

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT OF THE DIRECTOR
BUREAU OF SAFETY

ACCIDENT ON THE
LEHIGH VALLEY RAILROAD

TANNERY, PA.

MAY 28, 1936

INVESTIGATION NO. 2067

SUMMARY

Railroad: Lehigh Valley
Date: May 28, 1936
Location: Tannery, Pa.
Kind of accident: Head-end collision
Trains involved: Freight : Light engine
Train numbers: Extra 293 : Extra 760
Engine numbers: 293 : 760
Consist: 1 car and :
caboose
Speed: Standing : 20 miles per hour
Track: 5° 04' curve to the left for east-
ward trains; 0.41 percent descend-
ing grade.
Weather: Cloudy
Time: 5:38 p.m.
Casualties: 1 injured
Cause: Train operated against the current
of traffic without authority or
protection.

July 2, 1936.

To the Commission:

On May 28, 1936, there was a head-end collision between a freight train and a light engine on the Lehigh Valley Railroad, at Tannery, Pa., which resulted in the injury of one employee.

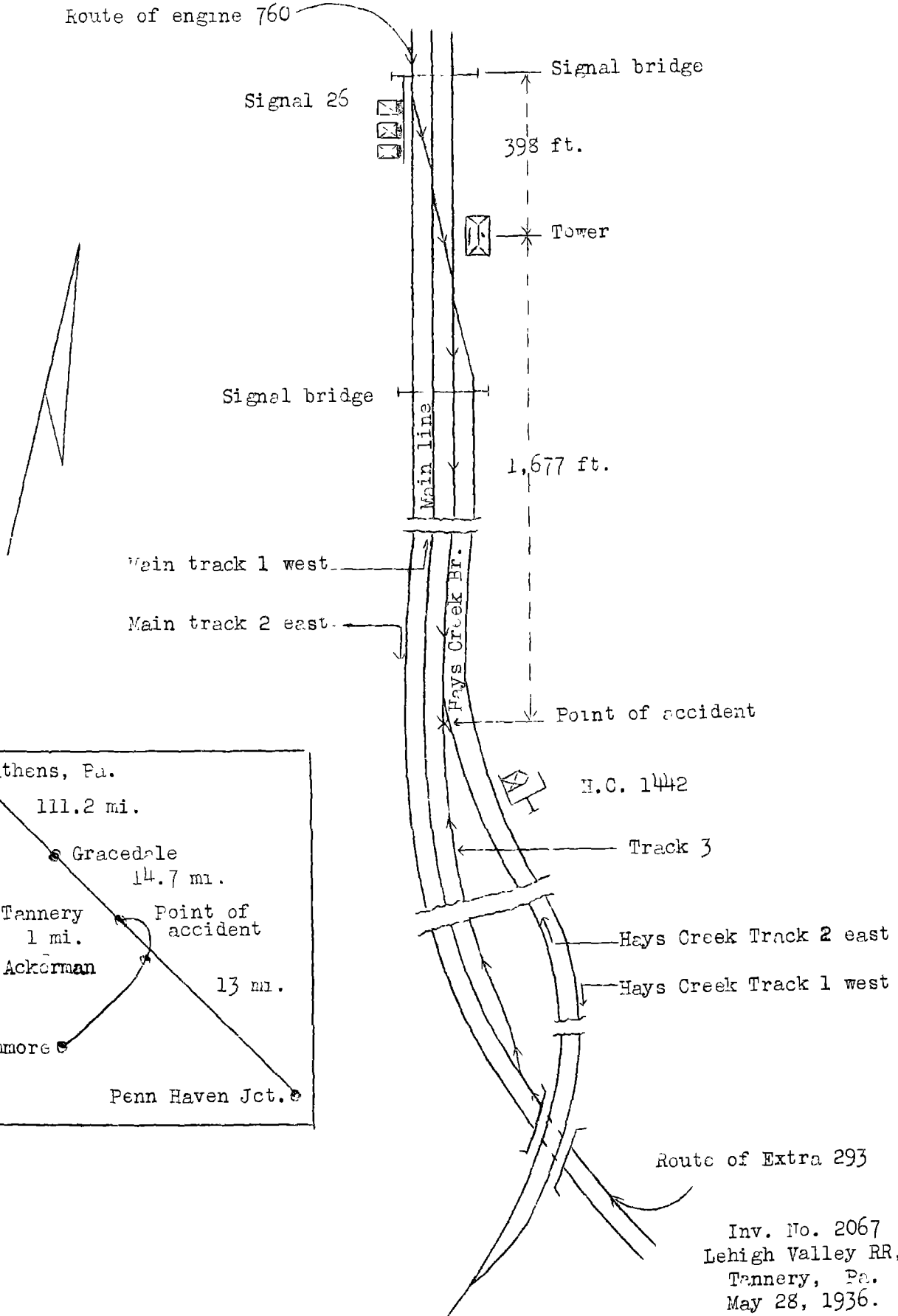
Location and method of operation

This accident occurred on the Wyoming Division extending between Fenn Haven Jct., and Athens, Pa., a distance of 138.9 miles; in the vicinity of the point of accident it is a double-track line over which trains are operated by time table, train orders, an automatic block-signal system, and an automatic train-stop system of the intermittent inductive type. Hays Creek Branch connects with the main line at Tannery and extends between Tannery and Ashmore, Pa., a distance of 13 miles; between Tannery and Ackerman, a distance of 1 mile, it is a double-track line over which trains keep to the left and are operated by time table, train orders and an automatic block-signal system. Train movements through Tannery and to Hays Creek Branch are controlled by interlocking signals. In the vicinity of Tannery, Hays Creek Branch parallels the main tracks on the north and time-table directions on the branch are the reverse of those for the main line. The tracks are numbered from south to north, main track 2, east-bound; main track 1, west-bound; Hays Creek Branch 2, east-bound, and Hays Creek Branch 1, west-bound. The branch line crosses the main line beyond the yard at Tannery, and continues in a southwesterly direction.

At a point 1,580 feet east of the tower there is a switch leading to track 3, this track lying between the branch line and the main tracks. Track 3 in turn leads to stub tracks 5 and 7. The accident occurred at the frog of the branch track switch leading to track 3. Approaching this point from the west the track is tangent for 1,144 feet, followed by a $1^{\circ} 40'$ curve to the right 362 feet in length, tangent track for 245 feet and then a $5^{\circ} 04'$ curve to the left 1,309 feet in length, the accident occurring on this latter curve at a point 324 feet from its western end. The grade on the branch line eastward is 0.41 percent descending. Due to a high cliff on the inside of the curve, the view to be had of the point of accident, approaching from the west, is limited to about 500 feet.

The interlocking plant is of the mechanical type with semi-automatic signals. The signals are of the three-position, upper-quadrant, semaphore type, normal position being

Route of engine 760



Inv. No. 2067
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at stop, and are mounted on signal bridges. A three-arm signal located 398 feet west of the tower, governs east-bound movements; the top arm governs through movements on main track 2; the middle arm governs movements to Hays Creek Branch track 2 and the bottom arm, known as signal 26, is a route signal governing movements against the current of traffic to either main track 1 or to branch track 2. The control of this signal extends to a signal bridge located 620 feet east of the tower; signal 26 displays 2 indications, namely, stop, and proceed at slow speed prepared to stop.

