INTERSTATE COMMERCE COMMISSION

WASHINGTON

INVESTIGATION NO. 2709

THE BALTIMORE & OHIO RAILROAD COMPANY

REPORT IN RE ACCIDENT

NEAR VERSAILLES, PA., ON

JULY 15, 1943

SUMMARY

Railroad:	Baltimore & Ohio
Date:	July 15, 1943
Location:	Versailles, Pa.
Kind of accident:	Derailment
Train involved:	Passenger
Train number:	21
Engine number:	5052
Consist:	10 cars
Speed:	50 m. p. h.
Operation:	Automatic block-signal system
Track:	Double; 5° right curve; level
Weather:	Clear
Time:	5:05 p. m.
Casualties:	1 killed; 1 injured
Cause:	Coal on track

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2709

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

THE BALTIMORE & OHIO RAILROAD COMPANY

August 18, 1943.

Accident near Versailles, Pa., on July 15, 1943, caused by coal on the track.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On July 15, 1943, there was a derailment of a passenger train on the Baltimore & Ohio Railroad near Versailles, Pa., which resulted in the death of one employee and the injury of one employee.

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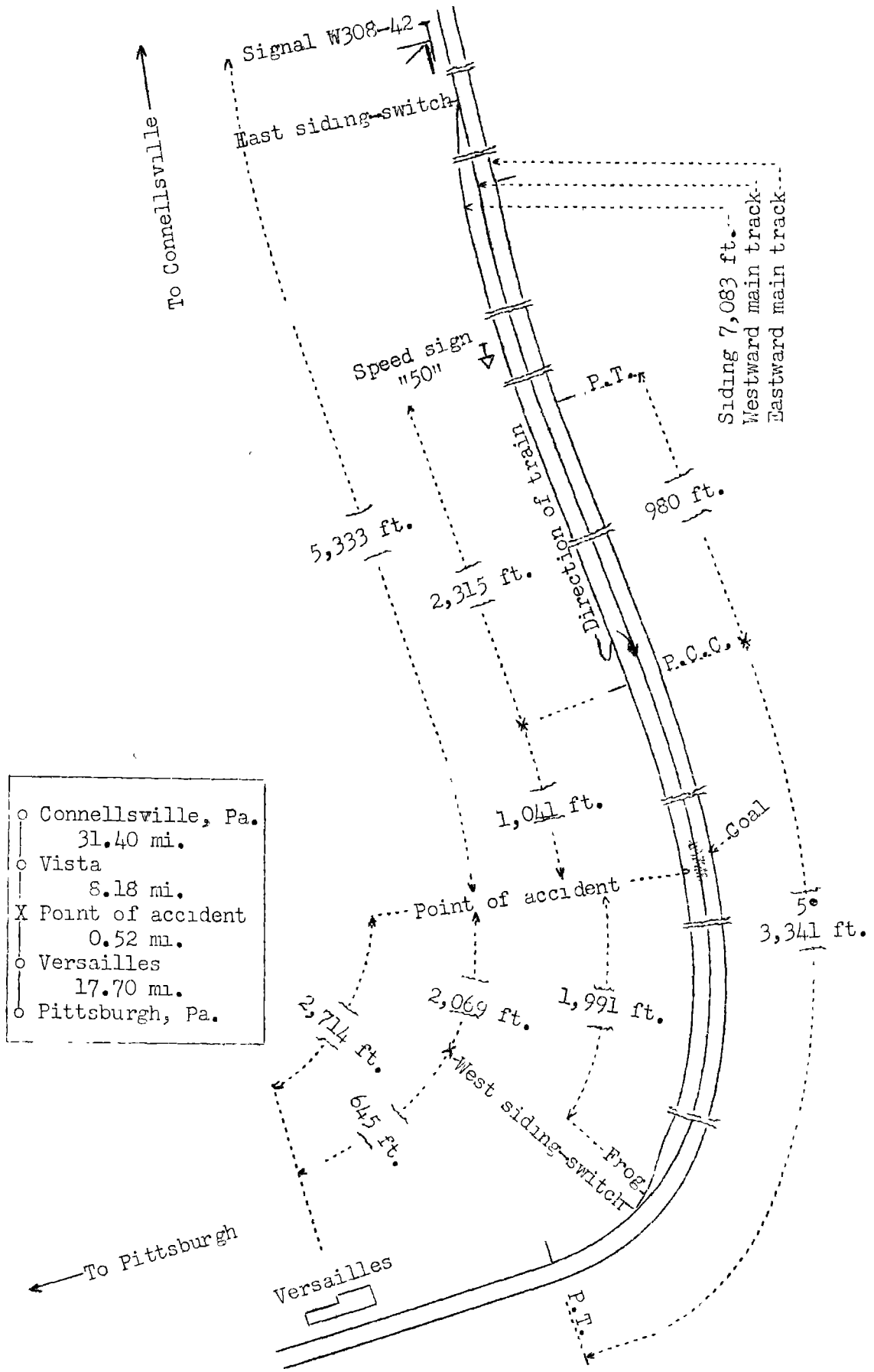
[1]Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Inv-2709
Baltimore & Ohio Railroad
Versailles, Pa.
July 15, 1943

Location of Accident and Method of Operation

This accident occurred on that part of the Pittsburgh Division designated as the River Sub-Division and extending between Connellsville and Pittsburgh, Pa., 57.8 miles. In the vicinity of the point of accident this was a double-track line over which trains moving with the current of traffic were operated by an automatic block-signal system, the indications of which superseded time-table superiority. The west switch of a siding which paralleled the main tracks on the north was located 645 feet east of the station at Versailles. The accident occurred on the westward main track at a point 2,069 feet east of the west siding-switch, and the general derailment occurred at the switch. Approaching from the east there was a tangent 980 feet in length, which was followed by a compound curve to the right 3,341 feet in length, the curvature of which varied between 2° and 5°. The accident occurred 1,041 feet from the eastern end of this curve, where the curvature was 5°. In the vicinity of the point of accident the grade was practically level.

