Inv-2406

INTERSTATE COMMERCE COMMISSION

WASHINGTON

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REPORT OF THE DIRECTOR

BUREAU OF SAFETY

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ACCIDENT ON THE

MISSOURI PACIFIC RAILROAD

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WAGONER, OKLA.

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JANUARY 14, 1940

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INVESTIGATION NO. 2406

SUMMARY

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Inv-2406

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| Railroad: | Missouri Pacific | |
| Date: | January 14, 1940 | |
| Location: | Wagoner, Okla. | |
| Kind of accident: | Rear-end collision | |
| Trains involved: | Freight | : Freight |
| Train numbers: | 167 | : 161 |
| Engine numbers: | 1560 | : 6432 - 1570 |
| Consist: | 91 cars and caboose | : 65 cars and caboose |
| Speed: | Standing | : 25 or 30 m.p.h. |
| Operation: | Timetable and train orders | |
| Track: | Single; tangent; 1.14 percent ascending grade for south-bound trains | |
| Weather: | Clear | |
| Time: | 7:15 p.m. | |
| Casualties: | 2 killed, 3 injured | |
| Cause: | Failure to operate following train under proper control within yard limits | |

February 16, 1940.

To the Commission:

On January 14, 1940, there was a rear-end collision between two freight trains on the Missouri Pacific Railroad at Wagoner, Okla., which resulted in the death of two employees and the injury of three employees.

Location and Method of Operation

This accident occurred on that part of the Southern Kansas and Central Divisions designated as the Wagoner District which extends between Coffeyville, Kans., and Van Buren, Ark., a distance of 136.01 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by timetable and train orders; there is no block system in use. The accident occurred within yard limits at a point approximately 3,440 feet south of the north yard-limit board. Approaching from the north there is a tangent approximately 2-1/2 miles in length to the point of accident and a considerable distance beyond. The grade for south-bound trains is, successively, from 0.97 percent to 1.05 percent descending a distance of about 3,000 feet, from 0.85 percent to 0.14 percent descending a distance of about 2,900 feet, and 1.14 percent ascending a distance of about 1,000 feet to the point of accident. A station board and a yard-limit board are located, respectively, 4,157 feet and 3,440 feet north of the point of accident.

The maximum authorized speed for freight trains is 50 miles per hour.

Rules 17 and 93 of the Transportation Rules read in whole or in part as follows:

