

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT OF THE DIRECTOR
BUREAU OF SAFETY

ACCIDENT ON THE
SPOKANE, PORTLAND & SEATTLE RY.

LYLE, WASH.

DECEMBER 17, 1935

INVESTIGATION NO. 2027

SUMMARY

Railroad: Spokane, Portland & Seattle

Date: December 17, 1935

Location: Lyle, Wash.

Kind of accident: Side collision

Trains involved: Freight : Freight

Train numbers: No. 274 : No. 221

Engine numbers: 454 : 303

Consist: 33 cars, caboose : Engine backing
cut of cars from
: main track to
house track

Speed: 18-35 m.p.h. : Stopped

Track: Curve of 3⁰ followed by tangent on
which accident occurred, within
yard limits, at fouling point of
house-track switch

Weather: Cloudy

Time: 11:05 p.m.

Casualties: 2 killed; 1 injured

Cause: Failure to operate under proper
control within yard limits

April 16, 1936.

To the Commission:

On December 17, 1935, there was a side collision between two freight trains on the Spokane, Portland & Seattle Railway at Lyle, Wash., which resulted in the death of 2 employees and the injury of 1 employee. This accident was investigated in conjunction with the Washington State Department of Public Works, completion of the investigation having been considerably delayed on account of serious injuries sustained by one of the employees involved.

Location and method of operation

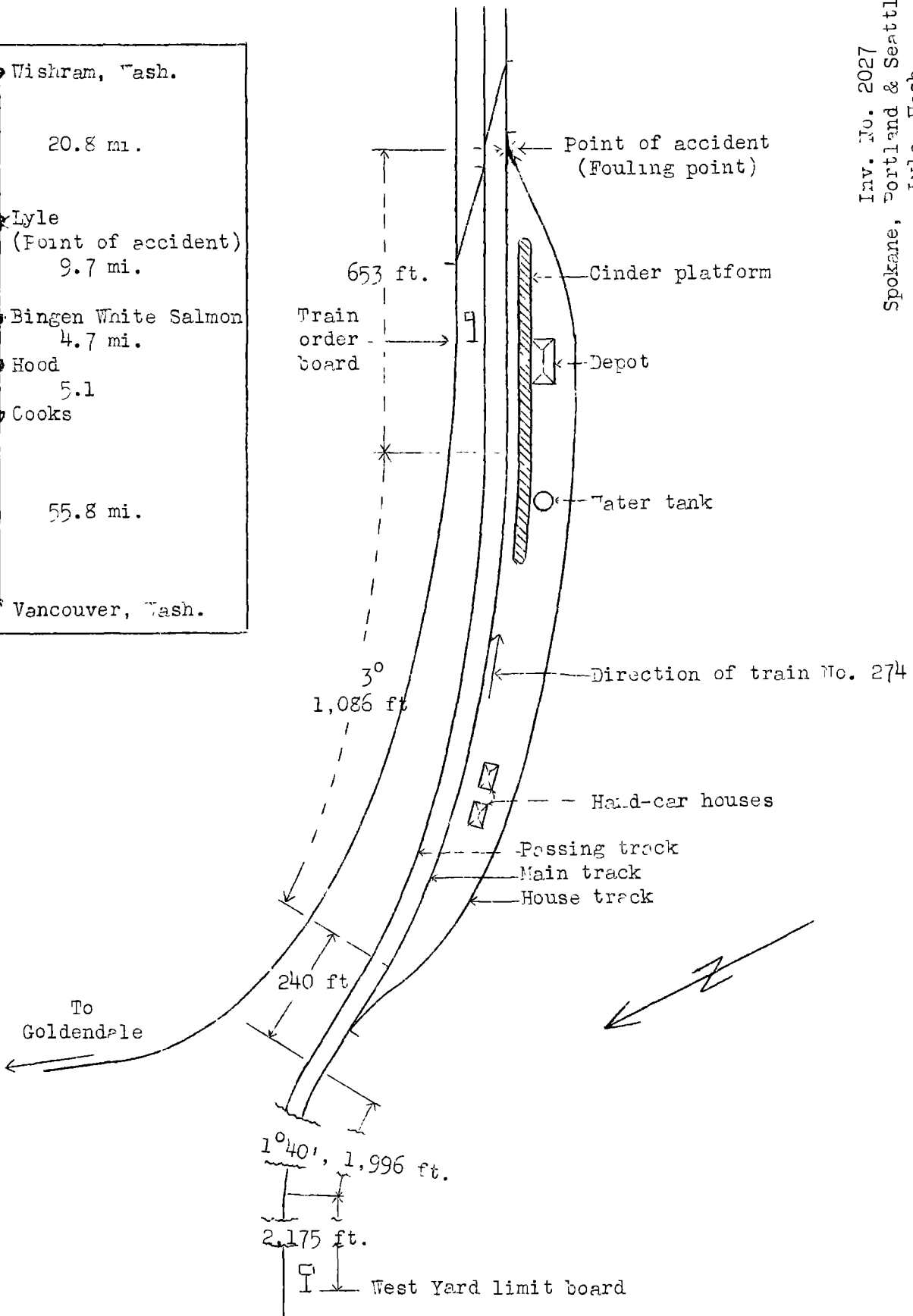
This accident occurred on the First Subdivision of the Vancouver Division, which extends between Vancouver and Wishram, Wash., a distance of 96.1 miles, and is a single-track line over which trains are operated by time table and train orders, no block-signal system being in use. The accident occurred within yard limits at Lyle, at the fouling-point of the east switch of the house track, 460 feet east of the train-order signal located opposite the depot; approaching the point of accident from the west, beginning at the west yard-limit board, the track is tangent a distance of approximately 2,175 feet, followed by a $1^{\circ} 40'$ curve to the right 1,996 feet in length, 240 feet of tangent, a 3° curve to the left 1,086 feet in length, and then 2,903 feet of tangent, the accident occurring on this last-mentioned tangent at a point 653 feet from its western end. The grade is level.