On the curve involved the track structure consisted of 130-pound rail, 39 feet in length, laid on 22 ties to the rail length. It was fully tieplated, double-spiked, provided with 7 rail anchors per rail length, and was ballasted with limestone to a depth of 18 inches. The maximum superelevation on the curve was 6-3/4 inches and the gage varied between 4 feet 8-3/4 inches and 4 feet 9-1/4 inches. The superelevation at the point of accident was 6-1/4 inches and the gage was 4 feet 8-3/4 inches.

Automatic signal W308-42, which governed west-bound movements on the westward main track, was located 5,333 feet east of the point of accident.

The maximum authorized speed for passenger trains on the curve involved was 50 miles per hour. A speed-limit sign bearing the numerals "50" was located 2,315 feet east of the eastern end of the curve.

Description of Accident

No. 21, a west-bound first-class passenger train, consisted of engine 5052, of the 4-6-2 type, two baggage cars, one mail car, one baggage car, one passenger-baggage car, one coach, one cafe car, one coach, one cafe-parlor car and one coach, in the order named. All cars were of steel construction. After an air-brake test was made this train departed from Connellsville, 40.1 miles east of Versailles, at 4:14 p. m., according to the dispatcher's record of movement of trains, on time, passed Vista, 8.7 miles east of Versailles and the last open office, at 4:55 p. m., one minute late, passed signal W308-42, which displayed proceed, and while moving at a speed

of about 50 miles per hour the engine and the first seven cars were derailed.

The front wheels of the engine truck were derailed to the left at a point 2,714 feet east of the station at Versailles and continued in line with the track 1,991 feet to the west siding-switch, where the general derailment occurred. The engine and its tender, remaining coupled, stopped, badly damaged, on their left sides on the eastward main track, with the front end of the engine 498 feet west of the west siding-switch. The first car stopped, badly damaged, on its left side on the eastward main track. The second to the sixth cars, inclusive, were derailed and stopped, slightly damaged, in various positions but practically upright and in line with the main tracks. The front truck of the seventh car was derailed.

It was clear at the time of the accident, which occurred about 5:05 p. m.

The fireman was killed and the engineer was injured.

Discussion

No. 21 was moving on a compound curve to the right at a speed of about 50 miles per hour, in territory where the maximum authorized speed was 50 miles per hour, when the front wheels of the engine truck became derailed. There was no defective condition of the engine prior to the accident, and there was no indication of dragging equipment or defective track. According to A.R.E.A. tables, the maximum safe speed on this curve was approximately 61 miles per hour.

As the train was approaching the point where the accident occurred, the engineer was maintaining a lookout ahead. The air brakes had functioned properly en route and the engine had been riding smoothly. When the engine reached a point about 600 feet west of the eastern end of the curve the engineer observed coal extending between the rails and outside each rail of the westward main track about 400 feet ahead of the engine, and, as the engine passed over the coal, a considerable amount of it was thrown up in front of the engine. He made a 10-pound brake-pipe reduction, but was not aware of anything being wrong until the engine reached the vicinity of the west siding-switch, then he observed that the front wheels of the engine-truck were derailed. He moved the brake-valve to emergency position, and immediately afterward the general derailment occurred. It could not be determined when the fireman first became aware of anything being wrong, as he was killed in the accident.

The investigation disclosed that about 725 cubic feet of 2-inch stoker coal had dropped on the westward main track from a car in a west-bound freight train about 11 hours 45 minutes prior to the time the accident occurred. The car was a hopper

of the four-pocket type. The door fastenings of the pocket at the west end of the car had failed at the point where the coal had dropped on the track. No member of the crew of the freight train was aware that the coal had dropped from the car until after the accident occurred. Five west-bound freight trains and three west-bound passenger trains moving on the westward main track had passed over the coal prior to the accident. The last train to pass this point was a west-bound freight train, which passed about 1 hour 20 minutes prior to the time the accident occurred. The members of the crew of that train did not observe any unusual condition other than the presence of the coal on the track. No report of the coal being on the track was made until after the accident occurred. The section foreman said that about 45 minutes prior to the accident his men removed some of the coal from the gage side of the rails. However, the acting division engineer said that he examined the track soon after the accident occurred and at that time there was no indication that any of the coal had been removed. The coal covered an area about 65 feet in length between the rails and on each side. Between the rails it was slightly above the level of the top of the rails, and outside it sloped upward to 4 or 5 inches above the level of the top of the rails. Starting at a point about 8 feet east of the western end of the coal a flange mark appeared on the nut of the east angle-bar bolt on the outside of the high rail. From a point about 9 feet west of this mark and extending westward 1,991 feet to the frog of the west siding-switch, flange marks appeared on the ties 9-1/2 inches outside the high rail and 13 inches inside the low rail. From this point westward the track was torn up to the point where the engine stopped.

After the coal fell upon the track, several trains passed that point. As a result, coal adjacent to the gage side of each rail was ground to dust and packed solidly. Apparently the coal next to the gage side of the high rail was packed enough to cause the left front engine-truck wheel to be raised high enough to pass over the high rail and drop outside that rail.

Cause

It is found that this accident was caused by coal being on the track.

Dated at Washington, D. C., this eighteenth day of August, 1943.

By the Commission, Commissioner Patterson.

W. P. BARTEL,

(SEAL)

Secretary.