

Noise Report

KELTRACK® Trackside Transit

East Coast US Transit System

EXECUTIVE SUMMARY

Kelsan® Technologies Corporation and Portec Rail Products, Inc. were approached to evaluate the effectiveness of their Transit Rail Friction Management Solution at an East Coast US Transit System (ECUSTS). The objective was to decrease wheel/rail interface sound generation, thereby reducing the ambient sound levels in the surrounding residential areas.

In this case, the Kelsan solution consisted of the KELTRACK®-Trackside, applied through a Portec Rail Products, Inc. Protector-III™ wayside applicator to the top-of-rail contact zone for controlling friction in the wheel/rail interface. This document details the system information and inspection of the installation.

Summary Results: Portec installed two Protector III top of rail waysides in October 2000. The units are located at Site 1-Track#2 Southbound and Site 2-Track#1 Northbound. The inspection of the applications at the ECUSTS showed both sites to be operating very well. The units apply product to both rails just prior to curve constructed of embedded track. Each curve has a road crossing through the apex. Contamination by motor vehicle traffic is not affecting the success of the KELTRACK-Trackside in controlling the noise. The pump's control settings are selected at ¼ second per 8 axles. To date 170,000-180,000 axles have passed over the wheel sensors. The product usage is approximately one 5-gallon pail per three weeks of operation. Inspection of the wiping bars showed each to be operating very well. The product flow from all bars was very even and occurring from almost all the ports. The KELTRACK-Trackside application at this site has successfully reduced the wheel/rail generated noise to a level acceptable for residential areas. High frequency top of rail noise associated with slip/stick has been reduced. In addition, high frequency noise from wheel flange contact with the gauge face of the rail has been reduced due to a reduction in lateral forces.

Note: To obtain a copy of the full report or find out the identity of the East Coast US Transit System, please contact John Milobar, Vice President Sales & Marketing at 604-984-6100 or jmilobar@kelsan.com.