



National Transportation Safety Board

Office of Railroad, Pipeline and Hazardous Materials Investigations

Washington, DC 20594

Derailed Union Pacific Railroad Train UEGKOT 09 with
Subsequent Hazardous Materials Release

DCA17MR007

Operations Factual Report

Addendum #1 – December 11, 2017

This addendum includes additional information regarding the toxicological test results of the train crew.

Toxicology Testing Results

Toxicology testing for the conductor and engineer was carried out by Quest Diagnostics as per FRA post accident testing regulations (49 CFR 219). The engineer's tests were negative for any tested-for substances.¹ The conductor tested positive for doxylamine in his urine (1950 ng/ml), but not in his blood. The FRA test uses a cut off of 50 ng/ml for reporting a positive result in the blood and urine. Doxylamine is a sedating antihistamine available over the counter in a variety of cold and allergy products. It is also sold as a sleep aid, often with the name Unisom. Doxylamine is considered impairing and carries a warning about using machinery or operating a vehicle under its influence.² The therapeutic window (a range of drug levels that produce a desired response without causing any significant adverse effects) is considered between 50 ng/ml and 150 ng/ml.³

¹ Tested for substances include amphetamines, barbiturates, benzodiazepines, cocaine, cannabinoids, methadone, opiates, oxycodone, phencyclidine, propoxyphene, tramadol, fentanyl, and sedating antihistamines.

² Drugs.com. Doxylamine Professional Prescribing Information. <https://www.drugs.com/ppa/doxylamine.html> Accessed 12/11/2017.

³ Federal Aviation Administration. CAMI Forensic Toxicology Drug Information: doxylamine. <http://jag.cami.iccbi.gov/toxicology/DrugDetail.asp?did=53> Accessed 12/11/2017.