

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT NO. 3599
THE CHESAPEAKE AND OHIO RAILWAY COMPANY
IN RE ACCIDENT
NEAR COLEMAN, VA., ON
NOVEMBER 25, 1954

SUMMARY

Date	November 25, 1954
Railroad.	Chesapeake and Ohio
Location	Coleman, Va.
Kind of accident:	Derailment
Train involved:	Freight
Train number:	Extra 7032 West
Engine number:	Diesel-electric units 7032, 7516, and 7033
Consist:	92 cars, caboose
Estimated speed.	30 m. p. h.
Operation.	Signal indications
Track	Single, 1°48' curve; level
Weather	Cloudy
Time	2 48 p. m.
Casualties	1 killed; 2 injured
Cause:	Rock slide

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3599

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

THE CHESAPEAKE AND OHIO RAILWAY COMPANY

December 21, 1954

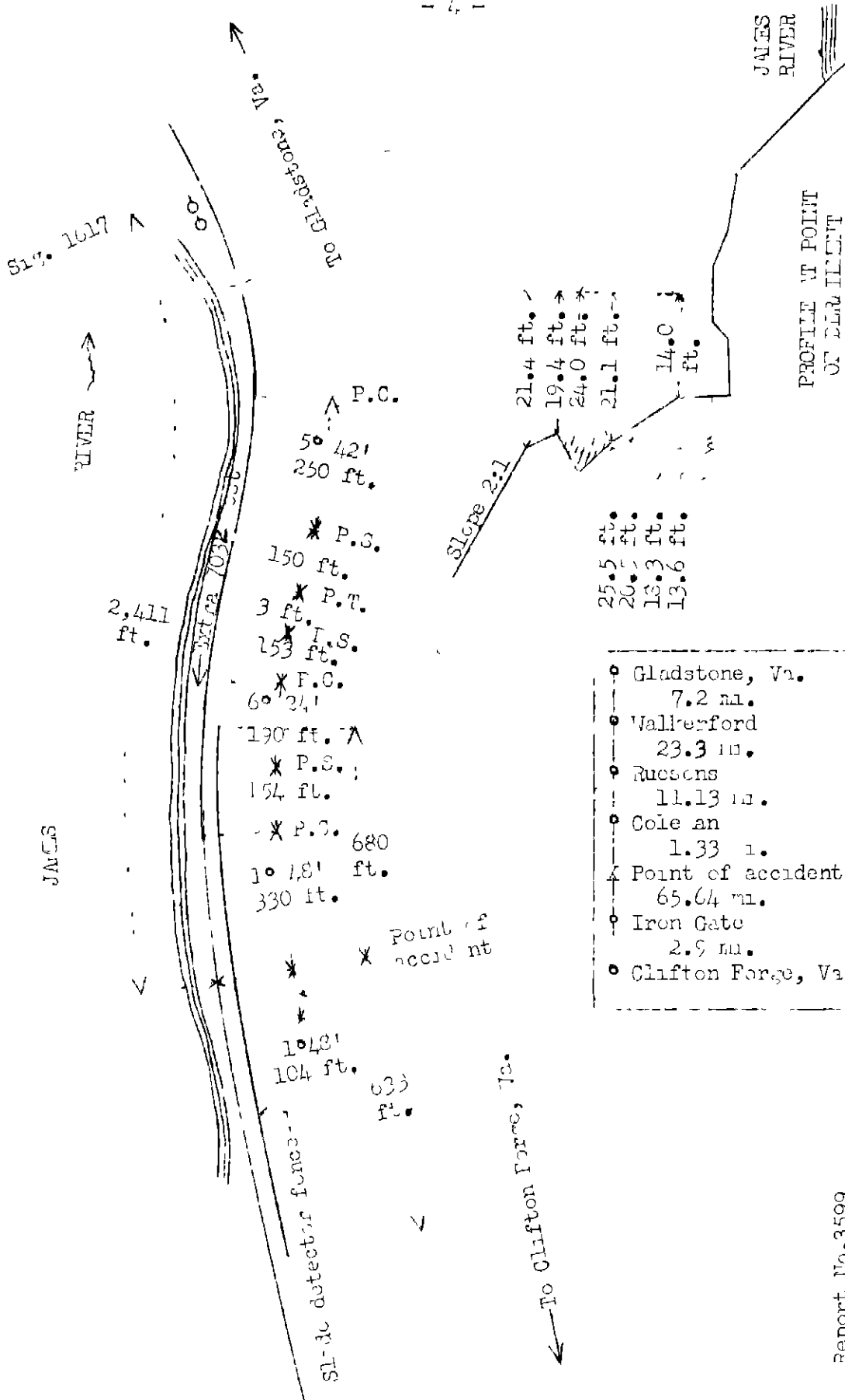
Accident near Coleman, Va., on November 25, 1954, caused
by a rock slide.