The house track is 2,002 feet in length and is on the south side of the main track, with the depot between the main track and the house track, the east switch of the house track being located 619 feet east of the depot; the water tank is located 220 feet west of the depot. The passing track, as well as other tracks, including a connection with the Golden-dale Branch, Fourth Subdivision, are located on the north side of the main track, and the train-order signal is located north of the passing track and opposite the depot; the west switch of the passing track is 793 feet west of the west house-track switch. A view of the east house-track switch can be had by the engine crew of an east-bound engine for a distance of 984 feet.

It was dark and cloudy at the time of the accident, which occurred about 11:05 p.m.

Inv. No. 2027
Spokane, Portland & Seattle Ry.
Lyle, Wash.
Dec. 17, 1935

Wishram, Wash.	
20.8 mi.	
Lyle (Point of accident)	9.7 mi.
Bingen White Salmon	4.7 mi.
Hood	5.1
Cooks	
55.8 mi.	
Vancouver, Wash.	



Description

Train No. 221, a Fourth Subdivision west-bound second-class mixed train, consisted of 17 freight cars and 1 coach, hauled by engine 303, and was in charge of Conductor Wheaton and Engineman Bigby. This train arrived at Lyle, its destination on the Goldendale Branch, at 10:45 p.m., according to the train sheet, 1 hour 35 minutes late. Work of putting away the train was in progress and a cut of cars was being backed from the main track to the house track at the east switch when the left side of the fourth or fifth car from the engine was struck by Train No. 274.

Train No. 274, a First Subdivision east-bound second-class freight train, consisted of 33 cars and a caboose, hauled by engine 454, and was in charge of Conductor Roberson and Engineman Kraus. This train departed from Vancouver, 75.3 miles west of Lyle, at 8:13 p.m., according to the train sheet, 1 hour 13 minutes late, passed Bingen White Salmon, 9.7 miles west of Lyle, at 10:47 p.m., 1 hour 33 minutes late, and on reaching Lyle it collided with Train No. 221 while traveling at a speed estimated to have been between 18 and 35 miles per hour.

Engine 454, of Train No. 274, stopped on its right side, headed north across the tracks, in a badly-damaged condition; the first four cars behind the engine were derailed and damaged. Five cars in Train No. 221 were derailed, three of these being demolished. The employees killed were the engineman and fireman of Train No. 274, and the employee injured was the head brakeman of that train, who also was on the engine.

