

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
DENVER & RIO GRANDE WESTERN RAILROAD AT NORTH SALT
LAKE, UTAH, ON FEBRUARY 3, 1931.

March 3, 1931.

To the Commission.

On February 3, 1931, a passenger train struck a motor truck at a grade crossing on the Denver and Rio Grande Western Railroad at North Salt Lake, Utah, resulting in the death of 2 occupants of the motor truck and 1 employee of the railroad, and the injury of 1 employee of the railroad and 13 persons employed by the Cudahy Packing Plant located near the crossing involved. This accident was investigated in conjunction with a representative of the Public Utilities Commission of Utah

Location and method of operation

This accident occurred on Sub-division 7 of the Salt Lake Division, extending between Salt Lake City and Ogden, Utah, a distance of 36.9 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 point of accident is 1,314 feet east of the station at North Salt Lake, where a county highway crosses the tracks practically at right angles. The highway extends east and west by compass direction although time-table directions are also east and west, and these latter directions are used in this report, which makes it appear that the highway extends north and south. Approaching the crossing from the east, the track is tangent for over 1 mile and then there is a 1° curve to the right 581 7 feet in length, followed by 607.6 feet of tangent track to the crossing, this tangent extending for some distance beyond. The grade is slightly ascending for westbound trains. Approaching the point of accident from the south, the highway is tangent for a distance of 3,300 feet, and the grade for northbound traffic is generally ascending, being 9.3 per cent for a distance of 50 feet immediately preceding the crossing.

The Cudahy Packing Plant is located at the southwest corner of this crossing and across the road from it, at the southeast corner, are located various buildings, the nearest to the track being a garage 95 feet south of track, there are also several tracks leading to the packing plant and on the day of the accident there were cars standing on one of the tracks, east of the highway, as well as a number of automobiles parked south of the garage. However, approaching from the south on this highway, until a point about 376 feet from the crossing is reached, a clear and unobstructed view of a westbound train may be had for a distance of 2.6 miles, when 133 to 150 feet from the crossing, an approaching train may be seen for a distance of 3,700 feet, and when 95 feet from the crossing a train again may be seen for a distance of 2.6 miles, this latter view continuing until the crossing is reached.

There is a warning sign 31 $\frac{1}{4}$ by 34 $\frac{1}{4}$ inches on the right side of the highway, 17 feet from the track, painted white with black letters, reading "All vehicles must come to a full stop before crossing tracks." This sign may be read from a point 200 feet south of the crossing. There is also a "Railway Crossing" sign on the north side of the crossing and west of the highway which may be seen for a distance of 400 feet from either direction on the highway.

There was a slight haze at the time of the accident, which occurred at 2.38 p.m.

Description

Westbound passenger train No. 3 consisted of one baggage car and one coach, hauled by engine 775, and was in charge of Conductor Dunn and Engineman Rugg. This train departed from Salt Lake City at 2.22 p.m., two minutes late, according to the train sheet, and was derailed when it struck a motor truck at a grade crossing while traveling at a speed estimated to have been from 20 to 35 miles per hour.

The motor truck involved was a Chevrolet, six-wheel, 1930 six-cylinder model, equipped with a regular cab, owned by the Tintic Lumber Company of Eureka, Utah. The truck had a capacity of $1\frac{1}{2}$ tons and at the time of the accident was carrying a load of 60 cases of blasting caps weighing 2,960 pounds, which was being transported from the warehouse of the Western Powder Company, located slightly more than 1 mile from the crossing on which the accident occurred, to the warehouse at Eureka, a distance of more than 100 miles. This truck was driven by G. W. Begeman, who was accompanied by James Prinsen, assistant secretary of the Western Powder Company, who had given him access to the magazines at the warehouse and delivered the load to him. This truck approached the main track of the Denver and Rio Grande Western at a speed of from 15 to 18 miles per hour, and was proceeding over the track, no stop having been made for the crossing, when it was struck by train No. 3.

The truck was demolished and the chassis came to rest upside down at the foot of an embankment 30 feet northwest of the crossing, the blasting caps exploding immediately after the collision. Engine 775 came to a stop 1,614 feet west of the center of the crossing, with the front pair of engine-truck wheels derailed. The right side of the engine was considerably damaged, indicating that the explosion had come from that side, causing the air cylinder pipes to be torn loose, thus destroying the braking power on the engine and tender. The two cars were damaged but were not derailed. Several buildings in the immediate vicinity, including the Cudahy Packing Plant, were damaged by the force of the explosion. The employee killed was the engineman and the employee injured was the fireman.

