

Thermal cameras find bad brakes

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Trucker Bob Vilar left Portland, Oregon Tuesday hauling two trailers loaded with asphalt bound for a plant on Delta's Annacis Island.

Nothing appeared out of the ordinary on the 503-kilometre journey – the truck's brakes seemed to be fine, as did the tires.

He delivered the asphalt late Tuesday, and the next morning was set to head home when he drove into the Nordel Way weigh station beside Highway 91. He was pulling out of the scale when a Delta Police officer flagged him down and said the Oregon-registered truck needed to be inspected.

Vilar was shocked by what inspectors found – nine of 12 brakes were not working and one wheel was so under-inflated, it was coming off the rim. He had no idea. Nothing seemed wrong when he visually inspected the trailer before leaving Portland.

It wasn't fate that Vilar's rig was targeted for inspection. For the past six weeks, Delta Police have been using thermal imaging technology to pre-screen commercial trucks for faulty or unsafe equipment, including non-working brakes and unsafe tires.

The mobile system, which was developed by Intelligent Imaging Systems Inc., uses a thermal camera to measure the amount of heat coming from the brakes and tires on a vehicle. And depending on how hot – or cool – they appear on a computer screen inside the monitoring van, technicians can figure out if a brake is working properly. They can also tell whether a wheel is under-inflated or if a load has shifted.

The technology allows commercial vehicle inspectors to quickly pre-screen vehicles as they drive by the camera, but a manual inspection is still needed to verify if a problem exists.

Enrique Cramer from Intelligent Imaging Systems said one advantage of the system is it takes the guesswork out of a random inspection. There's no worrying whether a trucking company has a good maintenance record or if a truck looks well-kept visually – if the camera sees a problem, there likely is one.

More than 20,000 vehicles were screened during the pilot project, and about one per cent of those were pulled over for inspection. Of that, about 90 per cent were confirmed to have unsafe equipment.

The success rate impressed Sgt. Rhen Hallet of Delta Police Traffic Services.

“The accuracy of it is what’s so impressive,” Hallet said.

Cramer would not comment on the price of the system because the company is in negotiations with the Corporation of Delta, which could decide to buy the system outright, or contract Intelligent Imaging System to provide the screening service several times a year.

dweir@surreyleader.com