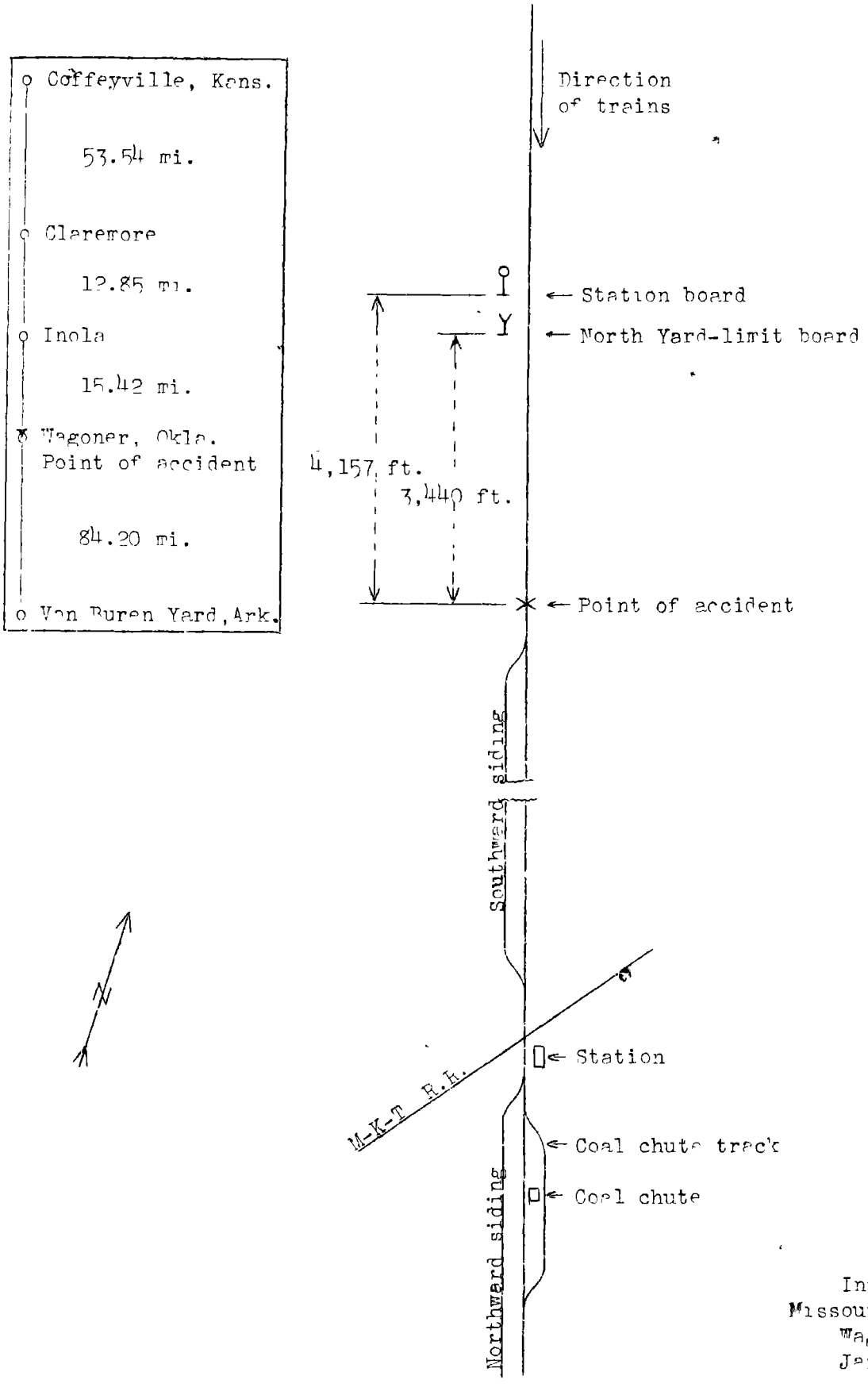
17.

* * *

When electric headlight fails, use white lantern and run at restricted speed to a point where repairs can be made or engine changed.

93.

Within yard limits the main track may be used, protecting against first-class trains.




Inv. No. 2406
Missouri Pacific R.R.
Wagoner, Okla.
Jan. 14, 1940

> Second and inferior class and extra trains must move within yard limits prepared to stop unless the main track is seen or known to be clear.

Restricted speed is defined as follows;

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

It was dark and the weather was clear at the time of the accident, which occurred about 7:15 p.m.

## Description

No. 167, a south-bound second-class freight train, with Conductor White and Engineman Watson in charge, consisted of engine 1560, an auxiliary water car, 20 loaded cars, 70 empty cars and caboose. This train departed from Coffeyville, 81.81 miles north of Wagoner, at 2:50 p.m., according to the train sheet, 2 hours 49 minutes late, passed Inola, the last open office, 15.42 miles north of Wagoner, at 5:20 p.m., 3 hours 20 minutes late, arrived at Wagoner at 6:40 p.m., and, while standing with the caboose 3,440 feet south of the north yard-limit board, the rear-end was struck by No. 161.

No. 161, a south-bound second-class freight train, with Conductor Hamilton and Enginemen Rice and Hogan in charge, consisted of engines 6432 and 1570, an auxiliary water car, 13 loaded cars, 51 empty cars and a caboose. This train departed from Coffeyville at 3:35 p.m., according to the train sheet, 5 hours 5 minutes late, left Claremore, the last open office, 28.27 miles north of Wagoner, at 5:57 p.m., 5 hours 7 minutes late, and, while moving at a speed estimated to have been between 25 and 30 miles per hour, collided with the rear end of No. 167.

