



RESEARCH / DEVELOPMENT / TECHNICAL SERVICES

Laboratory Analysis Report

Project: Evaluation of CBRT-SO Treated Asphalt Pavement Vs Untreated Pavement

Date: February 5, 1997

Project No.: P697

Background: Test Sections were prepared by applying CBRT-SO to approximately 10 year old asphaltic concrete pavement in September of 1995 (section 7, P5395). CBRT-SO was supplied by Mariani Asphalt Co., Tampa, Fl. Application rate of CBRT-SO was 0.75 gallons per square yard. A section of the pavement immediately adjacent to the treated sections was set aside as a control (untreated) section. The pavement area containing the test sections is a railroad access lane and not exposed to traffic.

Procedure: On January 31, 1997, core sampling was taken from the CBRT-SO and control test sections. The top half inch of each set of cores were tested in the following method; extraction by ASTM D 2172 method B, recovery of liquid asphalt by ASTM D 1856. The recovered asphalt was tested for penetration, ASTM D 5, and for viscosity, ASTM D 2171.

Test Data:	Samples	
	Control Section Lab No. 26197	CBRT-SO Treated Lab No. 26097
Penetration, 0.1mm @ 25°C (77°F)	7	13
Viscosity, poise @ 60°C (140°F)	402,000	123,660

Conclusion: The CBRT-SO treated pavement exhibited significant improvement in physical properties of the asphalt binder 16 months after treatment. The improvement is based on comparison to the "untreated" control section physical properties. The reduction in viscosity from the control section was 69 percent while the increase in penetration was 86 percent.

Sincerely yours,

Kevin Hardin
VP Materials and Research

Phone (813) 823-3941 / FAX (813) 826-4103
5201 Causeway Blvd. / P.O. Box 75437 / Tampa, FL 33875

P697

Physical Analysis / Weatherometer / Mix Designs / Abson Recoveries / Rheological Test/ Field Evaluations
Asphalt Cement / Cutback Asphalt / Asphalt Emulsions / Coal Tar Emulsions