500 feet, but apparently neither he nor Foreman Early, who was on the engine, were maintaining a proper lookout or the approaching train would have been seen. As a result no attempt was made to stop the work train which was being operated at a speed of 8 or 10 miles per hour. Fireman Lehman of Train No. 52 stated that he first saw the work extra when it was about one-fourth of a mile distant and at no time did he see any one looking out from the engine cab. Train No. 52 was being operated at a very low rate of speed and was brought to a stop when it was seen that the extra train was proceeding toward them.

Conclusion

This accident was caused by the failure of the engine crew of a work extra to maintain a proper lookout when making a movement within the working limits.

Respectfully submitted,

W. J. PATTERSON,

Director.