

INTERSTATE COMMERCE COMMISSION.

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE HOUSTON EAST & WEST TEXAS RAILWAY, SOUTHERN PACIFIC LINES, AT HUMBLE, TEX., ON DECEMBER 13, 1922.

January 13, 1923.

To the Commission:

On December 13, 1922, there was a side collision between a passenger train and a light engine on the Houston East & West Texas Railway, Southern Pacific Lines, at Humble, Tex., resulting in the death of 19 passengers, 1 news agent and 2 employees, and the injury of 10 passengers and 1 employee.

Location and method of operation.

This accident occurred on that part of the Shreveport Division extending between Houston and Lufkin, Tex., a distance of 118.23 miles, in the vicinity of the point of accident this is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. The accident occurred about 925 feet west of the station at Humble, at the junction of a lead track with the main track. This switch is a trailing-point switch for eastbound trains. Just west of this switch, and immediately south of the main track, there is a small yard, the three tracks being numbered 1, 2, and 3, from north to south. Tracks 1 and 2 connect with track 3, the lead track, at points 155 and 271 feet west of the main track switch, respectively. These two tracks parallel the main track, while the lead track diverges at an angle, there is a watchman's shanty just south of the lead track, at a point about 450 feet west of the main track switch. At the time of the accident there were two tank cars of fuel oil, coupled, standing near the east end of track 2, opposite the watchman's shanty it was possible to supply oil from the east car to an engine standing opposite it on the lead track, by means of a steam syphon provided for this purpose, however, owing to the angle at which the lead track diverges, oil could not be supplied to an engine standing on the lead track from a car standing where the west tank car was located. An engine standing on track 1 could be supplied from either of these tank cars.

Approaching the point of accident from the west there are more than 2 miles of tangent. The grade is level for 3,200 feet, following which the main track is 0.24 per cent ascending for eastbound trains to within 100 feet of the point of accident; from there it is 0.07 per cent ascending for a short distance. The yard tracks are practically 0.21 per cent ascending toward the main track. The weather was foggy at the time of the accident, which occurred at about 9.50 p. m.

Description

Light engine 439, headed east, was left standing on track 1, at about 9.15 p. m., opposite the west tank car, to be supplied with fuel oil and then to be watched during the night by Engine Watchman Smith. After supplying the engine with oil, Engine Watchman Smith disconnected the syphon, and shortly afterwards, while fouling the main track, the left side of the engine was struck by train No. 28.

Eastbound passenger train No. 28 consisted of one combination baggage and mail car, two coaches and one Pullman sleeping car, in the order named, hauled by engine 255, and was in charge of Conductor Campsey and Engineman Hottle. This train left Houston, its initial terminal, 17.09 miles from Humble, at 9.15 p. m., on time, and collided with light engine 439 while traveling at a speed estimated to have been about 20 miles an hour.

The left boiler check valve of engine 439 located on the side of the boiler over the front driving wheel, was broken off and the first coach of train No. 28 came to a stop with the forward window directly opposite the broken-off boiler check valve, live steam entering the car at boiler pressure. With the exception of the fireman of the passenger train, who was injured on account of jumping from the engine, all of the casualties occurred in this car. The employees killed were the conductor and train porter of train No. 28.

Summary of evidence.

Engine Watchman Smith, in whose charge engine 439 had been left, made two statements as to how the engine came to be fouling the main track. The first statement was a very short written memorandum given to a deputy sheriff who found him nearby about four hours after the occurrence of the accident; the second was made on December 18 at an investigation held by the representatives of the Commission and the railroad. In his first statement, Engine Watchman Smith did not say how the engine happened to be near the switch, merely stating that he got off the engine, lined the switch connecting track 1 with the lead track for a movement west on the lead track, and when he again caught the engine it was moving toward the main track, the full length of the engine being on the main track when he brought the engine to a stop. He then placed the engine in reverse and was looking out of the cab to pass the switch when the accident occurred.

