

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN
RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON
THE LINE OF THE READING COMPANY AT ST. CLAIR, PA.,
ON MARCH 2, 1929.

June 5, 1929.

To the Commission:

On March 2, 1929, there was a collision between a cut of runaway freight cars and a yard engine on the line of the Reading Company at St. Clair, Pa., resulting in the death of two employees and the injury of three employees.

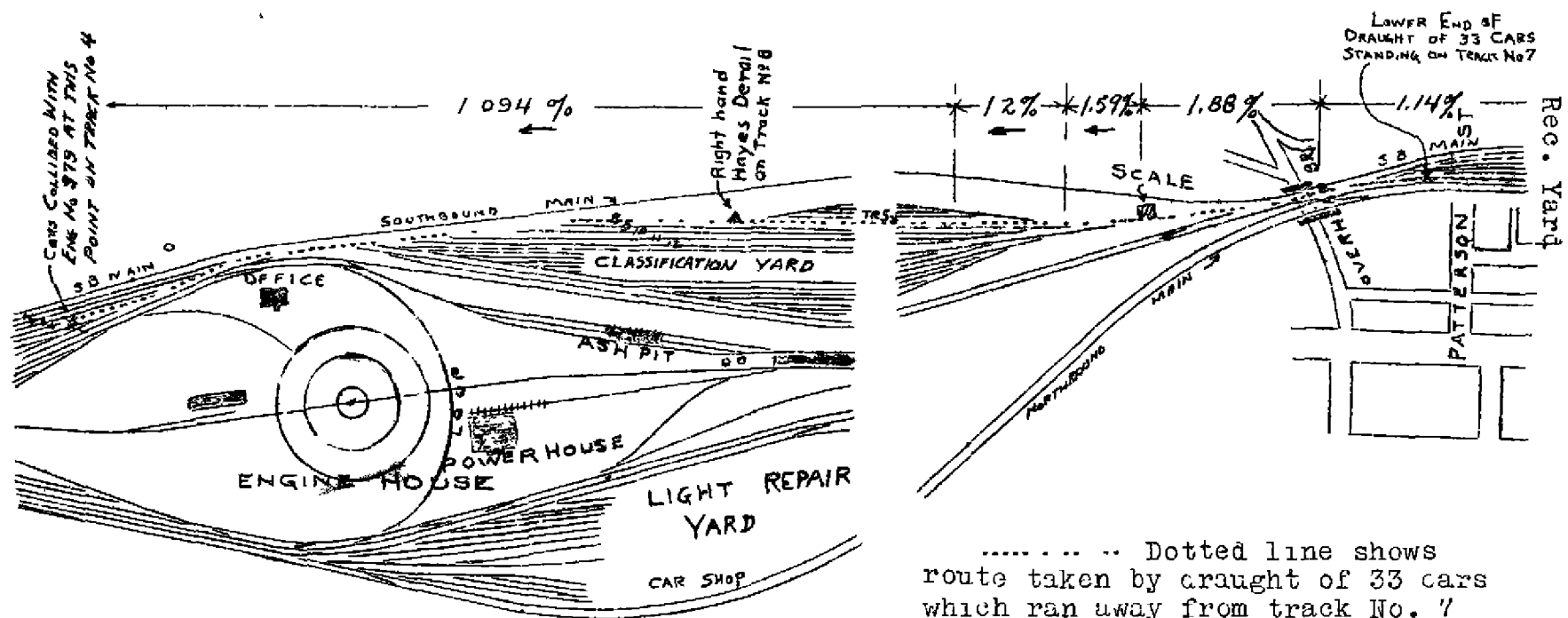
Location and method of operation

St. Clair is located on the Frackville Branch of the Reading Division, at the foot of Frackville grade, there are several yards at this point and those involved, adjoining each other from north to south, are the southbound receiving yard, the classification yard, and the southbound departure yard. The runaway cars started from the south end of the receiving yard, on track 7, while the collision occurred at a point approximately 1 mile distant, in the north end of the departure yard, on track 4; proceeding southward over the route followed by the runaway cars the grade is descending, varying from 0.7 per cent to 1.88 per cent, being 1.14 per cent at the point where the cars started. Cars are switched by gravity, brakemen handling them without the aid of an engine. At the south end of the classification yard there is located a hand-operated Hayes derail which protects the departure yard.

A light rain was falling at the time of the accident, which occurred at about 1.50 a.m.

Description

The cut of 33 runaway cars consisted of loaded cars that had been placed in the receiving yard on track 7 by four different crews; the first 12 cars were placed by engine 1820 at about 7.40 p.m., March 1, the next 7 cars were placed against the north end of the



Philadelphia & Reading Ry. Co.
New Yard at
St. Clair, Pa.

first draft by engine 1052 at about 9.10 p.m., the following 2 cars were then placed on the south end by engine 1811 at about 9.30 p.m., while the last 12 cars were placed against the north end by engine 1057 at about 10.55 p.m. At about 1.45 a.m., March 2, these cars started to move, ran out of the receiving yard, proceeded down the lead track of the classification yard, entered track 5 of that yard, headed out upon the lead track at the opposite end, thence down track 8, which track is merely a continuation of the lead track, passed the point where the Hayes derail is located, the derail being off the rail, continued out of the classification yard, then entered upon track 4 of the departure yard and collided with engine 979.

Yard engine 979, coupled to its caboose, was in charge of Conductor Titus and Engineman Simpson. It was standing in the north end of the departure yard on track 4 with its caboose against the caboose of a 59-car train, loaded with coal and ready to depart, when it was struck by the cut of runaway cars.