Summary of evidence

Fireman James stated that approaching the curve south of the crossing the engineman sounded one long blast of the whistle, and a service application of the air brakes was made while the engine was working steam, reducing the speed to 35 miles per hour; the brakes were then released and after rounding the curve the engineman called "red board", which was repeated by the fireman, who was then sitting on his seat box. The engineman then sounded the crossing whistle signal, and when the train had reached a point about 150 feet from the crossing Fireman James saw a truck approaching from between

the Gudshy Packing Plant and the garage. He did not know whether or not the truck was going to stop, but as the train approached the crossing he saw that the truck did not slacken its speed perceptibly and called to the engineman to stop the train. The engineman applied the air brakes in emergency, at which time the train was about 60 or 75 feet from the crossing, traveling at a speed of between 30 and 35 miles per hour, with the crossing signal still being sounded and the bell ringing, the collision occurring a few seconds later. Fireman James estimated the speed of the truck to have been between 15 and 18 miles per hour, and also stated that while it was hazy he could see the train-order board at the station for a distance of between one-fourth and one-half mile. Fireman James stated that the air brakes had been tested before leaving Salt Lake City and a running test made after their departure, and that the brakes worked properly en route.

Conductor Dunn stated that he was riding on the left side of the smoking compartment of the coach approaching the crossing involved, that he heard the crossing signal sounded, two long and two short blasts, and that the speed was reduced to between 25 and 30 miles per hour. The air brakes were then applied in emergency and the explosion occurred. He thought that the engine worked steam until the train stopped, and he did not know that the engine had collided with a truck until about 10 minutes after the accident. Conductor Dunn further stated that he did not hear the station whistle signal sounded nor did he hear the engine bell ringing. He also stated that while it was a little hazy, it was possible to see easily for a distance of 1 mile.

Flagman Loughien, who was riding in the rear end of the coach, stated that approaching North Salt Lake he heard the station and the crossing signals sounded, after which the speed was reduced from 30 miles per hour to between 20 and 25 miles per hour, he then started toward the door to look out at the train-order board and just as he reached the door the air brakes applied in emergency followed shortly afterwards by an explosion. As soon as the train stopped he got his flagging equipment and went back to protect the rear of his train.

Mr McClurg, a clerk for the Oregon Short Line Railroad, who was in the station of that railroad, located a short distance north of the Denver and Rio Grande Western track, stated that he was looking out of the window toward the crossing when he saw a truck on the crossing, he saw it swing to the west, followed by an explosion. From his position he was unable to see the train approaching, although he heard the station and crossing signals sounded, the whistle still being sounded at the time of the explosion.

Truck Driver Hunsaker, employed by the Cudahy Packing Plant, was assisting in unloading a load of paper from his truck at the dock of the packing plant when he looked up and saw the engine collide with the rear end of the truck. He did not see either the truck or the train approach the crossing, nor did he hear any whistle signals sounded. He thought that on the day of the accident the train could have been seen for a distance of one-half mile. Truck Driver Hunsaker further stated that he uses this crossing frequently and considers it a good crossing.

Coach Yard Foreman Wilkinson, of Salt Lake City, stated that he was present at the time train No. 3 was inspected prior to its departure from that point on the day of the accident. The air brakes were tested and found to be working properly and the equipment was in first-class condition. On the morning following the accident he inspected the cars and found burned spots on each of the wheels of both cars, also flat spots of various lengths.

Conclusions

This accident was caused by a motor truck being driven on a grade crossing directly in front of an approaching train.

The only protection afforded this crossing was a warning sign requiring all vehicles to come to a full stop before crossing the tracks. According to the statements of the fireman of train No. 3, the truck driver failed to stop at the crossing. While there were buildings and obstructions to the right of the highway interfering to some extent with the view of the driver of the truck, a clear view could be had of an approaching westbound train, at intermittent points approaching this crossing, for some distance, and from a point 95 feet from the crossing and extending up to the crossing, a clear and unobstructed view could be had by the driver of a truck on the day of the accident for a distance of at least one-half mile.

The driver of this truck had had many years of experience as a driver of automobiles and trucks, had been in the employ of Mr. Jones, of the Tintic Lumber Company and the Tintic Powder & Supply Company, for seven years, and during the past year he had been driving the powder truck exclusively. Mr. Prinson, of the Western Powder Company, who was riding on the truck at the time of the accident, was said to have been an exceedingly careful man, of excellent habits, long experienced in the work of handling explosives, and was thoroughly familiar with the crossing involved, having made from 4 to 10 or more trips a week from Salt Lake City to the powder magazines at North Salt Lake.

In view of the above, it is difficult to understand the failure of the truck driver to stop before attempting to cross the track, or the apparent failure of either of these men to see the approaching train, or in the event that the train was seen, that an attempt to cross in front of it should have been made with such a hazardous commodity.

On the morning of the accident the truck received a periodical inspection, the brakes were adjusted and other minor adjustments were made, it was considered to be in good mechanical condition.

All of the employees involved were experienced men, and at the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service law. The truck driver went on duty at 5 45 a.m. on the day of the accident.

Respectfully submitted,

W. P. BORLAND,

Director.