

Asphalt Pavement And Recycling Technologies, Inc.

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Report: 17-0815A

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Customer: Biobased Spray Systems, LLC – Mike Freisthler

Project: Franklin TWP

Samples submitted:

Four pavement core samples (2 untreated and 2 treated) identified as:

#2

#3

Requested Testing:

Determine the Dynamic Shear Rheological properties at 60°C of the recovered asphalt binder from the top 3/8-inch layer of each core. These properties include viscosity, phase angle, complex, elastic, and viscous moduli.

Summary of Testing:

The top 3/8-inch of each core was removed for testing. The asphalt from each core was extracted and recovered as prescribed by California Test Method 365. Viscosities and phase angles as well as complex, elastic, and viscous moduli were determined on the recovered asphalt binders of each sample using Dynamic Shear Rheology as prescribed by AASHTO T315. Test results are as follows:

Sample Identification	Viscosity 60°C, Poises	Phase Angle, °	MODULUS, 60°C, Pa		
			Complex	Elastic	Viscous
#2					
Untreated	9842	72.6	9870	3221	9427
Treated	8157	74.2	8179	2564	7738
#3					
Untreated	9021	68.9	9066	2412	8735
Treated	7536	70.7	7581	1964	7217

Michael S. J.

Test data reported herein has been secured by reliable testing procedures. As we have no knowledge of, or control over the conditions that may affect the use of material from which samples were taken, we assume no responsibility in furnishing this data other than to warrant that they represent reliable measurements of the properties of the sample (s) received and tested. No warranties, expressed or implied, including warranties of merchantability or fitness for a particular use, are made with respect to the products described herein. Nothing contained herein shall constitute a permission or recommendation to practice any invention covered by a patent without license from the owner of the patent.