REPORT OF THE COMMISSION¹

CLARKE, Commissioner

On November 25, 1954, there was a derailment of a freight train on the Chesapeake and Ohio Railway near Coleman, Va., which resulted in the death of one train-service employee, and the injury of two train-service employees.

¹ Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Clarke for consideration and disposition.



○	Gladstone, Va.	7.2 mi.
○	Walkerford	23.3 mi.
○	Rucesons	11.13 mi.
○	Coleman	1.33 mi.
▲	Point of accident	65.64 mi.
○	Iron Gate	2.9 mi.
○	Clifton Forge, Va.	

Report No. 3599
 Chesapeake and Ohio Railway
 Coleman, Va.
 November 25, 1954

Location of Accident and Method of Operation

This accident occurred on that part of the Clifton Forge Division extending between Gladstone and Clifton Forge, Va., 111.5 miles. In the vicinity of the point of accident this is a single-track line, over which trains are operated by signal indications. The accident occurred on the main track at a point 42.96 miles west of Gladstone and 1.33 miles west of Coleman. From the east there are, in succession, a 5°42' curve to the right 250 feet in length, a spiral 150 feet, a tangent 3 feet, a spiral 153 feet, a 6°24' curve to the left 190 feet, a spiral 154 feet, and a 1°48' curve to the left 350 feet to the point of accident and 104 feet westward. The grade is level.

The track structure consists of 132-pound rail, 39 feet in length, laid new in April, 1954, on an average of 22 treated ties to the rail length. It is fully tieplated, spiked with two rail-holding spikes and two plate-holding spikes per tie-plate, and is provided with 6-hole 36-inch joint bars and an average of 12 rail anchors per rail. It is ballasted with crushed stone.

In the vicinity of the point of accident the track is laid in a sidehill cut which parallels the James River on the south. At the point of accident the track is 16 feet above the level of the shore-line of the river and 31 feet horizontally distant from it. The toe of the south wall of the cut is 14 feet from the center-line of the track, and at a point 25 feet above the level of the track the wall is 21 feet south of the center-line of the track. Above this point the ground rises on a slope of approximately 2 to 1. At a point 34 feet west of the point of accident the wall of the cut rises to a height of 39 feet and is 23 feet south of the center-line of the track at the top. A ditch approximately 2 feet in depth is located between the track and the toe of the wall of the cut.

The wall of the cut is composed of granite containing numerous vertical seams.

Automatic signal 1617, governing west-bound movements, is located 2,411 feet east of the point of accident. This signal forms part of a traffic-control system which extends between Walkerford and Iron Gate, located, respectively, 7.2 miles and 108.6 miles west of Gladstone. The control machine is located at Clifton Forge.

A woven wire slide detector fence extends between points 680 feet east and 633 feet west of the point of accident. This fence is 28 feet 9 inches in height; at the bottom its supports are located 9 feet south of the center-line of the track but due to an offset near the upper end they are 5 feet 1 inch south of the center-line of the track at the top. The control circuits of the signal system are so arranged that when any appreciable pressure is exerted against the fence the signals governing movements into the block in which the fence is located are caused to indicate Stop. When this occurs an indicator on the panel of the traffic-control machine becomes illuminated.