The caboose of No. 167 and the third car ahead of it were demolished; the first and second cars ahead of the caboose were derailed and badly damaged and stopped some distance to the left of the track; the fourth car was knocked off center but was not derailed. The first engine of No. 161 was derailed and stopped 161 feet south of the point of impact, at nearly right angles to the track; it leaned at an angle of about 30 degrees, and the cab fouled the track; the tender, coupled to the engine, remained upright and stopped at right angles to the engine. The second engine was derailed and uncoupled from the tender of the first engine but stopped upright and nearly

in track alinement, with its tender coupled and upright, but at right angles to the engine. The auxiliary water-car stopped behind the second engine; the second, fourth and sixth cars were derailed and badly damaged; the third and fifth cars were demolished; all these cars were at nearly right angles to the track; the debris was confined to a space of about 60 feet. The seventh car and the forward trucks of the eighth and ninth cars were derailed.

The employees killed were the fireman of the first engine and the engineman of the second engine of No. 167, and the employees injured were the engineman of the first engine, the fireman of the second engine, and the conductor of No. 161.

Summary of Evidence

Engineman Watson, of No. 167, stated that his train arrived at Wagoner at 6:40 p.m., and after they took coal and water a bad-order car was set out. He said that visibility was good and that he saw the headlight of No. 161 for a moment as it approached over the hill, which was about 3/4 mile north of the north yard-limit board, but he did not watch it closely because it interfered with his vision and his observation of hand signals from members of his crew.

Fireman Brown, of No. 167, stated that while his train was at Wagoner he saw the reflection of the headlight of No. 161 approaching from the north but did not see the headlight after it reached the summit of the grade north of the yard-limit board.

Conductor White, of No. 167, stated that before his train departed from Coffeyville a terminal air-brake test was made by the car inspectors, and the brakes functioned properly en route. It was dark and clear at 6:40 p.m., when his train arrived at Wagoner, and he observed that the marker and cupola lamps were lighted and displayed red lights toward the rear. About 7 p.m., when the train was being started, a coupler was pulled out of the forty-third car. He was assisting the crew in setting out this car, and was at a point about 8,000 feet south of the rear end of his train when the accident occurred. He stated that at the time of the accident the rear end of his train stood about 60 car lengths south of the north yard-limit board, and that under such circumstances flag protection against other than first-class trains is not required.

The testimony of Brakeman Wallace, of No. 167, who assisted in setting out the bad-order car, brought out nothing additional of importance.

Flagman Winford, of No. 167, stated that on arrival at Wagoner about 6:40 p.m. he observed that the marker and cupola lamps were lighted and displayed red lights toward the rear. He said that about 20 minutes later, when the train was being started, a coupler was pulled out of a car about 50 car lengths ahead of the caboose. While the remainder of the crew was engaged in setting out the bad-order car, he was standing near the front end of the rear portion of his train; he heard No. 161 approaching and could see the reflection of the headlight as that train approached the summit located about 3,000 feet north of the yard-limit board. At no time did he see the direct rays of the headlight.

Engineman Rice, of the first engine of No. 161, stated that a terminal air-brake test was made prior to departure from Coffeyville, and the brakes functioned properly en route. He said that, because the fireman complained of a sore back and shoulder, he fired the engine from Inola to a point which he estimated to have been a mile or more from the north yard-limit board at Wagoner. When he again took charge of the engine he could not see distinctly because his eyes had not become adjusted to the darkness after being exposed to the bright glare from the fire-box. He said that a moment after taking charge of the engine the headlight failed but, because he was approaching a fuel and water station, he did not immediately comply with the requirements of rule 17. About this time he saw the red markers of a caboose at a distance which he thought was about a mile. He made a 6 or 7-pound brake-pipe reduction and then, seeing that he was closely approaching the rear end of No. 167, he made an emergency application of the brakes; the collision occurred almost immediately. He thought the impact occurred about 7:15 p.m., at which time the speed was 25 or 30 miles per hour. He stated that if he had complied with the requirements of the yard-limit rule the accident would have been averted.

Fireman Fine, of the second engine of No. 161, estimated that the speed of his train approaching Wagoner was 35 or 40 miles per hour. He heard his engineman remark a moment before the collision occurred that the headlight of the first engine had failed. He was engaged in mixing boiler compound when the accident occurred. He understood the requirements of rule 93 and stated that his train was not being operated in compliance with that rule.

