

## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN  
ACCIDENT ON THE PERE MARQUETTE RAILWAY NEAR RIVERDALE,  
MICH., ON AUGUST 3, 1935.

October 5, 1935.

To the Commission:

On August 3, 1935, there was a head-end collision between a mixed train and a portion of a freight train on the Pere Marquette Railway near Riverdale, Mich., which resulted in the injury of 3 passengers and 2 employees.

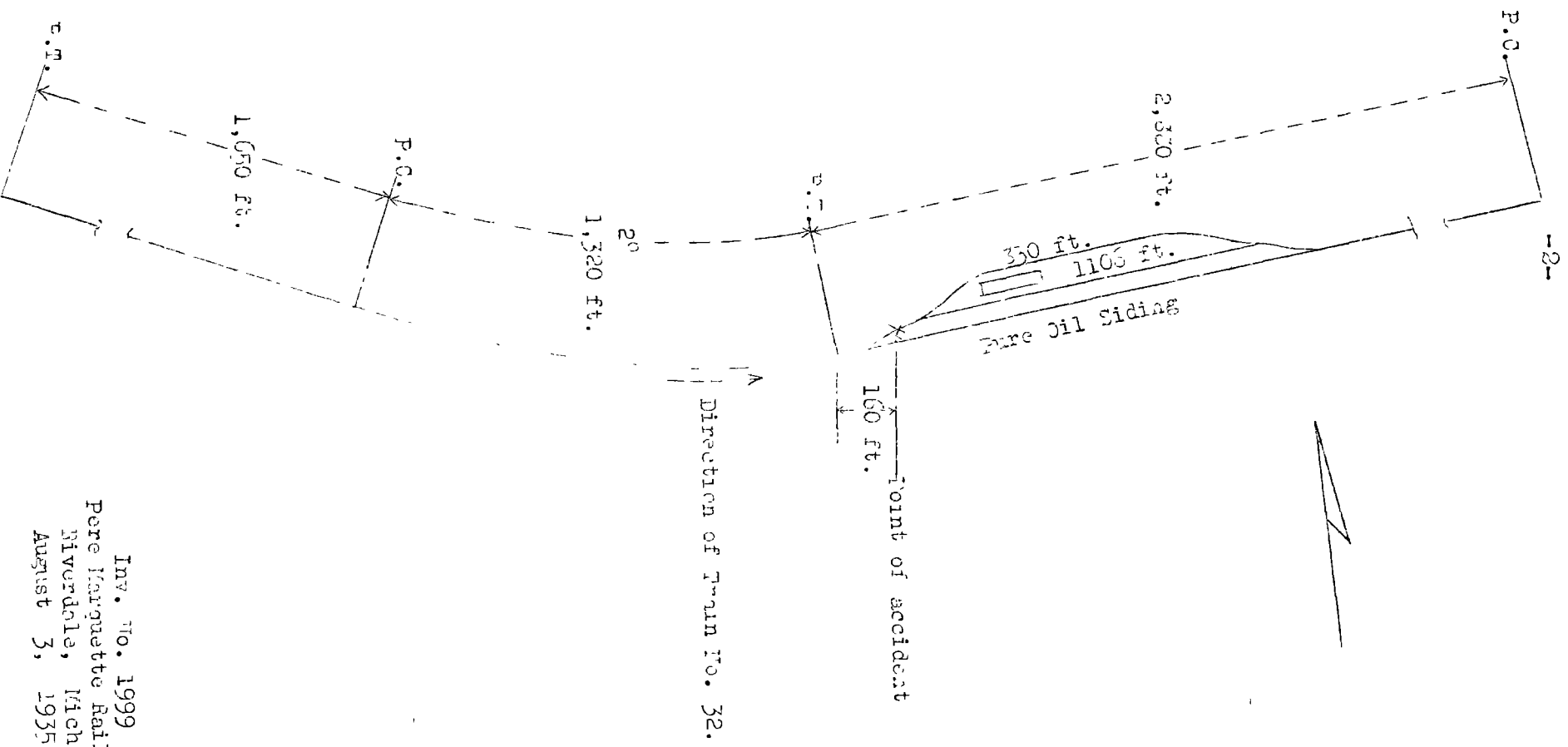
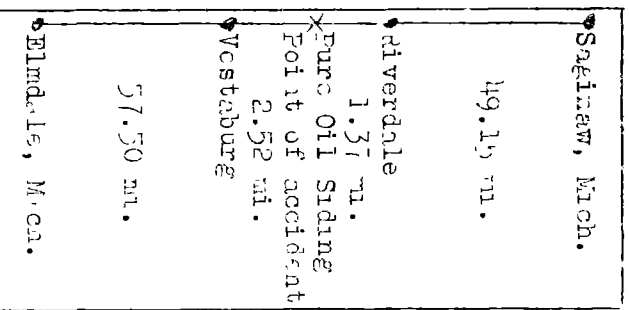
Location and method of operation