In his second statement, Engine Watchman Smith stated the engine was spotted on track 1, opposite the tank cars, with all the lights extinguished except the one over the water glass; the reverse lever about two or three inches

watcher

ahead of the center, the throttle closed with the safety pin in place, and the air brakes properly set. After syphoning into the engine all of the oil which remained in the tank car farthest west, he disconnected the syphon, and then went to the watchman's shanty, about 40 feet distant, to prepare his supper. Shortly afterwards he saw the engine moving up the ascending grade toward the main track, ran out and caught it, bringing it to a stop before it had run through the main track switch. His statements were conflicting as to just what occurred at this time, first he said he placed the engine in reverse and began to work steam, but that as the tender brakes did not release and the rails were wet, the driving wheels spun around, and that it was just as the rear end of the engine got into clear that the accident occurred. Other statements more nearly agreed with the memorandum he gave the deputy sheriff, and indicated that he got off the engine and threw the switch to back the engine in on the lead track, and that it was while he was doing this that the engine began to move out on the main track; he ran after it, brought it to a stop, and was backing it into clear of the main track, on the lead track, at the time of the accident; he had not observed the approach of train No. 28. Engine Watchman Smith then stated that in his opinion the throttle was leaking sufficiently to move the engine, even with the brakes applied, and that this was how it came to be fouling the main track. Upon being further questioned, Engine Watchman Smith admitted he intended moving the light engine from the point at which it was spotted on track 1 to the lead track, and there finish supplying it with oil while he prepared and ate his supper. He also stated the switch connecting track 1 with the lead track is not locked and when in the normal position is lined for track 1; also that when the light engine passed through this switch it was in its normal position.

Approaching the station at Humble, Engineman Hottle, of train No. 28, reduced speed to about 25 miles an hour, then released the air brakes, and, on reaching a point about 1,700 feet east of the station, sounded the whistle for the train order signal, at which time he could dimly see through the fog that this signal was displaying a stop indication. He continued watching for the indication of this signal to change; however, when about 100 feet from the light engine he saw it fouling the main track, applied the air brakes in emergency, and opened the sanders, the train being brought to a stop within about 200 feet. He estimated the speed of his train at the time of the accident to have been about 20 miles an hour. Engineman Hottle stated the reason he saw the train-order signal, through the fog, before seeing the light engine, was on account of the fact that the signal is 32 feet above the ground and is equipped with a bright electric light, while the fog was hanging close to the ground and there were no lights visible on the light engine. He also stated the boiler check valve was broken off at the time the cab of his engine passed.

Engineman Coker, who spotted engine 439 on track 1, stated the throttle valve was not leaking, the throttle stem was packed properly, also that the throttle latch and ratchet held the throttle lever properly. He also stated he had inspected engine 439, and when he left it in charge of Engine Watchman Smith the throttle was closed, safety pin in place, reverse lever in the center notch, independent engine brake applied, and cylinder cocks open.

Engineman Henning, of train No. 215, stated engine 439 hauled his train more than 100 miles on this day, and on arrival at Humble was exchanged for another engine, as was customary. He made switching movements at practically every station en route to Humble, and noticed no defects of any kind.

Division Engineer Lowe arrived at the scene of accident shortly after its occurrence and found the rear tender truck wheels standing on the switch points, with the switch lined for the lead track and the switch lever in the socket. The reverse lever of the light engine was in back motion, the throttle slightly open, and the firing valve closed.

Tests made of the throttle valve and air brakes on engine 439 after the accident disclosed that they were in proper working order, no defective condition being found. One of these tests showed that in order to start the throttle valve it was necessary to pull the throttle lever back about an inch farther than could be done with the safety pin in place. A check of engine work performed disclosed that the throttle had been packed at Shreveport on December 1, 1922, while no subsequent report had been made of the throttle valve leaking.

Conclusions.

This accident was caused by light engine 439 fouling the main track, for which Engine Watchman Smith is responsible.

While Engine Watchman Smith said he thought the accident was due to the leaking of the throttle, the statements of employees who had recently used the engine were to the effect that there was nothing wrong with it, which statements were confirmed by careful examination and test; and the condition of the lead-track switch after the accident, coupled with other statements made by the engine watchman, indicate undoubtedly that he moved the engine from the point at which it had been left in his charge. After the accident the rear tender truck wheels were standing on the switch points, which were lined for the lead track and bore no evidence of having been run through; these facts alone prove that the engine had been moved eastward on track 1 until it

cleared the switch points, that the switch had then been lined for the lead track, and that the engine was being backed in on that track at the time of the accident, and agree with that part of the watchman's statements which indicate that he was on the engine when it passed the switch, got off to throw the switch, and then boarded the engine for the purpose of backing it in on the lead track

Engine Watchman Smith was employed in this capacity in 1920, and had been located at Humble since August, 1921. None of the employees involved in this accident had been on duty in violation of any of the provisions of the hours of service law

Respectfully submitted,

W. P. BORLAND,

Director.