

## Railway accident investigation report

Railway operator : Isumi Railway Co., Ltd.

Accident type : Train derailment.

Date and time : About 13:43, December 28, 2013.

Location : At around 25,800.4 m from the origin at Ohara station, between Nishihata station and Kazusa-Nakano station, single track, Isumi Line, Otaki Town, Isumi District, Chiba Prefecture.

### SUMMARY

At about 13:43, on December 28, 2013, the driver of the Local 63D train, composed of one vehicle and one-man operated, starting from Ohara station bound for Kazusa-Nakano station, Isumi Line, Isumi Railway Co., Ltd., operating at about 34 km/h in the 250 m radius curved track at Shoji River bridge located between Nishihata station and Kazusa-Nakano station, noticed a shock and applied an emergency brake to stop the train.

It was found that the front axle in the front bogie was derailed to left by inspection after the train stopped.

There were 4 passengers and the driver onboard the train, but there was no casualty.

### PROBABLE CAUSES

It is somewhat likely that the accident occurred in the following process.

[1] The right wheel of the front axle of the front bogie in the train, running in the 250 m radius right circular curved track, derailed to inside of the track by the enlarged irregularity of gauge according to the passing train, and ran with contacting the side of the inner rail top and spreading gauge, where there was the possibility of deterioration in the suspension forces of the spikes fastening the rail and sleepers due to corrosion or cracks of the sleepers.

Here, it was related with the derailment to inside of the track that the irregularity of gauge was exceeded the maintenance standard value.

[2] After that, the left wheel, undergoing the irregular lateral force, climbed up the outer rail and derailed to outside of the track, i.e., to left, at around the point where the longitudinal level irregularity was locally high and the radius of curved track was locally small, at the same time, on Shoji River bridge.

Here, it is somewhat likely that the right wheel fell from side of the inner rail top to the sleeper, according to the derailment of the left wheel.