This accident occurred on Subdivision 2 of the Detroit-Grand Rapids Division, extending between Elmdale and Saginaw, Mich., a distance of 110.57 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 form of block-signal system being in use. At Pure Oil Siding, 1.37 miles west of Riverdale, there are two tracks serving the Pure Oil Pipe Line Company which parallel the main track on the north, these tracks being 1,106 and 830 feet in length. The accident occurred approximately at the lead switch connecting these two tracks at their western end, located 136 feet east of the west main-track switch. Approaching this point from the west, the track is tangent for a distance of approximately 1,650 feet, followed by a  $2^{\circ}$  curve to the left 1,320 feet in length and then tangent track for a distance of 2,880 feet, the accident occurring about 160 feet east of the leaving end of the curve. The grade for east-bound trains is descending for more than 1 mile approaching Pure Oil Siding, varying from 0.6 percent to a maximum of 0.96 percent at the point of accident.

The weather was clear at the time of the accident, which occurred at 10:28 a.m.

Description

Train No. 51, operating as Extra 1046, was a west-bound freight train hauled by engine 1046, and was in charge of Conductor Larabel and Engineman Walsworth. At Elwell, 4.62 miles east of Riverdale, the crew received a copy of train order 45, form 19, providing for a meet with Train No. 32 at Vestaburg, which is 3.92 miles west of Riverdale. Extra 1046 departed from Elwell at 9:23 a.m., according to the train sheet, passed Riverdale at 9:35 a.m. and arrived at Vestaburg at 9:47 a.m.



Inv. No. 1999  
 Pere Marquette Railway  
 Riverdale, Mich.  
 August 3, 1935

It pulled in on the passing track and five cars were set out on the house track, and the engine with a caboose which was on the head end of the train, together with two cars, then returned to Pure Oil Siding, 2.52 miles east of Vestaburg, to perform work, having left a flagman at that point to protect their return movement, and the engine was standing on the lead switch, with the main-track switch open, preparing to pick up the last car on the siding, when it was struck by Train No. 32.

Train No. 32, an east-bound second-class mixed train, consisted of 23 freight cars, 1 mail car, 1 baggage car, and 1 coach, hauled by engine 1012, and was in charge of Conductor Barger and Engineman Jackson. At Edmore, 6.64 miles west of Vestaburg, the crew received a copy of train order 45, form 31, previously mentioned. Train No. 32 departed from Edmore at 10:03 a.m., according to the train sheet, 3 minutes late, and on arrival at Vestaburg the crew received a copy of train order 53, form 19, stating that Extra 1046 had arrived at Vestaburg. Train No. 32 departed from Vestaburg at 10:23 a.m., 6 minutes late, entered the open switch at the western end of Pure Oil Siding and collided with the engine of Extra 1046 while traveling at a speed estimated to have been about 20 miles per hour.

Engine 1046 was shoved backward a distance of about three car lengths; it was not derailed but its front end was badly damaged. Engine 1012, of Train No. 32, was derailed but remained upright, with its front end damaged. The first car in Train No. 32 was destroyed and the second car was slightly damaged. The employees injured were the engineman and fireman of Train No. 32.

#### Summary of evidence

Conductor Larabel, of Extra 1046, stated that at Alma, 9.15 miles east of Riverdale, he received instructions to perform work at Pure Oil Siding and told the dispatcher that he had too much tonnage to get over the hill and that he would proceed to Vestaburg with the train and then return to Pure Oil Siding to perform the work; at the same time he instructed his flagman to drop off at that point to protect their return movement. At Elwell he received the train order directing him to meet Train No. 32 at Vestaburg, and on arriving at Vestaburg the train was pulled in upon the siding, some cars were placed on the house track, and the engine with two cars and caboose then returned to Pure Oil Siding. Conductor Larabel told the operator at Vestaburg to inform the dispatcher that he was returning to Pure Oil Siding to get the cars, and he said they were getting ready to spot the last car on the siding when he told the flagman that he was going to call the dispatcher to find out about Train No. 32, as he figured that he would take the cars back to

Riverdale rather than delay Train No. 32. He then heard the oil man on the rack call out that Train No. 32 was coming and told the head brakeman to go out and flag, although he did not think that it was Train No. 32 as he thought that the train order covering the meet with that train still held good; the head brakeman was out a distance of about 15 or 20 car lengths when he flagged the approaching train. Conductor Larabel stated that it was the general practice to take his train to Vestaburg and then return to Pure Oil Siding to perform work, and that he had made this same movement on a previous occasion when he held a meet order with Train No. 32 at Vestaburg, although he could not recall the exact date. Occasionally he leaves his train at Riverdale when he has work to perform at Pure Oil Siding.

