

INTERSTATE COMMERCE COMMISSION  
WASHINGTON

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REPORT NO. 3414  
THE CHESAPEAKE AND OHIO RAILWAY COMPANY  
IN RE ACCIDENT  
NEAR CLIFTON FORGE, VA., ON  
JULY 29, 1951

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SUMMARY

Date: July 29, 1951  
Railroad: Chesapeake and Ohio  
Location: Clifton Forge, Va.  
Kind of accident: Derailment  
Train involved: Passenger  
Train number: 104  
Engine number: 613  
Consist: 6 cars  
Estimated speed: 35 m. p. h.  
Operation: Signal indications  
Tracks: Double; 1°30' curve; level  
Weather: Cloudy  
Time: 5:25 p. m.  
Casualties: 1 killed  
Cause: Obstruction on track

INTERSTATE COMMERCE COMMISSION

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REPORT NO. 3414

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS  
UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910.

THE CHESAPEAKE AND OHIO RAILWAY COMPANY

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September 26, 1951

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Accident near Clifton Forge, Va., on July 29, 1951,  
caused by an obstruction on the track.

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REPORT OF THE COMMISSION<sup>1</sup>

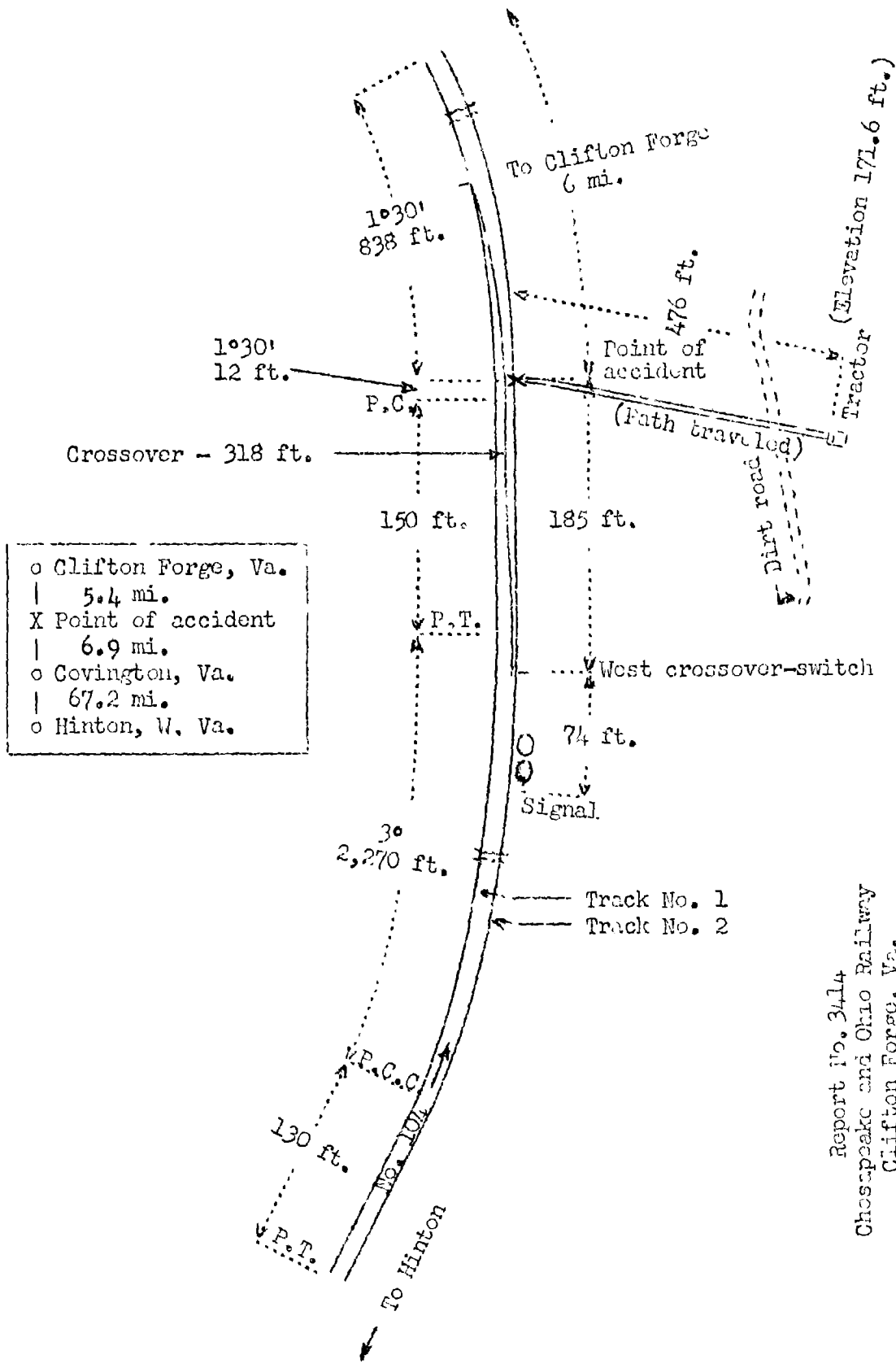
PATTERSON, Commissioner:

On July 29, 1951, there was a derailment of a passenger train on the Chesapeake and Ohio Railway near Clifton Forge, Va., which resulted in the death of one employee.

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Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



- o Clifton Forge, Va.
- | 5.4 mi.
- X Point of accident
- | 6.9 mi.
- o Covington, Va.
- | 67.2 mi.
- o Hinton, W. Va.

Report No. 3414  
 Chesapeake and Ohio Railway  
 Clifton Forge, Va.  
 July 29, 1951

### Location of Accident and Method of Operation

This accident occurred on that part of the Clifton Forge Division extending between Hinton, W. Va., and Clifton Forge, Va., 79.5 miles. In the vicinity of the point of accident this is a double-track line, equipped with a traffic-control system, over which trains are operated in either direction on either track by signal indications. From north to south the main tracks are designated as No. 1 and No. 2. The accident occurred on track No. 2 at a point 74.1 miles east of Hinton and 5.4 miles west of Clifton Forge. From the west there are, in succession, a tangent 130 feet in length, a compound curve to the left, having a maximum curvature of 3°, 2,270 feet, a tangent 150 feet and a 1°30' curve to the left 12 feet to the point of accident and 838 feet eastward. In the vicinity of the point of accident the grade is level.

The track structure consists of 131-pound rail laid new in 1947 on an average of 22 treated ties per rail length. It is single-spiked, fully tieplated with double-shoulder tieplates and is provided with 6-hole 36-inch toeless joint bars and an average of 10 rail anchors per rail length. It is ballasted with 18 inches of crushed stone.

In the vicinity of the point of accident the track is laid on a side-hill cut. South of the tracks the hillside slopes steeply upward, and at the point of accident it reaches an elevation of 171.6 feet above the base of the rail at a point 430 feet south of the center-line of track No. 2 and continues to rise a considerable distance southward.

The maximum authorized speed for passenger trains is 60 miles per hour.

### Description of Accident

No. 104, an east-bound second-class passenger train, consisted of engine 613, a 4-8-4 type, one mail car, two express cars, one mail car, one passenger-baggage car and one coach, in the order named. All cars were of steel construction. This train departed from Covington, 6.3 miles west of the point of accident, at 5:15 p. m., on time, and while moving at an estimated speed of 35 miles per hour it struck a tractor which was obstructing track No. 2, and was derailed.