The switch leading from branch track 2 to track 3 is a ball type hand-throw, ground switch with no target. An indicator is located at this switch, which indicates the approach of trains moving with the current of traffic on branch track 2. When the switch is open, automatic signal H.C. 1442, located on the branch line 422 feet east of the switch, displays its most restrictive indication. There is no indicator in the interlocking tower connected with this switch.

The weather was cloudy at the time of the accident, which occurred at 5:38 p.m.

Description

Extra 293, west-bound, consisted of engine 293 and a caboose, and was in charge of Conductor Boyle and Engineman McBride. This train passed Penn Haven Jct., 13 miles from Tannery, at 4:52 p.m., according to the train sheet, arrived at the east end of Tannery yard at 5:18 p.m., according to the statement of the conductor, entered track 3, where water was taken and a car picked up. The train then started to move from track 3 to Hays Creek branch track 2 when Engineman McBride saw engine 760 approaching and immediately brought his train to a stop, with the engine standing at the frog of the switch, where it was struck by engine 760.

Extra 760, east-bound, was in charge of Engineman McNally and Fireman Barry, and departed from Gracedale, 14.7 miles west of Tannery, at 4:58 p.m., stopped at Bridgeport, 1 mile west of Tannery, where the caboose was left and train crew went off duty. Light engine 760 then continued eastward on main track 2 and on arrival at Tannery Engineman McNally accepted the route set up by the towerman from the main track to Hays Creek branch track 2; he forestalled operation of the automatic train stop device on passing signal 26, which displayed an indication to proceed at slow speed prepared to stop, proceeded to the tower where a train order was received, and then continued on Hays Creek

branch track 2 against the current of traffic, entered the open switch leading to track 3, and collided with Extra 293 while traveling at a speed estimated to have been about 20 miles per hour.

The front ends of both engines were damaged, the lead truck of engine 760 being pushed back under the No. 1 driving wheels. The No. 1 driving wheels of engine 293 were derailed. The employee injured was the fireman of engine 760.

Summary of evidence

Engineman McBride, of Extra 293, stated that his train entered track 3 at the east end of Tannery yard, picked up a car on track 5 and then started to pull out of track 3 onto track 2 of the branch line when he saw engine 760 approaching. At first he thought this engine was on track 1, but on looking a second time he saw that it was on track 2. He immediately stopped his engine, with the pilot on the switch frog, sounded the whistle, and at that time the approaching engine was about 25 or 30 yards distant; he reversed the engine but was unable to get it started in backward motion before the collision occurred. Engineman McBride stated that when he makes a movement from the tower to the yard on track 2 of the branch line, against the current of traffic, he does so under flag protection.

Fireman Walsh, of Extra 293, stated that he was on his seatbox but due to the curve he was unable to see the approaching engine. The first he knew of anything wrong was when he heard the engineman sound the engine whistle.

