BUREAU OF SAFETY

REPORT NO. 2019

Railroad: Missouri Pacific

Date: November 10, 1935

Location: Windsor, La.

Kind of accident: Derailment

Train involved Passenger

Train Number: 115

Engine Number: 6513

Consist: 7 cars

Speed: 45-50 m.p.h.

Track: 1°58′30′′ curve; level track

Weather: Cloudy

Time: 8:50 p.m.

Casualties: 2 killed and 18 injured

Cause: Train struck cattle on track

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN ACCIDENT ON THE MISSOURI PACIFIC RAILROAD NEAR WINDSOR, LA., ON NOVEMBER 10, 1935.

December 17, 1935.

To the Commission:

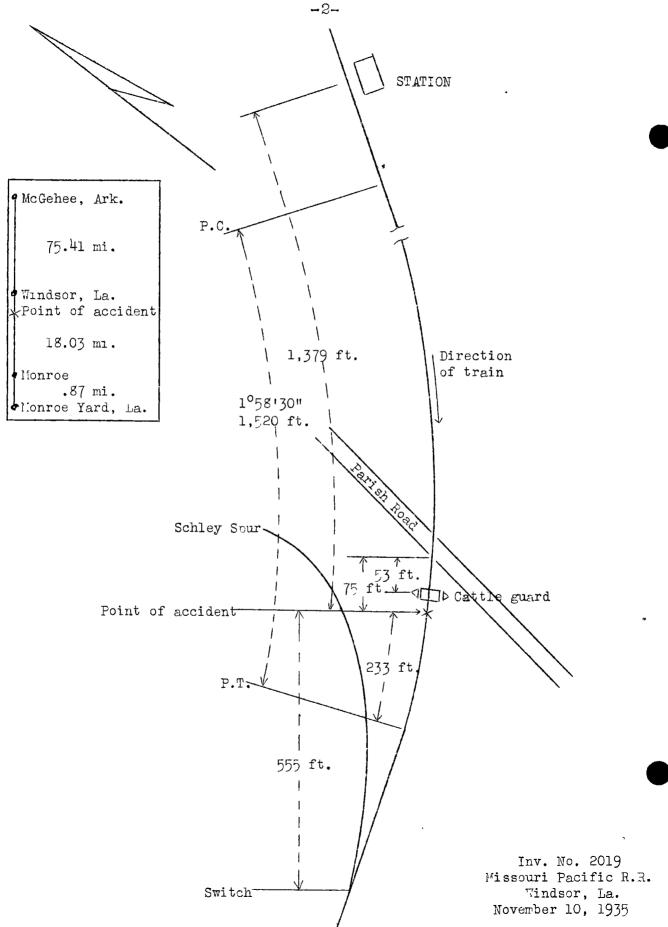
On November 10, 1935, there was a derailment of a passenger train on the Missouri Pacific Railroad near Windsor, La., which resulted in the death of 2 employees, and the injury of 15 passengers, 2 railway mail clerks, and 1 employee.

Location and method of operation

This accident occurred on the McGehee District of the Louisiana and Little Rock Divisions, which extends between McGehee, Ark., and Monroe Yard, La., a distance of 94.31 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 block-signal system. The accident occurred at a point 1,379 feet south of the station at Windsor; approaching this point from the north, the track is tangent for several miles, followed by a 10 58 30 curve to the right about 1,520 feet in length, the accident occurring on this curve at a point 233 feet from its southern end. The grade is level at the point of accident.

The track is on a fill about 4 feet in height and is laid with 90-pound rails, 39 feet in length, with an average of 24 treated ties to the rail length, single-spiked, fully tieplated, and ballasted with washed gravel to a depth of 8 inches. The maximum permissible speed for passenger trains is 55 miles per hour.

A graveled highway 16 feet in width crosses the tracks at an angle of about 45° at a point 75 feet north of the point of accident; 53 feet south of the crossing is a cattle guard, 9 feet in width, with a steel deck having triangular teeth, and wooden wings projecting upward from the track at an angle of 45°. Southward from this cattle guard the right of way is protected with a barbed-wire fence maintained in good condition. This locality is an open range country and there is no law prohibiting cattle from being permitted to run at large.



At a point 555 feet south of the point of accident there is a trailing-point switch for south-bound trains leading to what is known as Schley Spur.

The weather was cloudy at the time of the accident, which occurred about 8:50 p.m.

Description

Train No. 115, a south-bound passenger train, consisted of 1 mail and baggage car, 1 baggage car, 5 coaches, 1 Pullman sleeping car and 1 dining car, hauled by engine 6513, and was in charge of Conductor Rainey and Engineman Farmer. All of the cars were of steel construction with the exception of the third car, which had a wooden superstructure with steel ends and underframe. This train departed from Collinston, the last open office 2.49 miles north of Windsor, at 8:47 p.m., according to the train sheet, 12 minutes late, and shortly after passing Windsor was derailed while traveling at a speed estimated to have been between 45 and 50 miles per hour.

The engine stopped on its right side to the left of and at an angle of 45° to the track approximately 719 feet beyond the point of derailment. The tender broke loos, and stopped on its right side, in reverse position, beyond the engine. The first car was on its left side headed down the embankment to the right of the track, with its rear end lying across the track. The second, third and fourth cars were derailed but remained parallel and in general line with the track; the front truck of the fifth car also was derailed. The employees killed were the engineman and fireman and the employee injured was the baggageman.

