

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY
IN RE INVESTIGATION OF AN ACCIDENT WHICH
OCCURRED ON THE VIRGINIAN RAILWAY AT GLEN
LYN, VA., ON SEPTEMBER 1, 1924.

October 24, 1924.

To the Commission:

On September 1, 1924, there was a derailment of a freight train on the Virginian Railway at Glen Lyn, Va., resulting in the death of one employee and the injury of two employees.

Location and method of operation

This accident occurred on the Third Subdivision of the New River Division, extending between Roanoke, Va., and Princeton, W. Va., a distance of 97.1 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 500 feet east of the station at Glen Lyn, in a cut about 900 feet in length, at a point about 100 feet from its western end, approaching this point from the west the track is tangent for more than 2,000 feet, followed by a 2° 30' curve to the left 1,266 feet in length, the accident occurring on this curve at a point about 450 feet from its western end. The grade is descending for eastbound trains, varying from 0.70 to 0.8125 per cent, being 0.71 per cent at the point of accident. The track is laid with 100-pound rails, 33 feet in length, with about 19 to 20 hardwood ties to the rail-length, double-spiked, tie-plated, and ballasted with crushed limestone about 12 inches in depth; the track is well maintained.

The cut is about 70 feet in height at the point of accident, the north wall is comparatively smooth and slopes at an angle of about 45°, while the south wall is irregular and practically perpendicular. It is composed of shale rock and dirt. The drainage through the cut is eastward and is adequate to take care of a normal flow of water. Owing to the curve the view of the point of accident is considerably restricted. The weather was clear at the time of the accident, which occurred at about 1.05 a.m.

Description

Eastbound freight train extra 712 consisted of 81 loaded coal cars and a caboose, hauled by engine 712, and was in charge of Conductor Waltnall and Engineman Reid. This train left Princeton at 11.10 p.m., August 31, and was derailed on encountering a landslide in the cut east of Glen Lyn while traveling at a speed variously estimated at between 20 and 28 miles an hour.

The engine and forward portion of the train were forced over the slide by the momentum and weight of the rear portion of the train, the engine and tender coming to rest leaning against the south slope of the cut; the front end of the boiler was against a large projecting rock, 297 feet east of the slide. The first five cars were piled up and practically demolished; the twenty-fifth and twenty-sixth cars were telescoped; the sixty-sixth, sixty-seventh and sixty-eighth cars were overturned, and the sixty-ninth and seventieth cars were partly derailed but remained upright. The track and roadbed were torn up for a considerable distance. The employee killed was the engineman.

Summary of evidence

At Kellysville, 4 miles from Glen Lyn, the retainers were turned down and the train was given the usual inspection by the crew. Just after passing through Hale Gap tunnel, located about $1\frac{1}{4}$ miles west of Glen Lyn, the throttle was closed and the train was permitted to drift, and speed increasing on the descending grade. On reaching East River bridge, located about $\frac{1}{2}$ mile from the point of accident, the speed was about 25 miles an hour and a service application of the air brakes was made, being released just before reaching Glen Lyn station. Head Brakeman Brogan was looking out of the front window on the fireman's side of the cab but he did not see the slide before the engine struck it as the reflection from the headlight shown on the south slope of the cut while rounding the curve, however, just prior to the derailment he saw what he at first thought was fog in the cut, but afterwards he said this might have been smoke or dust; after the accident he did not see any suspicious looking person in the vicinity. Fireman Smith had been putting in a fire and just as he climbed up on his seat box the accident occurred, he estimated the speed to have been about 20 miles an hour. Conductor Waltnall was unaware of anything wrong until the accident occurred, at which time he said that the weather was clear and he estimated the speed of the train to have been about 28 miles an hour.

Examination showed that a large mass of rock and dirt had fallen on the track from the north wall of the cut, the total amount being about 250 cubic yards, in which there was one boulder weighing about a ton. This slide apparently had started at a point about 20 or 25 feet above the track.

Trackwalker Ferguson stated that his duties require him to walk through this cut every day and that on the day prior to the accident he passed through the cut at 10 a.m., but at this time he noticed nothing unusual. A light shower fell in this vicinity two days prior to the accident, there was no rainfall on the day prior to the accident. There had been slides in this cut on previous occasions, usually after heavy rains, but in these instances it had only required a few hours' work to clear them. An abnormal slide occurred at this point when the road first began operation, several days being required to clear it up, but this happened during inclement weather.

Section Foreman Ganoie went through the cut on several occasions on Saturday, August 30, the last time about 3 p.m., but nothing unusual was noticed on any of these occasions. Section Foreman Ganoie stated that a light rain fell about 4 p.m. on that day. An employee of a power company, located in the vicinity of the point of accident, who was formerly in the employ of this railway, stated that while crossing the tracks at a point about 290 feet from where the derailment occurred, on his way to work less than one and one-half hours prior to the accident, he looked through the cut but noticed no dirt or rocks covering the rails and was of the impression that had the slide been covering the shiny surface of the rails at this time he would have noticed it even in the darkness.

Superintendent White stated that in company with two special officers of the railroad he visited the scene of the accident about six and one-half hours after its occurrence, and conducted an investigation to determine whether or not the slide was due to natural causes, in view of the fact that no trouble is expected with slides during dry weather, but nothing was found to indicate that the slide was the result of a malicious act. On the following morning, however, after a quantity of coal had been shoveled out of the derailed cars and from the ditch a small piece of wire, about 5 feet in length, with the insulation trimmed from each end, was found in the coal, this wire being similar to wire used in blasting coal from the mines. This did not seem unusual at the time, but when on the next day another piece of wire of the same gauge and about the same length was found about 20

feet above the coal, in the freshly disturbed rock on the side of the cut, it was thought that the slide might have been due to other than natural causes.

The last train to pass through the cut prior to the derailment was a westbound extra which passed that point about four hours before the accident occurred, and at that time nothing unusual was noticed by members of that crew.

Conclusions

This accident was caused by a land slide.

No trouble had been experienced with slides in this cut in dry weather, but during inclement weather slides had occurred, at times covering the rails, however, in these instances it had only required a few hours' work to repair the damage. There was testimony to the effect that the slide, which developed on the north slope of the cut, might have been due to other than natural causes, but nothing definite was developed in this connection at the time of the investigation.

All of the employees involved were experienced men. 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.