Conductor Boyle, of Extra 293, stated that while it is common practice for trains arriving at Tannery yard to pull through track 3 and out upon branch line track 2, under ordinary circumstances his train would have continued west-bound on the main line and then backed down track 2 of the branch line and into the yard, under flag protection, but upon arrival at the east end of Tannery yard on the day of the accident, there were two trains ahead on main track 1, the second of which fouled the switch leading to track 3. After calling the dispatcher relative to picking up a car at that point he found that the trains had departed, and his train then pulled into track 3. He further stated that it is not his practice to call the towerman before using the main track switch when leaving the yard.

Head Brakeman Groark, of Extra 293, stated that on arriving at the west end of the yard he opened the switch leading from track 3 to Hays Creek branch track 2 while

the engine was taking water. Before opening the switch he pushed the operating button of the switch indicator and received a clear indication, showing that there was no east-bound train approaching on the branch line. He then opened the switch leading to yard track 5; he coupled the car that was picked up and later boarded the caboose, and was in the caboose at the time of the accident.

Engineman McNally, of Engine 760, stated that on the day of the accident he operated the engine, light, from Ashmore to Bridgeport, 1 mile west of Tannery, where the train crew went on and off duty, and he was returning from Bridgeport en route to Ashmore when the accident occurred. On arriving at the signal bridge just west of Tannery interlocking plant, on main track 2, the route was set for him to proceed through the cross-overs to Hays Creek branch track 2 against the current of traffic, signal 26 displaying an indication to proceed at slow speed prepared to stop. On passing this signal he operated the forestalling feature of the automatic train-stop device, proceeded to the tower where he received an order to run extra from Ackerman to Hartz, and continued without further instructions from the towerman. He was moving at a speed of about 20 miles per hour and was about 3 or 4 rail lengths from the switch leading to track 3 when he discovered it was open. He immediately applied the air brakes in emergency; he heard the engine whistle sounded by the engineman of Extra 293, but the speed of his engine was too high to stop before striking engine 293. Engineman McNally stated that while he knew it was against the rules to operate against the current of traffic without authority, it is a common practice at this point, and he considered the towerman a trustworthy man and when the route is lined for a movement against the current of traffic he accepts it without question, keeping a sharp lookout ahead. On the day of the accident, however, he was late and in a hurry and was running a little faster than he should have been. He preferred to use branch line track 2 in moving from Tannery to Ackerman as this avoids throwing a switch at Ackerman. He has been making this run three days per week in the winter and four or five days per week in the spring for about 10 years.

Fireman Barry, of Engine 760, stated that he was in the tender on approaching Tannery and did not see the signal indication. When the stop was made at the tower he received the train order which he read and handed to the engineman. He did not notice on which track they were operating on leaving the tower and was shoveling coal up to the time of the accident. He stated that they occasionally make this movement from Tannery to Ackerman against the current of

traffic, that it saves throwing a switch at Ackerman and also saves throwing the interlocking switch leading to branch track 1.

Towerman Scally stated that when he lined the route for engine 760 to make the movement against the current of traffic on branch track 2, he knew that he had no authority to run this engine against the current of traffic, but he did not know there was another engine working in the yard that would have occasion to use branch line track 2. His first knowledge that engine 293 was in the yard was about 5:42 p.m. when the dispatcher informed him that Extra 293 had pulled into track 3 but at that time engine 760 had left the tower.

Discussion

Rule 634 prohibits signalmen from permitting trains to pass beyond interlocking signal limits against the current of traffic unless the movement is fully protected by a flagman, or authority of the Superintendent; by a special rule in the time table trains on the Hays Creek Branch are required to keep to the left between Tannery and Ackerman.

The evidence indicates that Towerman Scally set the route for engine 760 to proceed from main track 2 to Hays Creek branch track 2 and move against the current of traffic without authority and in violation of the rules; Engineman McNally accepted this route without question, stating that it is common practice if the track is not occupied. Engineman McNally failed to proceed at slow speed prepared to stop, as required by the indication displayed by signal 26, but instead, he operated his engine at such speed that he was unable to stop when he saw the open switch. He gave as his reason for operating at this speed the fact that he was late and in a hurry. Fireman Barry was negligent in that he failed to observe the indication displayed by signal 26 and did not know what route was set up for his engine. He stated that in making this movement from Tannery to Ackerman against the current of traffic it saves the handling of a switch at Ackerman and also saves the towerman from throwing the switch leading to track 1.

Observation made by the Commission's inspectors disclosed that the rails of branch track 1 were rusty while the rails of track 2 were bright, indicating that the greater part of train movements were being handled over track 2. Engineman McNally has been assigned to this run for the past 10 years and it is probable that this practice is of long standing and should have been known by the officers of the

railroad whose responsibility it is to see that the operating rules are properly observed.

Conclusion

This accident was caused by a train being operated against the current of traffic without authority or protection.

Recommendations

It is recommended that the operating officials of this railroad take such steps as may be necessary to secure proper enforcement and observance of the rules.

Respectfully submitted,

W. J. PATTERSON,

Director.