Engineman Walsworth, of Extra 1046, stated that at Vestaburg the conductor told him that their meet order with Train No. 32 still was in effect and that they would go to Pure Oil Siding to do the work and return to Vestaburg if they would not delay Train No. 32, otherwise he was to call the dispatcher while at Pure Oil Siding if they could get into clear. While performing the switching movements at Pure Oil Siding, Engineman Walsworth saw the head brakeman leave the caboose with a red flag, and on questioning the brakeman as to where he was going, the brakeman replied that he was going to flag Train No. 32. He told the brakeman that he did not have to flag that train but apparently the brakeman did not hear him. Shortly afterwards Engineman Walsworth looked up over the hill and could see smoke, but he continued with the switching and when he saw Train No. 32 approaching around the curve his engine was standing on the siding just foul of the main track; he warned the fireman and they both jumped off. Engineman Walsworth further stated that while trains have proceeded to Vestaburg and then returned to Pure Oil Siding to perform work, this was the first time he had ever made such a movement; however, he frequently leaves his train at Riverdale. In this particular case he was under the impression that train order 45 was still in effect, but he acknowledged that having completed the movement it was necessary to have an additional train order before another movement could be made.

Fireman Gildurski, of Extra 1046, did not hear the conversation between the conductor and engineman at Vestaburg, but he was of the opinion that they had a right to return to Vestaburg on the meet order after performing work at Pure Oil Siding, because of the fact that their entire train was not at Vestaburg upon the arrival of Train No. 32. He was an extra fireman and had made 8 or 10 trips on this division during the last 30 days, but had never made a movement similar to the one being made on

the day of the accident, stating that they had at times left their train at Riverdale when work was to be performed at Pure Oil Siding.

Head Brakeman Pierson, of Extra 1046, stated that when he heard the oil man say that Train No. 32 was coming he immediately secured his flagging equipment and ran toward the train; he could see the train for a distance of about 40 car lengths and reached a point about 18 car lengths from his own engine when the train passed him at a speed of about 25 miles per hour, the engineman having sounded a short blast on the whistle when about 2 car lengths from him. Brakeman Pierson was of the opinion that they had a right to return to Vestaburg without flag protection, having done so on four or five previous occasions.

Flagman Connell, of Extra 1046, stated that he dropped off the train at Pure Oil Siding about 9:30 a.m., the engine and three cars returning to that point about 10 a.m. He asked the conductor what he was going to do about Train No. 32 and the conductor informed him that the order was still good and that when they were ready to leave the siding he would call the dispatcher to see whether they should return to Vestaburg or go to Riverdale.

Engineman Jackson, of Train No. 32, stated that he received the train order providing for a meet with Extra 1046 at Vestaburg, and on arrival at Vestaburg received the order stating that Extra 1046 had arrived at that point, this order being similar to orders he had been in the habit of receiving when operating on other portions of the line. He had seen the train of Extra 1046 at Vestaburg but there was no engine and he thought possibly there had been engine trouble and the engine had gone back to Saginaw. On starting down the hill after leaving Vestaburg the fireman said to him, "We don't know where those fellows are. They may be out between here and Riverdale working", and Engineman Jackson said that he then made a 20-pound brake-pipe reduction, at that time being about half way on the tangent just west of the curve near Pure Oil Siding, and the speed had been reduced to about 30 miles per hour on entering the curve when the fireman called his attention to a flagman about 10 or 12 car lengths distant. He immediately placed the brake valve in emergency position, also applying the independent brake, shutting off the engine and opening the sanders, and he estimated the speed to have been about 20 miles per hour at the time of the accident. Engineman Jackson stated that he expected Extra 1046 would provide protection. He was familiar with this territory but this was not his regular run, the engineman saying that he had not operated Train No. 32 at any previous time.

Fireman Gossett, of Train No. 32, stated that after warning the engineman of the flag ahead, which he thought was about 15 car lengths distant, the engineman answered the flag with one blast of the whistle. He estimated the speed of his train to have been between 40 and 45 miles per hour when the engineman made the first brake-pipe reduction and thought the speed had been reduced to 20 or 25 miles per hour at the time of the accident. Fireman Gossett stated that he is regularly assigned to Trains Nos. 32 and 51, and when working on Train No. 51 it is the usual practice, when the tonnage is heavy, to take the train to Vestaburg and return to Pure Oil Siding to perform work, but at times the train has been left at Riverdale, depending on the location of Train No. 32, and never in his experience after leaving his train at Vestaburg and returning to Pure Oil Siding under flag protection has he returned to Vestaburg for Train No. 32.