The maximum authorized speed for freight trains in the vicinity of the point of accident is 35 miles per hour.

Description of Accident

Extra 7032 West, a west-bound freight train, consisted of Diesel-electric units 7032, 7516, and 7033, coupled in multiple-unit control, 92 cars, and a caboose. At Gladstone the crew received copies of train order No. 3 reading as follows:

Run very carefully at points where slides and rocks are liable to fall.

This train departed from Gladstone at 1.38 p. m., passed Reusons, 30.5 miles west of Gladstone, the last open office, at 2.32 p. m., passed signal 1617, which indicated Proceed, and while moving at an estimated speed of 30 miles per hour it struck a rock slide at a point 42.96 miles west of Gladstone and 1.33 miles west of Coleman.

The three Diesel-electric units and the first four cars were derailed. The first Diesel-electric unit stopped on its left side, approximately 150 feet west of the point of accident, with the rear end about 30 feet north of the track and the front end submerged in the river. The second unit stopped upright and at right angles to the track. The front end was near the rear end of the first unit, and the rear end was against the wall of the cut. The third unit stopped upright with the front end against the rear end of the second unit and the wall of the cut and the rear end about 15 feet north of the track. The derailed cars stopped in various positions on or near the track. The Diesel-electric units were badly damaged, and the derailed cars were somewhat damaged.

The engineer was killed. The fireman and the front brakeman were injured.

The weather was cloudy at the time of the accident, which occurred at 2:48 p. m.

Discussion

As Extra 7032 East was approaching the point where the accident occurred the enginemen and the front brakeman were maintaining a lookout ahead from the control compartment at the front of the locomotive. The conductor and the flagman were in the caboose. The fireman and the front brakeman estimated that the front of the train passed signal 1617, which indicated Proceed, at a speed of from 30 to 35 miles per hour. The fireman said that when the locomotive reached a point which he thought was from 400 to 600 feet east of the point of accident he observed rocks falling from the wall of the cut. He called a warning, and the engineer immediately made an emergency application of the brakes. The front brakeman said he observed rocks on the track at approximately the time the fireman called the warning. He thought that the speed of the train was slightly reduced before the accident occurred.

Examination after the accident occurred disclosed that approximately 75 tons of rock had become dislodged from the wall of the cut and had fallen into the ditch and upon the track. Before this rock became dislodged it had occupied a space 42 feet in length, from 6 to 13 feet in height, and a maximum of approximately 7 feet in width. The east end of the dislodged portion had been approximately 14 feet above the level of the track and the west end 25 feet above the level of the track.

Apparently the rock became dislodged as a result of weathering which had occurred over a long period of time. Heavy rains had fallen in the vicinity a short time before the accident occurred. The cut in which the accident occurred was completed in 1881, and the wall was last hand scaled in September 1954. The supervisor of track said that a rock weighing from 2 to 3 tons fell from the wall of the cut in 1936 and several rocks weighing from 4 to 5 tons fell in 1945. With these exceptions, only minor dislodgements had occurred in the vicinity of the point of accident during a period of 28 years prior to the time of the accident. No. 10, an east-bound passenger train, passed the point of accident about 45 minutes before the accident occurred. The crew of this train reported no unusual condition.

Slide detector fences are designed to provide protection by causing the signals governing approaching trains to indicate Stop if a slide occurs. The chief train dispatcher said that in the instant case the indicator on the panel of the traffic-control machine indicated that the slide occurred at approximately the time that the locomotive of Extra 7032 West passed signal 1617, the last westward signal east of the point of accident.

Cause

This accident was caused by a rock slide.

Dated at Washington, D. C., this twenty-first day of December, 1954.

By the Commission, Commissioner Clarke.

(SEAL)

GEORGE W. LAIRD,
Secretary,