The vehicle in this accident was a crawler type tractor owned and operated by Bradford & Cook Lumber Company and was used in logging operations in that vicinity. It was an Allis-

Chalmers model MD-19 and was powered with a 6-cylinder General Motors Diesel engine. A hydraulic torque converter transmitted power from the engine to the driving mechanism. The tractor was mounted on two parallel tracked treads, 24 inches in width and spaced 7 feet between centers. The distance between the centers of the drive sprocket and the front idler was 8 feet 10-5/8 inches. Each tread consisted of 37 track shoes. It was equipped with hydraulically controlled clutches for steering. Two brake pedals were provided. It was equipped with brake locks, shielded to prevent accidental release, for safe locking of the brakes in applied position when not in operation. The total length of the tractor was 15 feet 10-3/4 inches and the over-all height, without stacks, was 7 feet 10-5/16 inches. The total weight of the tractor was approximately 40,000 pounds. The tractor was parked on the slope a distance of 476 feet from the track and, while unattended, moved down the slope to track No. 2 where it was struck by No. 104.

The engine stopped on its left side, with the front end over the south rail of track No. 1 and 301 feet east of the point of accident. The tender remained coupled to the engine and stopped in line with it. It leaned to the north at an angle of about 45 degrees. The first two cars and the front truck of the third car were derailed and stopped about in line with track No. 2. The first car leaned to the north at an angle of about 65 degrees and the second car leaned to the north at an angle of about 75 degrees. There were no separations in the train. The engine was badly damaged. The tender and the first three cars were slightly damaged.

The tractor stopped in the drainage ditch on the south side of the tracks, with the front end against the embankment and its rear end against the side of the second car. It was demolished.

The engineer was killed.

The weather was cloudy at the time of the accident, which occurred at 5:25 p. m.

#### Discussion

As No. 104 was approaching the point where the accident occurred the speed was 47 miles per hour. The enginemen were maintaining a lookout ahead from their positions in the cab of the engine. The fireman, a qualified passenger engineer, was operating the engine under the supervision of the assigned engineer, who was seated on the left seatbox. The members of

the train crew were in various locations throughout the cars of the train. The brakes of this train had been tested and had functioned properly when used en route. The engineer was killed in the accident. The fireman said that, because of track curvature, the block signal governing east-bound movements into the block in which the accident occurred was first visible from the left side of the engine, and the engineer called the Proceed signal indication. He said that when the engine was closely approaching the signal the engineer called a warning that the track was obstructed. The fireman immediately placed the brake valve in emergency position, and the speed of the train was reduced to about 35 miles per hour when the accident occurred.

About 23 minutes before the accident occurred, Extra 1608 West passed this point on track No. 1 at a speed of about 30 miles per hour. The members of the crew on the engine of this train, and the conductor and the flagman, who were in the caboose, observed no obstruction on the tracks in the vicinity of the point of accident.

The investigation disclosed that the tractor had been parked by its driver about 4 p. m. of the second day preceding the day on which the accident occurred. The driver said that he had placed the tractor, headed southward and uphill, on the south side of an unimproved road that paralleled the railroad in the vicinity of the point of accident. The fuel supply was shut off before he left the tractor and the brakes were applied and secured with the brake-locking device. As an additional precaution, the driver left the machine in low gear with the clutch engaged and also wedged a wooden block between the foot rest and the brake pedals to hold the pedals depressed in the applied position. After the tractor had been so secured it would be necessary, before it could be moved, to remove the wooden block and to release both brakes and the master clutch and to disengage both steering clutches.

The owners of the tractor had not authorized its movement or use by anyone after it had been parked by the driver two days before the accident occurred. Within a period of about 23 minutes immediately before the accident occurred, the tractor moved northward from the point where it had been parked by its driver, entered the railroad right-of-way and stopped with its rear end obstructing track No. 1 and its front end obstructing track No. 2. It could not be determined how the tractor was started in motion. However, the marks made by the tractor treads showed no indication of retardation by the brakes or otherwise. Apparently the brakes were released before the tractor was started in motion.

Cause

It is found that this accident was caused by an obstruction on the track.

Dated at Washington, D. C., this twenty-sixth day of September, 1951.

By the Commission, Commissioner Patterson.

(SEAL)

W. F. BARTEL,

Secretary.