Summary of evidence

Conductor Wheaton, of Train No. 221, stated that his train was within yard limits, and under the rules it was not necessary to afford flag protection against the approaching freight train while his own train was backing in at the east house-track switch; Conductor Wheaton expected Train No. 274 to stop west of the depot as usual, and to set out cars and take water. As the train approached he heard the whistle sounded, calling for the train-order signal, and then an acknowledgment was sounded when the engine was a short distance west of the hand car houses, located about 500 feet west of the water tank. At first steam was shut off, but when the engine reached a point between the hand car houses and the water tank, steam was worked again; realizing that the train was traveling too fast, Conductor Wheaton began giving stop signals, and he also saw Brakeman Barney, who was on the depot platform, start giving stop signals

with a lighted lantern. Conductor Wheaton continued to give signals until Train No. 274 passed him, working steam, at which time the conductor was at the east end of the depot, and he said he also called to the engineman, who seemed to be looking ahead; Conductor Wheaton did not hear any air-brake application prior to the accident. A few minutes afterwards the conductor talked with Engineman Kraus, who subsequently died from his injuries, and at that time the engineman complained about the cold and did not know where he was, and also inquired as to the whereabouts of his fireman and wanted to know who was to blame for the accident.

Brakeman Barney was on the depot platform, about 20 feet east of the water tank, as Train No. 274 approached and whistled for the train-order signal. He saw the reflection from the headlight as the engine rounded the curve and began giving stop signals when the engine reached a point about opposite the hand car houses, but the engine had begun to work steam at or just before reaching the hand car houses and passed him at a speed of about 30 or 35 miles per hour.

Brakeman Hoyt was at a point west of the east house-track switch while the back-up movement was being made from the main line; he saw the reflection from the headlight of Train No. 274 as it approached at a speed of about 30 or 35 miles per hour, and heard the engine whistle for and answer the train-order signal. Brakeman Hoyt saw Conductor Wheaton and Brakeman Barney giving stop signals, and realizing that a collision was imminent he also began giving stop signals, but the approaching train continued without any reduction in speed and steam apparently was being worked at the time of the accident; in his opinion the air brakes had not been applied.

Fireman Sarsfield, of Train No. 221, saw the stop signals given by Brakeman Hoyt and thought they were intended for his own train; he informed the engineman accordingly and also told him that he thought the approaching train was going to collide with their train, and he and the engineman were still on the engine when the accident occurred. Fireman Sarsfield could not tell whether the brakes were applied on the approaching train prior to the accident, or whether the engine was working steam, and after the accident he heard Engineman Kraus asking where he was and what had happened.

Head Brakeman Johnson, of Train No. 274, who was badly injured as a result of the accident and was not interrogated until March 10, 1936, said that the air brakes on his train had been tested at Vancouver and worked properly en route. When approaching Lyle he was standing beside the engineman, but he

could not say at what rate of speed the train was traveling or whether the speed was reduced between the west yard-limit board and the west switch of the house track, this switch being located 2,633 feet west of the point of accident. On reaching a point in the immediate vicinity of the west switch of the house track, the engineman, who was sitting on his seat box, whistled for the train-order signal, but the head brakeman did not recall whether the signal was cleared or whether the engineman answered it. Head Brakeman Johnson had been looking over the train from the engineman's side, and then had crossed over to the fireman's side, and he first realized that there was any danger upon reaching a point just east of the west switch of the house track, where he could see the train-order signal, and also the reflection of the headlight of the train switching on the main track and the stop signals being given by two or three men with lanterns. Head Brakeman Johnson said that both he and the fireman immediately shouted to the engineman, when the engine was west of the water tank, but he could not say definitely whether the engineman applied the brakes or closed the throttle prior to the accident. Head Brakeman Johnson looked for a place to get off, but he said that the speed was too high to do this in safety, estimating it to have been about 20 or 25 miles per hour. Head Brakeman Johnson further stated that he had some conversation with the engineman en route about cars to be set out at Lyle, and just before reaching Cooks, located 19.5 miles west of Lyle, he asked the engineman about the water and was told that they would take water at Lyle. The head brakeman also reminded the engineman about the cars to be set out at Lyle, and spoke to the engineman at Hood, 14.4 miles west of Lyle, and he said the engineman appeared to be in normal condition at all times. Usually the speed of the train is materially reduced going through Lyle, but to his knowledge there was no reduction in speed on this occasion; at the same time, however, the head brakeman did not realize when passing the west switch of the house track that the engineman would be unable to stop in time to set out the cars or take water, and he could not account for what happened.