Summary of evidence

Conductor Rainey stated that he was in the fourth car of the train when he felt an emergency application of the air brakes, followed almost instantly by the derailment. Soon after the accident he went back to telephone and found carcasses of several animals scattered along the track south of the highway crossing, his examination indicating that the train had struck the animals on the crossing, knocking them down, and that the teeth of the metal cattle guard held the cattle and caused them to go under the engine; the first marks of derailment were on the ties just south of the cattle guard. Conductor Rainey stated that on leaving Collinston he observed the neadlight burning brightly, while he heard the crossing signal sounded as the train passed the station at Windsor and felt a light application of the air brakes before the engine entered the curve on which the accident occurred. He estimated the speed of the train at the time of

the accident to have been approximately 50 miles per hour.

Express Messenger-Baggageman Cook, who was in the second car from the engine, stated that he heard the engineman sound the highway crossing signal and then 3 or 4 short blasts, the alarm signal for live stock on the track; the engineman then opened the cylinder cocks and apparently applied the air brakes. Baggageman Cook then thought that the livestock was in the clear as it seemed as though the brakes were released, and the next thing he knew the car in which he was riding was derailed.

Train Porter Booth stated that just as he was preparing to sit down on the right side in the third car he heard a long blast of the whistle and also heard steam escaping from the open cylinder cocks; as he sat down he put his head out of a window and saw the engine strike a cow and also saw two or three animals running to the right, and about 15 seconds later he heard a rumpling noise and the train turned over. The animals appeared to him to have been going westward on the highway crossing.

Flagman Wilkins, who was in the fourth car, stated that the first intimation he had of anything wrong was when the car felt as though it was turning over, and he did not feel any application of the air brakes prior to that time.

General Car Inspector Dysart stated that on passing through Windsor he was sitting in the fifth car, he felt a light application of the air brakes, followed immediately by a release, and in a very short time there was an emergency application, the train moving about two car lengths before he felt the first snock. On going back over the track after the accident to determine the cause, he found parts of carcasses of several cows scattered on and alongside the track between the rear end of the train and the highway crossing. The first mark of derailment was a flange mark 8 inches from the gauge side of the west rail lat a point about 1 rail length south of the cattle guard, and about 150 feet south there were flange marks on the edges of the tieplates on the outside of the east rail, there being marks of only one pair of wheels, indicating that it was the lead wheels of the engine truck that first became derailed.

Section Foreman Bruno stated that on his arrival at the scene of the accident soon after its occurrence he found that five cattle had been killed. The carcasses of two animals were lying north of the cattle guard and two were south thereof, with one in the ditch on the east side of the track, the last three being badly mangled. Four of the cattle were branded and he knew their owners, and while he did not know whether they owned land elsewhere he knew that they did not own the land adjacent to the railroad right of way. It appeared to him that the

cattle had been north of the cattle guard when struck by the train. He had never before had any trouble with cattle getting onto the track south of the highway crossing. The fences north of the highway belong to the owners of the land and he had not noticed their condition very closely.

Roadmaster Treadwell stated that a few of the metal points of the cattle guard were bent and others had hair and pieces of flesh hanging to them. He observed the first mark of derailment on the ties about 12 or 15 feet south of the cattle guard and about 8 inches from the gauge side of the west or right rail, and also on the tieplates outside of the left rail; this flange mark near the left rail appeared at irregular intervals between the point of derailment and the frog of the spur-track switch. There also were marks on the nuts of the angle-bar bolts apparently made by the back of the flange chafing them. When the derailed wheels reached the spur-track switch they pulled the turnout rail loose and splintered the ties badly, beginning just south of the frog, and the track was demolished from the point of switch southward for a distance of 150 or 175 feet.

Master Mechanic Roquemore stated that at a point about 21/2 feet north of the first mark of derailment, near the right rail, there was evidence on both sides of the left rail of wneels having run over an animal and it was his opinion that when the lead wheel of the engine truck ran over the animal the wheel was raised and the truck turned so that when the wheel dropped it Examination of the came down on the left side of the rail. engine disclosed that the left cylinder cocks were open, the valve gear in reverse position, and the automatic brake-valve handle in the emergency position. The pilot was found buried in the mud 50 feet north of the engine and 20 feet east of the track; it was badly damaged, but it was his opinion that this damage was a result of the derailment and not from striking the cattle. Examination of the flanges and treads of the encine wheels disclosed them to be in good condition and he did not find any condition about the engine that would have contributed to the cause of the accident.

Examination of the track by the Commission's inspectors for 1/4 mile north of the point of accident did not show any condition that could have contributed to the cause of the derailment, and there was no evidence of dragging equipment. The fences from the cattle guard southward for a distance of about 1/4 mile were found to be in good condition. The wings of the cattle guard had been removed and were lying at one side; they were in good condition, however, and did not show any indication of having been struck or damaged. Inspection of engine 6513 after it had been removed from the scene did not

disclose any defects that would have contributed to the cause of the accident.

On the evening following the accident a test was made to ascertain the distance an engineman could see an object in the vicinity of the track between the highway crossing and the cattle guard, and it was found that with a train moving slowly men standing between the cattle guard and the highway could be seen for a distance of about 450 feet. This test was conducted about 9:30 p.m., at which time it was dark and cloudy.

Discussion

The evidence disclosed that the train struck and killed five cattle, some of them being badly mangled, and there was evidence of one having been caught by the teeth of the cattle guard, causing the wheels on the left side of the engine truck to pass over the animal; this resulted in the derailment of the front pair of engine-truck wheels, the final derailment occurring when these derailed wheels encountered the frog of the switch leading to a spur track.

Conclusion

This accident was caused by the train striking cattle, on the track in the vicinity of a highway crossing.

Respectfully submitted,

W. J. PATTERSON,

Director.