Conductor Barger, of Train No. 32, stated that the train was traveling at a speed of about 28 or 30 miles per hour when he felt an emergency application of the air brakes, the train traveling a distance of about 25 or 30 car lengths before the accident occurred, the speed at that time being 20 or 25 miles per hour. The air brakes had been given the proper terminal test before leaving Wyoming, and functioned properly en route. Conductor Barger stated that in the past he had received orders similar to the one he received at Vestaburg, and he expected to find Extra 1046 at Pure Oil Siding or at Riverdale, into clear or protected by flag, as had been the case in the past. Head Brakeman Diment, who was riding on the rear end, thought the speed of their train was 40 miles per hour when the service application was made, and about 15 miles per hour when the accident occurred.

Agent-Operator Peasley, on duty at Vestaburg, stated that extra 1046 pulled in on the passing track and then placed several cars on the house track. Conductor Larabel informed him that they were going back to Pure Oil Siding ahead of Train No. 32, but nothing was said about returning to Vestaburg for that train. Operator Peasley called the dispatcher, informed him of the arrival of Extra 1046, and of the fact that the engine was going to Pure Oil Siding ahead of Train No. 32; the dispatcher questioned him closely as to whether the entire train was there, and then issued the train order for Train No. 32 advising them that Extra 1046 had arrived, this order being made complete at 10:07 a.m.

Dispatcher Eggleston, on duty at Detroit, stated that Conductor Larabel had not said anything to him about returning from Vestaburg to Pure Oil Siding, but when the operator at Vestaburg reported the arrival of Extra 1046 the operator said he thought the engine was going back to Pure Oil Siding; later

he said that the engine had gone and the dispatcher inquired if he was sure they had their entire train at Vestaburg with the caboose and markers, and on being informed in the affirmative, he issued train order 53 to the crew of Train No. 32. He expected that engine 1046 would be protected by flag. The dispatcher further stated that while it is not the practice for this train to proceed to Vestaburg and then return to Pure Oil Siding to do switching, it depends on its arrival time at Riverdale and the tonnage; the train is often left at Riverdale while the switching is performed at Pure Oil Siding, and then Train No. 32 is met at some point west of Vestaburg, usually at Edmore. There had been only one previous occasion to his knowledge when the train had proceeded to Vestaburg and then later returned to Pure Oil Siding, and at that time the engine followed Train No. 32 back to the siding, protected by flag.

Subsequent to the accident observations were made in order to determine the view which could be had by the crew of an east-bound train approaching Pure Oil Siding, and it was found that a flagman standing at a crossing located approximately 600 feet west of the point of accident could be seen by the fireman for a distance of 800 feet; the engineman's view was restricted to 150 feet.

#### Discussion

The crew of Extra 1046 held an order to meet Train No. 32 at Vestaburg; this train proceeded to that point and went in on the siding. Subsequently the engine, with a caboose and two cars, returned to Pure Oil Siding without additional authority or flag protection against east-bound trains, depending on the meet order to hold Train No. 32. The order had not been fulfilled by Extra 1046, yet this train had arrived at the meeting point and having done so, then in the absence of additional train-order authority the crew had no right to move either west or east of that point unless flag protection were provided against trains moving in either direction; such protection had been provided against following movements by leaving a flagman at Pure Oil Siding but no protection was provided against opposing movements until the approach of Train No. 32 was discovered, and it was then too late to avert the accident.

Train Order No. 53, addressed to Train No. 32 at Vestaburg, advised the crew of that train that Extra 1046 had arrived at that point. This was not a proper order to issue for the purpose of annulling a meet order; the dispatcher should have issued an annulment order, which would have required the signature of the conductor of Extra 1046, and in that event there would not have been any misunderstanding as to rights on the part of the crew of the Extra.

The crew of Train No. 32 held a copy of the order to meet Extra 1046 at Vestaburg, and upon arriving at that point also received a copy of train order No. 53, advising that Extra 1046 had arrived. There is no train register at Vestaburg and this order amounted to a message written on a train-order form and conferred no authority, neither was it a proper order. The meet order was still outstanding, and under the rules it was in full effect until fulfilled, superseded or annulled; in the absence of a proper order superseding or annulling the meet order, the crew of Train No. 32 should have regarded the meet order as unfulfilled and should have realized that they were required to know that the entire opposing train was there and to identify it as the train named in the meet order.

#### Conclusions

This accident was caused by Extra 1046 making an unauthorized movement on the main line without being properly protected by flag; by the issuance of an improper order by the dispatcher and by the acceptance of such improper order by the crew of Train No. 32.

#### Recommendations

The following recommendations are made:

1. That steps be taken immediately to restrict the issuance of train orders to the forms prescribed in the rules.
2. That employees receive instructions and supervision adequate to insure that they have a correct and uniform understanding of their rights under the train-order method of operation.

Respectfully submitted,

W. J. PATTERSON,

Director.