Conductor Roberson, of Train No. 374, who was in the caboose, said that after passing the west yard-limit board the engineman eased off on the throttle and the slack ran in, the speed being reduced to about 22 or 25 miles per hour. He expected the engineman to take water at Lyle as usual and heard him whistle for the train-order signal and answer it, indicating that he was alert at that time. No unusual air-brake application would have been necessary at this time to have stopped the train at the point required in order to set out the cars on the house track; instead of decreasing, however, the speed began to increase and at first the conductor thought it was intended to

stop beyond the house track and did not become unduly alarmed, but when the speed kept increasing, instead of decreasing, and reached 30 miles per hour, the conductor became considerably concerned and decided to apply the air brakes from the caboose. Before he could do so, however, the speed was again reduced, to about 22 or 25 miles per hour, and then the accident occurred. Conductor Roberson said that the air brakes had been tested and worked properly en route, and that he had talked with the engineman at Portland and Vancouver and that the engineman appeared to be normal in every respect. After the accident the conductor found the brake valve in emergency position, the throttle partially closed, and the reverse lever about one notch ahead of center. Conductor Roberson was at a loss to account for the action of the engineman in not stopping the train at Lyle.

Brakemen Walgren and Hudson were in the caboose cupola; Brakeman Walgren, who was looking out, said the air brakes were applied in emergency when the caboose was between the west passing-track and house-track switches, which would have placed the engine in the immediate vicinity of the water tank. The speed at this time was between 30 and 32 miles per hour and he estimated that it was reduced to about 25 or 30 miles per hour when the accident occurred. Brakeman Hudson also felt the air brakes applied just prior to the accident and he estimated the speed to have been about 30 miles per hour when the collision occurred. Statements of Enginemen Lingo and Schaer, both of whom were deadheading on the caboose, developed nothing additional of importance; each of them felt an application of the brakes a few seconds before the train stopped, and Engineman Schaer said Engineman Kraus inquired several times as to where he was, this being when Engineman Schaer was helping him after the accident.

Telegraph Operator Donahue, at Lyle, stated that Train No. 274 whistled for the train-order signal and that he cleared it, following which the whistle was sounded again in acknowledgment. He watched the train as it approached, with the headlight burning, and as the engine passed the depot he immediately put down the time, following which he glanced out of the window and saw sparks flying from the wheels of several of the cars.

Superintendent La Bertew stated that he had frequently ridden on trains operated by Engineman Kraus and had found that in every instance the engineman complied with all speed requirements, usually operating slightly under the maximum authorized speeds, and his train handling performance had been entirely satisfactory in every respect; he considered Engineman Kraus an exceptionally good engineman. While Engineman Kraus had

passed a satisfactory physical examination in July, 1935, the superintendent said it was learned subsequently that he had been undergoing private treatment for diabetes, and the indications were that he was able to pass the physical examination satisfactorily by reason of the fact that he was adhering to a strict diet control, clearing up the condition so that it was not discovered at the time of the examination. The superintendent also said that according to the company doctors, there was a possibility of a diabetic person, through diet, having the balance of the system disturbed to such an extent as to make it possible for him to suffer a temporary mental lapse of several minutes duration, and he was inclined toward the opinion that this might be the explanation for what occurred.

Discussion

Under the rules, second-class trains were required to move within yard limits prepared to stop unless the main track was seen or known to be clear. The evidence indicates that in this instance the speed of the train was reduced after the train passed the west yard-limit board, and that the engineman whistled for the train-order signal and then answered it, at which time the speed was estimated to have been between 22 and 25 miles per hour, indicating that the engineman was then alert. Instead of applying the brakes and bringing the train to a stop, however, in order to set out cars and take water, it appears that the engineman began to work steam and increased the speed to about 30 miles per hour, and when other members of the entire crew realized the impending danger it was too late for them to take action to avert the accident. The fireman and head brakeman shouted a warning of danger to the engineman when the engine was in the vicinity of the water tank and there was evidence to indicate that the engineman applied the air brakes in emergency, although there was a conflict as to whether he shut off steam more than a few seconds, if at all, before the collision occurred. The evidence also indicated that Engineman Kraus was afflicted with a diabetic condition and while no statement shedding any real light on the cause of the accident was obtained from him prior to his death, it is possible his physical condition caused a mental lapse which resulted in his failure to bring his train to a stop. He had been given a physical examination in July, 1935, but apparently had been treating his ailment in such a way as to prevent its discovery by the examining physician.

-10-

Conclusion

This accident was caused by the failure of Engineman Kraus, of Train No. 274, to operate his train under proper control within yard limits.

Respectfully submitted,

W. J. PATTERSON,

Director.