Engine 979 was derailed and came to rest in an upright position, with its forward end about 7 feet from the center of the track, the left side of the engine cab was torn off and the engine was otherwise damaged, while the tender cistern was torn from its frame and came to rest about 50 feet away. Both cabooses, which were of steel-underframe construction, were demolished. Eight cars were destroyed beyond repair, and wreckage was spread across tracks 2, 3, 4, and 5, of the departure yard. The employees killed were a brakeman with engine 979, and one of the brakemen called for duty with the train ready to depart from track 4.

Summary of evidence

Conductor Martin, Engineman Weber and Brakemen Wurster and Harig, of engine 1820, gave testimony to the effect that track 7 of the receiving yard was clear when they placed the first 12 cars thereon and that these cars were left standing on the grade with the hand brakes applied on the first 8 cars at the south end of the draft. The first draft of cars so placed is termed the "bumper" and according to statements of the above employees it was the practice to apply enough hand brakes to keep cars from starting of their own accord, in the event drafts of 7 or 12

cars were placed against the "bumper", under conditions similar to the way such drafts were placed in this instance, hand brakes would be applied on at least 2 of the cars in each draft. In other words each draft of cars would be dealt with separately and enough hand brakes would be applied to hold each draft placed against the "bumper".

Conductor Hughes and Brakemen Wesner and McConnon, of engine 1052, gave testimony to the effect that when a draft of cars as large as the first draft, consisting of 12 cars, is left standing on a track as long as track 7 of the receiving yard, which has a capacity of about 35 cars, it is customary to apply enough hand brakes on the same to hold whatever additional drafts are placed against the "bumper", to the extent of the full capacity of the track, also, that whenever such additional drafts are so placed, any hand brakes that have been applied in order to help control the switching movement down the grade and against the "bumper" are left applied, and in this case there was only 1 hand brake applied on the second draft of 7 cars; the air brakes on these 7 cars were applied when his crew left them. The manner by which it is determined whether hand brakes have been set on the cars in the "bumper" is to judge by the impact when the other draft comes against it, in this connection, however, it was admitted that if air brakes had been used to hold the cars in the "bumper", instead of hand brakes, the impact would feel just as solid.

Conductor Smith and Brakemen Nolan and Hartnett, of engine 1811, gave testimony to the effect that the third draft, consisting of two cars, was placed against the south end of the "bumper" with the hand brakes applied on both of these cars. After the accident engine 1811 was used to pull back those cars in the runaway cut that were not derailed and damaged, 24 in number, and no hand brakes were found applied on these cars at this time.

Conductor Coonan, Engineman Dewald, Fireman Hoy and Brakemen Reed and Roeder, of engine 1057, gave testimony to the effect that the fourth draft consisting of 12 cars, was placed against the north end of the cars already on track 7 without any hand brakes having been applied, they having assumed that the usual practice had been followed of having enough hand brakes set on the cars in the "bumper" to hold such additional cars as might be placed on that track, although Brakeman Reed said the cars moved a little when the coupling was made. These last 12 cars were also left with the air brakes set.

Conductor Wolf, Engineman Schrodung, Fireman Derr and Brakemen Freeman and Reilly, of engine 933, gave testimony to the effect that they were engaged in the performance of work in the classification yard and had just moved cars over the point where the derail is located and were putting these cars away elsewhere when the accident occurred. According to their statements they left the derail off the rail because they found it in that position and they were depending upon the car droppers to replace it, it was admitted, however, that it would have been good practice to have restored the derail to derailing position and that to have done so would have derailed the cut of runaway cars. Brakeman Freeman said that it was customary to leave the derail off when there were cars to be dropped down from the classification yard and that was the reason he did not restore it on this occasion.

Foreman Car Runner Auman stated that he was engaged in the work of dropping cars from the classification yard to the departure yard and that it was customary not to restore the derail until after all the cars had been dropped, in this case there were still some cars to be dropped after engine 933 passed over the point where the derail is located.

Assistant Trainmaster Wingert stated that it was the practice to leave the derail off the track provided it was either left in charge of some one or a definite understanding was had as to restoring it. He said that his instructions called for setting 10 hand brakes on a full track of cars, however, if cars are backed in by different crews, such as was the case in this instance, he requires that each crew secure their own particular draft.

Conclusions

This accident was caused by the failure to apply a sufficient number of hand brakes to hold a cut of cars on a descending grade.

Under the instructions relative to the general operation in St. Clair yard it is required that when handling any cars they must be secured by hand brakes before being allowed to stand at any point, enough brakes must be applied to properly secure the draft which is allowed to stand. The weight of testimony however, is to the effect that it is the practice to take it for granted that there are a sufficient number of hand brakes set on the "bumper" or first draft of

cars placed on a track, to hold any additional cars placed against it. The result was that in the draft of 7 cars placed against the "bumper" by engine 1052, and the draft of 12 cars placed by engine 1057, only 1 hand brake was set. The air brakes were applied on these 19 cars at the time they were set against the "bumper" and it seems probable that when the air leaked off these cars it permitted the slack to run in and resulted in starting the cars off of the track on which they were standing. As the 33 cars stood prior to the accident, hand brakes were supposed to be set on the first 10 and also on the 15th car, the first 9 cars were destroyed in the accident and afterwards it was found that the hand brakes were not set either on the 10th or the 15th cars.

The restoring of the derail at the south end of the classification yard would have mitigated the results of this accident but a practice has grown up of leaving the derail off the rail until the work of dropping cars out of the classification yard has been completed. This practice defeats the purpose for which the derail is intended.

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.

Respectfully submitted,

W. P. BORLAND,

Director.