Conductor Hamilton, of No. 161, stated that he was on the first engine from Inola to the point of accident and estimated that the speed of his train when approaching Wagoner was 35 or 40 miles per hour. He said that after leaving Inola Engineman Rice fired the engine to a point which he estimated was about a mile north of the north yard-limit board at Wagoner, and the headlight failed a moment after he again took charge of

the engine. The engineman secured a flashlight from the seat-box and attempted to determine their location and speed. The conductor said that the cab curtains were drawn and, in the darkness, he could not determine his location and was not aware that No. 167 was ahead until the brakes became applied in emergency, at which time he was standing on the deck of the engine as there was no seat available to him on the engine; the collision occurred almost immediately thereafter. He stated that the accident would not have occurred if his train had been operated in compliance with the provisions of rule 93.

Brakeman Shaffer, of No. 161, stated that he rode in the brakeman's cabin on the rear of the tender of the second engine from Inola to the point of accident. Approaching Wagoner the speed was about 50 miles per hour but was reduced as a result of a brake-pipe reduction to about 25 miles per hour when the train reached the summit of the grade about 3/4 mile north of the yard-limit board. About 1-1/2 minutes later an emergency application of the brakes was made and almost immediately the accident occurred. He stated that he understood the provisions of rule 93 and that his train was not being operated in compliance with these provisions.

Flagman Johnson, of No. 161, estimated that the speed approaching Wagoner was about 45 miles per hour and, when the caboose was some distance from the summit of the grade north of the north yard-limit board, speed was reduced to about 25 miles per hour as a result of a brake-pipe reduction. He said he understood the provisions of rule 93 and that his train was not being operated in compliance with those provisions.

Car Inspector De Berry stated that he made a terminal air-brake test of No. 161 at Coffeyville and found all brakes to be functioning properly.

## Observations of the Commission's Inspectors

The Commission's inspectors observed that throughout a distance of 1-1/2 miles immediately north of the point of accident there was nothing to obstruct the view of an engineman of a south-bound train.

## Discussion

According to evidence, No. 167 stopped at Wagoner with the caboose about 3,440 feet south of the north yard-limit board. After the engine was supplied with coal and water, a coupler was pulled out of the forty-third car, and, while the crew was engaged in setting out the bad-order car, the rear end of this train was struck by No. 161.

Flag protection was required only against first-class trains and as both trains involved were second-class trains, No. 167 was not required to provide flag protection. It was dark and the weather was clear. The caboose marker and cupola lamps were lighted and displayed red lights toward the rear.

The engineman of the first engine of No. 161 fired the engine from Inola to a point about 1 mile north of the north yard-limit board, at which point he again took charge of the engine. He said that he could not see distinctly because his eyes had not become adjusted to the darkness after being exposed to the glare from the fire-box, and he was momentarily unable to determine his exact location. It was during this period that the headlight failed, and he reduced speed to 25 or 30 miles per hour as a result of a 6 or 7-pound brake-pipe reduction. The fireman of the second engine said that his engineman remarked shortly before the accident that the headlight on the first engine had failed. The engineman of the first engine saw the marker lights of No. 167 at a distance which appeared to be about a mile, but only a moment later he saw that he was closely approaching the caboose; he applied the brakes in emergency but the accident occurred almost immediately thereafter. The engineman said that because he was closely approaching a coal and water station, he did not immediately stop to display a white light on the front of the engine as the rules require. Under the yard-limit rule, No. 161 was required to enter and to move within yard limits prepared to stop short of train or obstruction, and all employees involved understood the requirements of this rule. All the surviving members of the crew of the following train stated that the accident would have been averted if their train had been operated in compliance with the yard-limit rule. It is not known why the fireman of the first engine did not inform his engineman of the exact location of their train as the fireman was killed in the accident. The conductor was on the first engine but because of standing on the engine deck he did not know that No. 167 was only a short distance ahead.

## Conclusion

This accident was caused by failure to operate the following train under proper control within yard limits.

Respectfully submitted,

S. N. MILLS,

Director.