

Railway accident investigation report

Railway operator : Choshi Dentetsu Co., Ltd.

Accident type : Train derailment.

Date and time : About 08:19, January 11, 2014.

Location : In the premises of Kasagami-Kurohae station, Choshi Dentetsu Line, at around 2,556 m from the origin at Choshi station, Choshi City, Chiba Prefecture.

SUMMARY

On January 11, 2014, the inbound 14 train, composed of 2 vehicles, starting from Tokawa station bound for Choshi station, Choshi Dentetsu Line, Choshi Dentetsu Co., Ltd., departed from Nishi-Ashikajima station on schedule, 08:18, by one-man operation.

While the train approaching to the up track in Kasagami-Kurohae station, ran around No. 16 turnout in the premises of the station at the velocity of about 20 km/h, the driver of the train felt an abnormal sound from underfoot, and immediately applied an emergency brake to stop the train.

It was found that all axles in the rear bogie of the first vehicle and all axles in the front bogie of the second vehicle were derailed to right.

There were 9 passengers and a driver onboard the train, but no one was injured.

PROBABLE CAUSES

It is somewhat likely that the tire flange of the right wheel, of the first axle in the rear bogie of the front vehicle of the train running along the main line, derailed by flange climbing at around the tip of tongue rail of No. 16 turnout, spring switch, in the premises of Kasagami-Kurohae station, and ran between stock rail and tongue rail, once returned onto the right lead rail at around the rear edge of the tongue rail and finally derailed to right.

It is somewhat likely that the right wheel derailed by flange climbing at around tip of tongue rail of No. 16 turnout because the following factors were combined.

[1] It is somewhat likely that, while the train passed through the No. 16 turnout where the alignments existed, the flange of the right wheels in the rear bogie of the first vehicle was forced to contact with the right tongue rail as the rear bogie shifted to right due to yawing motion of the front vehicle, because when the wheels of the first axle in the front bogie of the front vehicle passed the rear edge of the lead rail, the wheels of the first axle in the rear bogie passed at around tip of the tongue rail, then the front and the rear bogies of the front vehicle passed the track with the alignments in the opposite direction.

[2] It is somewhat likely that the wheels of the train were in the conditions as liable to climbing up the rail at around tip of the tongue rail of the turnout due to the status of ballast including much earth and sand and the subsidence of rails when the train was passing.